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Agricultural Marketing Service

USDA Farm to School Team

2010 Summary Report

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“Supporting farm to school programs will increase the amount of produce available to cafeterias and help to support local farmers by establishing regular, institutional buyers. Many schools are using farm to school programs as an important component of nutrition education.”

—Tom Vilsack, Secretary, U.S. Department of Agriculture

“Everything is right about farm to school: healthy fresh food, enhanced economic opportunity for farmers, and education for children about where food comes from. That’s a trifecta!”

—Kathleen Merrigan, Deputy Secretary, U.S. Department of Agriculture

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Boston Public Schools, Boston, Massachusetts
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Harrisonburg City Schools, Harrisonburg, Virginia
Hilbert School District, Hilbert, Wisconsin
Independence Community School District, Independence, Iowa
Jamestown School District, Jamestown, Rhode Island
Jefferson County Public Schools, Louisville, Kentucky
Montgomery County Public Schools, Mount Sterling, Kentucky
Morrison Public Schools, Morrison, Oklahoma
Riverside Unified School District, Riverside, California
Union Public Schools, Tulsa, Oklahoma
Ventura Unified School District, Ventura, California
Woodbridge School District, Bridgeville, Delaware

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Table of Contents

Executive Summary	i
Introduction	1
Background	2
USDA Farm to School Team	4
School Food Service Infrastructure.....	7
Farm to School Implementation and Promotion.....	13
Procurement	26
Farm to School Education	38
Food Safety	44
Impact and Evaluation	51
Local, State, and Federal Policy.....	55
Farmers' Perspective in Selling to Schools.....	61
Conclusion.....	67
Appendix A: Examples of USDA Funding Support for Farm to School Initiatives	68

Executive Summary

The USDA Farm to School Team was established late in 2009 as a result of discussions within the Department-wide *Know Your Farmer, Know Your Food* Initiative. These discussions focused on the need to develop strategies to enhance market opportunities for local farmers as well as the need to better connect farmers with consumers and thereby increase public understanding of American agriculture. Very quickly, Farm to School was identified as a strategy that could potentially contribute to both goals. The USDA Farm to School Team was appointed and tasked with surveying Farm to School efforts and providing USDA leadership with a deeper understanding of the challenges and opportunities faced by Farm to School efforts.

During 2010, the Team visited 15 school districts across the country that were involved in farm to school related activities in varying capacities, reviewed resource materials, participated in national and regional conferences, and consulted with other organizations that worked with the farm to school community. This report summarizes the observations of these activities. This report also provides suggestions for further action by USDA to support schools in obtaining fresh and healthy food from their local and regional food systems.

Farm to school covers a wide range of activities that necessitate a high degree of collaboration among a variety of participants. As such, this report is intended for a broad audience, including school food service personnel, school district administrators, farmers and processors, nonprofit organizations, State and local governments, parents, teachers, and other community stakeholders.

During the course of the site visits, the Team extracted a number of lessons, which are described in greater detail within this report. Some of the significant lessons from the visits include the following:

1. Communities are passionate about their farm to school initiatives and work hard to overcome the challenges faced;
2. Open and clear communication between schools, farmers and ranchers, producers, and community and commercial partners is paramount for success;
3. USDA's attention to local and regional food systems through the *Know Your Farmer, Know Your Food* initiative and the Farm to School Team has provided credibility to local efforts; and
4. Insufficiencies in local supply chains (e.g., production volume and quality, processing, storage, etc.) often present challenges for farm to school efforts.

Although the characteristics of individual farm to school initiatives vary, the USDA Farm to School Team identified several needs that were expressed consistently throughout the visits. These needs are identified within each section of this report; however, some of the primary needs are as follows:

1. Funds to support farm to school-related initiatives and infrastructure (e.g., school food service staff trainings; student educational activities; establishment of small processing facilities; equipment for storing, processing, and preparing local products);
2. Clear understanding about USDA's Child Nutrition Programs' procurement requirements;
3. Farm to school stakeholder networks to facilitate communication, share experience, and build relationships;
4. Increased awareness of existing USDA efforts to support local and regional food systems; and
5. Evaluation systems to measure the impact of farm to school on farmers, school food service, and students' health and behaviors.

Finally, USDA is committed to addressing these needs by:

1. Expanding USDA's outreach efforts to bring awareness of existing USDA support for local and regional food systems.
2. Efficiently administering the farm to school grants in accordance with the Healthy, Hunger-Free Children Act of 2010;
3. Maintaining and expanding support for local and regional food systems, including farm to school, by building on the efforts of *Know Your Farmer, Know Your Food*;
4. Evaluating the impact of farm to school efforts at a national level, including the USDA Economic Research Service's Farm to School Census Survey and Food and Nutrition Service's School Food Purchase Study;
5. Attending and facilitating networking and educational meetings throughout the country that support farm to school efforts;
6. Maintaining and expanding outreach and collaboration with other Federal Departments—such as the Department of Education and the Centers for Disease Control and Prevention—to work on farm to school-related initiatives and leverage resources;
7. Expanding collaboration with nonprofit agencies working on farm to school-related issues; and
8. Exploring options for the use of USDA Foods to support local and regional food systems.

Introduction

Farm to school activities bring local food items into the school meal programs. In addition, they may also encompass activities such as nutrition and agricultural curricula, school gardens, and farm tours. These activities teach children essential lessons about how farm products are produced and the role they play in a nutritious, healthful diet. Farm to school activities benefit multiple stakeholders, including students, school food service personnel, farmers, parents, teachers, and the community at large.

In 2009, the U.S. Department of Agriculture (USDA) formed a Farm to School Team, comprised of staff from both the Food and Nutrition Service and Agricultural Marketing Service, to gain a greater understanding of the variables that affect farm to school; determine what needs exist for the school districts and farmers to begin, progress, or sustain their farm to school activities; and what support the USDA could provide for these efforts. To do this, the Team visited school districts across the country, reviewed resource materials, participated in national and regional conferences, and consulted with various organizations.

This report summarizes the 2010 site visits and is divided into the following topic areas:

- School Food Service Infrastructure
- Farm to School Implementation and Promotion
- Procurement
- Farm to School Education
- Food Safety
- Impact and Evaluation
- Local, State, and Federal Policy
- Farmers' Perspective in Selling to Schools

Each topic area includes related background information, common challenges expressed by the site visit participants, and examples of how those challenges were addressed by the participants, also known as "Expressed Challenges" and "Addressing the Challenges," respectively. Each topic area also offers a conclusion from the Farm to School Team, which highlights existing efforts USDA provides to support farm to school efforts and also provides specific suggestions for how USDA can better assist schools and farmers in their endeavors.

USDA will continue to support farm to school activities by providing guidance, technical assistance, and funding resources, as well as by providing a format in which information can be shared through the USDA Farm to School website. The USDA Farm to School website (<http://www.fns.usda.gov/cnd/F2S>) will continue to provide updated information on USDA policy, as well as farm to school implementation and best practices.

Background

As early as 1997, the USDA began connecting small farms to the school meal programs. These initial “farm to school” efforts encouraged small-scale farms to sell fresh fruits and vegetables to schools and encouraged schools to buy produce from small-scale farms. Over the years, USDA’s Food and Nutrition Service (FNS) and Agricultural Marketing Service (AMS) have issued several publications to assist schools and farmers in their efforts to bring local food items to school meals. These publications (listed below), among other farm to school-related resources, are found on the USDA Farm to School website at <http://www.fns.usda.gov/cnd/F2S>.

USDA Publications:

Small Farms/School Meals Initiative: a Step-by-Step Guide on How to Bring Small Farms and Local Schools Together (2000)

How Local Farmers and School Food Service Buyers Are Building Alliances (2000)

Innovative Marketing Opportunities for Small Farmers: Local Schools as Customers (2000)

Eat Smart-Farm Fresh! A Guide to Buying and Serving Locally Grown Produce in School Meals (2005)

In 2002, the Farm Security and Rural Investment Act authorized funds for USDA to encourage the purchase of locally produced foods and to provide grants and technical assistance for projects that improve access to local foods from small-scale farms and school garden support. However, funding was not appropriated for the implementation of these activities.

Additionally, the Child Nutrition and WIC Reauthorization Act of 2004 authorized the Secretary to provide assistance in support of farm to school efforts through competitive matching grants and technical assistance to schools and nonprofit entities; however, again funding was not appropriated for implementation.

In March of 2008, FNS held a discussion session in Washington, D.C., with representatives from school districts, farmer associations, food banks, local farms, and nonprofit organizations to learn more about the growing interest in farm to school. The session provided participants with the opportunity to share their insights about procuring local farm products, food transportation from the farm to the school, the cost associated with purchasing local foods, and the needed cafeteria infrastructure to process local farm products.

Through this session and other inquiries, USDA observed that farm to school activities vary significantly among communities; however, the basic goals are similar. The topic areas of this report were designed to reflect these common goals, which include:

- To meet the diverse needs of school meal programs in an efficient manner;
- To support regional and local farmers and thereby strengthen local food systems; and
- To provide support for health and nutrition education.

Then in 2009, an initiative entitled “Know Your Farmer, Know Your Food” was formed as a USDA-wide effort to create new economic opportunities and promote healthy eating by strengthening the connection between consumers and local producers. The growing interest

among school districts and communities to incorporate regionally and locally produced foods into their school meal programs was very quickly identified as an opportunity for focused policy attention and effort. In response to this interest and in support of the *Know Your Farmer, Know Your Food* initiative, the Department created the "USDA Farm to School Team," which is discussed in more detail in the next section of this report.

In December 2009, FNS created a website dedicated to farm to school and the activities of the Farm to School Team. The website provides current information on procurement policies, resources, grants, webinars, stories, common obstacles and possible solutions, best practices, implementation tools, and other important materials related to farm to school efforts. The USDA's Farm to School website may be accessed through <http://www.fns.usda.gov/cnd/F2S>.

Finally, in December of 2010, the Healthy, Hunger-Free Kids Act was signed into law. This Act authorized and funded USDA to provide technical assistance and competitive matching farm to school grants to schools, State and local agencies, Indian tribal organizations, agricultural producers, and nonprofit organizations to improve access to local foods in schools. The grants may be used for training, supporting operations, planning, purchasing equipment, developing school gardens, developing partnerships, and implementing farm to school activities. According to the Act, individual grants are not to exceed \$100,000. USDA will receive \$5 million annually, beginning in October of 2012 (i.e., fiscal year 2013) through fiscal year 2015, to administer these grants and provide technical assistance. More information about USDA's farm to school grants will be provided on the USDA Farm to School website.

USDA Farm to School Team

Established in 2009, the USDA Farm to School Team is comprised of both FNS and AMS staff members and was created to support local and regional food systems by facilitating alliances between schools and their local food producers. The Farm to School Team's goals include:

- Providing access to resources and information on beginning and maintaining farm to school activities for schools, farmers, and local community members;
- Providing technical assistance to schools and farmers in the development, progression, and/or sustainability of farm to school activities;
- Identifying obstacles faced by schools and farmers in implementing, and/or sustaining farm to school activities and suggest solutions; and
- Suggesting ways to make current Federal programs compatible with and supportive of farm to school efforts.

Selecting the Sites

To meet the Team's goals, as well as understand the variables and needs impacting local farm to school initiatives, the Team visited with stakeholders across the country. Between December 15, 2009, and January 31, 2010, school districts were given an opportunity to express their interest to be considered for a site visit from the USDA Farm to School Team. During this time period, 290 requests were received. The Team reviewed the requests and selected 27 school districts for further consideration. Input was sought from regional (and State, via region) representatives and the National Farm to School Network, a nonprofit organization, to narrow the number of districts the Team would visit to nine. Due to the overwhelming response and the desire to make each visit as efficient and cost effective as possible, the Team chose to visit nine "areas" as opposed to nine individual "sites" as was originally planned. The idea was to find nine areas where more than one district was in close proximity to another, thus allowing the Team to see a wider variety of efforts.

A number of variables were considered during the site selection process. Some of the variables the Team considered included: regional representation; rural, urban, suburban, and tribal schools; large and small school districts; self-operating, vended meals and food service management companies; various distribution models; different stages of farm to school implementation; and schools practicing new or novel ideas for incorporating farm to school activities. In February 2010, the Team chose 15 school districts in 9 areas across the country.

These 15 districts were chosen because they offered the most diverse circumstances faced by schools and farmers in implementing and/or sustaining their farm to school efforts. During the months of May, June, and September of 2010, the USDA Farm to School Team visited these school districts; providing the Team a wide range of examples that exist in farm to school.

In 2010, the USDA Farm to School Team visited the following school districts:

- Bethel School District, Eugene, OR
- Boston Public Schools, Boston, MA
- Burlington School District, Burlington, VT

- Chilton Public Schools, Chilton, WI
- Eugene School District 4J, Eugene, OR
- Harrisonburg City Schools, Harrisonburg, VA
- Hilbert School District, Hilbert, WI
- Independence Community School District, Independence, IA
- Jamestown School District, Jamestown, RI
- Jefferson County Public Schools, Louisville, KY
- Montgomery County Public Schools, Mount Sterling, KY
- Morrison Public Schools, Morrison, OK
- Riverside Unified School District, Riverside, CA
- Union Public Schools, Tulsa, OK
- Ventura Unified School District, Ventura, CA

During the visits, the USDA Farm to School Team met with school food service directors and staff, school district administrators, local farmers, distributors, local and State authorities, students, teachers, parents, and community partners to analyze and assess variables that support or deter farm to school activities and the effects the activities have had on the school and community. The Team focused on several topic areas related to farm to school, including:

- School Food Service Infrastructure
- Farm to School Implementation and Promotion
- Procurement
- Farm to School Education
- Food Safety
- Impact and Evaluation
- Local, State, and Federal Policy
- Farmers' Perspective in Selling to Schools

This report highlights the common challenges expressed by the site visit participants, and provides examples of how the participants overcame those challenges. Each topic area also includes background information and a conclusion from the Farm to School Team, which highlights the existing resources USDA provides to schools and farmers and offers suggestions of how to improve support of farm to school activities at USDA.

Overall, the most widely shared best practices for successful implementation of farm to school efforts from the site visit participants included good communication—among the school district, farmers, policy makers, school children, and their parents—and perseverance. It seemed that those who were successful in their efforts worked diligently to find a way in which to bring local agriculture to their school meal programs.

In addition, all of the participants indicated that tapping into existing resources was their number one tip for beginning, sustaining, or expanding their farm to school efforts. Through nonprofit organizations; local, State, and national government agencies; and Cooperative

Extension Offices, many resources already exist to help foster the connection between school districts and their local or regional food systems. Talking with or visiting others—including other school districts; farmers; nonprofit organizations; and local, State, or Federal government agencies—allowed the participants to learn from each other and avoid recreating existing resources.

School Food Service Infrastructure

A school district's food service infrastructure significantly influences its efforts to incorporate local food products. For this report, school food service infrastructure refers to the kitchen's facilities, equipment, operations, and labor.

Most school districts in the United States have a self-operating school food service program, meaning the school district manages all aspects of the administration of the school meal programs. Another option to operating the school meal programs is for a school district to contract with a Food Service Management Company (FSMC) to manage a portion of the district's school meal programs. Furthermore, a school district that does not have a kitchen facility may choose to contract with a company or neighboring school district to prepare the school meals; this is known as a vended meal contract. During the 2010 site visits, the USDA Farm to School Team visited two school districts that contracted with an FSMC (i.e., Eugene School District in Oregon and Jamestown School District in Rhode Island) and one school district that contracted for vended meals for a portion of its schools (Boston Public Schools in Massachusetts); the remaining school districts were self-operating programs.

Regardless of how the school meal programs were operated, kitchen size, space, and equipment varied greatly among the school districts. For example, some districts are equipped to prepare meals in a central kitchen, which means school meals are prepared at one location within the district and then delivered to each school site. For other districts, each of their school sites is equipped with full kitchens to prepare the school meals onsite. And, in some districts, each school site may only have minimal equipment, which necessitates heating and serving of meals. School districts may also have a combination of these types of kitchen facilities to prepare the school meals. The Farm to School Team was interested in observing a variety of kitchen facilities and visited at least one school district with each type of facility described here.

Expressed Challenges of School Food Service Infrastructure:

Although the distribution of local food items is discussed in the Procurement section of this report, having enough staff to receive the local food items presented a challenge for some school districts. A few school food service directors indicated that they would receive local food items after work hours or during the weekend because they did not have enough staff during regular business hours. Once the local unprocessed food items arrived at the school district, other challenges the directors revealed included the lack of:

- Food service staff to process local food items;
- Adequate space to store local unprocessed food items;
- Appropriate equipment/materials to process local food items; and
- Culinary skills of food service staff to prepare unprocessed food items.

Due to the sheer volume and time it takes to process local unprocessed food items, some districts relied on volunteers to help with preparation. These districts noted, however, that depending on volunteers to handle the higher labor demands may not be a sustainable model and required training of proper food handling techniques.

School food service directors also indicated that their own staff needed additional training on processing and preparing local unprocessed food items. The directors noted that, in general, more training is needed in the following areas:

- Knife and cooking skills;
- Food safety;
- Proper handling of fresh produce; and
- General nutrition.

The lack of funding seemed to be the biggest barrier for school districts to provide the training to its school food service staff.

In addition to the lack of labor and/or labor skills, many school districts found it difficult to process and/or store local unprocessed food items because they did not have the right utensils or appliances to process these foods efficiently. Some districts expressed the basic need for knives and cutting surfaces, while other districts expressed a need for commercial size processing equipment (to allow for easier slicing and dicing of the unprocessed local food items) and storage facilities (such as cooler or freezer space). These districts stated that funding assistance to purchase such items would be helpful to their farm to school efforts.

Several school districts indicated they were awarded a USDA American Recovery and Reinvestment Act Equipment Grant in 2009 or 2010; however, the districts' need for utensils or food processing appliances fell below the cost threshold that defines "equipment" as specified in these grants. As stipulated in the American Recovery and Reinvestment Act of 2009, grant recipients were required to abide by the Office of Management and Budget's (OMB) definition of "equipment." As specified in the OMB Circular A-87, "equipment" means an article of nonexpendable, tangible personal property having a useful life of more than 1 year and a per unit acquisition cost of \$5,000. "Equipment" included new equipment, renovation of equipment or replacement equipment, but not the renovation of the food service area (e.g., kitchen design).

During the 2010 site visits, the Team observed a variety of kitchen facilities. Although there are advantages and disadvantages to each, school food service personnel generally have to work within the parameters of their facilities.

Addressing the Challenges of School Food Service Infrastructure:

To address the challenges of local food purchases associated with labor shortages and tight budgets, school food service directors have adopted a number of creative strategies that allow them to minimize the financial impact of using unprocessed local food items. These include: recruiting and training volunteers, adjusting school menus, selecting food items that require less in-house preparation, and utilizing the entire district to share storage facilities and equipment. Furthermore, a number of districts have begun to offer training designed to improve the skill set of their school food service staff.

For example, when volunteers are recruited and trained to help with the processing of local

foods, the food service director at Independence Community School District in Independence, Iowa, matches the skills and interest of the volunteers with the tasks for which she needs assistance. Not only does this accomplish the task of processing the local food items, but the volunteers also have personal commitment to the tasks.

At Bethel School District in Eugene, Oregon, they found that purchasing local food items that do not require a lot of preparation time (such as spinach and broccoli) cuts down on labor costs commonly associated with local unprocessed food items.

The food service director at Union Public School District in Tulsa, Oklahoma, modifies the menus when local fruits and vegetables are available to accommodate the increased processing requirements for these items. For example, they often decrease the amount of baked items on the menu when local fruits and vegetables are in season because staff hours are needed to process the fresh unprocessed local produce. Then, in the winter months, when local produce is out of season, they add the baked items back into the menu.

By assessing the current equipment and storage capabilities and needs, school food service directors have said they have learned how to work within their means. Within a district some school sites may have more storage space than other sites. Some food service directors indicated that they have been able to juggle the increased need for storage by utilizing their entire district and not just individual school sites. For example, a middle school might use the high school’s cooler and/or freezer space to store the local food items.

To address the challenge of staff training, Riverside Unified School District in Riverside, California, has hired a chef who provides culinary training to the school food service staff. Other school food service directors have utilized resources such as USDA’s Team Nutrition trainings, National Restaurant Association, local universities, State agencies, National Food Service Management Institute, and local chefs to train their staff. Boston Public School District in Boston, Massachusetts, participates in *Chefs Move to Schools*, which allowed for the district to work with a local chef to train school food service staff on culinary and menu planning skills.

The table below provides more solutions to overcoming the common challenges of school food service infrastructure as expressed by the 2010 farm to school site visit participants.

School Food Service Infrastructure	
Expressed Challenges	Addressing the Challenges

<ul style="list-style-type: none"> • Lack of staff for receiving local products and preparing unprocessed local food items. <ul style="list-style-type: none"> ○ Relying heavily on trained volunteers to process local food items 	<ul style="list-style-type: none"> ✓ Assess available labor and needs ✓ Assess which local food items should be purchased based on available labor ✓ Match labor-intensive local food items (e.g., sliced watermelon) with easy-to-prepare center-of-plate items (e.g., whole wheat chicken nuggets) ✓ Schedule staff or volunteers when products are delivered and need processing ✓ Match volunteers' skills and interest to district needs ✓ Assign a designated farm to school coordinator to assist with logistics, including processing and preparation of local food items
<ul style="list-style-type: none"> • School food service staff need additional training on how to utilize whole, unprocessed food items: <ul style="list-style-type: none"> ○ Knife skills ○ Scratch cooking ○ Proper produce handling ○ Food safety ○ Nutrition 	<ul style="list-style-type: none"> ✓ Assess staff skills for specific training needs ✓ Partner with universities or local chefs to offer culinary training and menu planning ✓ Enroll in training courses through the National Food Service Management Institute or organizations such as the National Restaurant Association or School Nutrition Association ✓ Food service management companies may have regional chefs to assist their clients (i.e., school districts) with menu development and staff training ✓ Sign up for <i>Chefs Move to Schools</i> to partner with a local chef to provide training for school food service staff (http://healthymeals.nal.usda.gov/nal_display/index.php?tax_level=1&info_center=14&tax_subject=225)
<ul style="list-style-type: none"> • Lack of storage (e.g., refrigerator, freezer) prevents the use of more local unprocessed food items 	<ul style="list-style-type: none"> ✓ Assess current storage capabilities and needs ✓ Assess which local food items should be purchased based on available storage ✓ Look to the entire district for available storage, not just individual school sites (e.g., a middle school uses the high school's cooler/freezer for local food items)
<ul style="list-style-type: none"> • Lack of equipment for prepping and processing the local food items (e.g., knives, knife sharpener, slicer, cutting boards, prep tables, food processors, etc.) <ul style="list-style-type: none"> ○ Need for training on new equipment 	<ul style="list-style-type: none"> ✓ Assess current equipment capabilities and needs ✓ Assess which local food items should be purchased based on available equipment ✓ Plan for small equipment needs and build into the budget ✓ Apply for grants that can be used to purchase needed equipment through USDA, State government, universities, or nonprofit organizations

School Food Service Infrastructure Conclusion:

The Team found there were barriers to farm to school activities including: (1) culinary skills training for school food service staff, (2) increased labor costs associated with processing local food items, and (3) lack of necessary utensils and/or food processing appliances to process local food items.

With regard to staff training, school districts that had local policies and resources to support training and education of its school food service staff seemed more successful in incorporating local food items into their school meal programs. The National Food Service Management Institute (NFSMI) has developed a number of culinary and nutrition trainings for the USDA that are currently available for school food service employees. For example, *Culinary Techniques for Healthy School Meals* is a series of lessons deigned to help school food service staff prepare healthier school meals, and *Cooking Green Across America* incorporates economical methods of food preparation with an emphasis on seasonal, local farm products, as well as using USDA commodity foods. These and other USDA resources can be obtained through USDA's "Resource Library" at http://healthymeals.nal.usda.gov/schoolmeals/Resource_Cafe/Resource_Search.php.

Although the USDA Farm to School website provides links to available resources, the Team will highlight available training in culinary, food safety, and nutrition training/lessons for school food service staff.

Additional assistance for staff training may be found by connecting with local chefs. USDA administers the *Chefs Move to Schools* program, which is part of the First Lady's *Let's Move!* campaign to end the epidemic of childhood obesity. The program helps chefs partner with local school districts so together they can create healthy meals that meet the schools' dietary guidelines and budgets, while teaching young people about nutrition and making balanced and healthy choices. Schools and chefs can sign up on the following website: http://healthymeals.nal.usda.gov/nal_display/index.php?tax_level=1&info_center=14&tax_subject=225. A number of resources are available on this website as well.

Existing USDA Efforts:

- Provides culinary and nutrition training for school food service staff through Team Nutrition, USDA's Resource Library, and the National Food Service Management Institute.
- Offered equipment grants in 2009 and 2010 through the American Recovery and Reinvestment Act of 2009.
- Administers the *Chefs Move to Schools* program, which is part of the First Lady's *Let's Move!* campaign to end the epidemic of childhood obesity.

Suggestions for USDA Consideration:

- Highlight USDA training opportunities for school food service on the USDA Farm to School website.

- As appropriations become available, provide funding for training, increased labor costs and small equipment/appliances needs.
- Develop formats in which school food service directors can exchange ideas and best practices of establishing farm to school efforts within their current school food service infrastructure (e.g., via webinars or in-person meetings).
- Continue the *Know Your Farmer, Know Your Food* initiative's focus on infrastructure investments and strategies that help farmers gain access to processing equipment to meet school district needs.

Farm to School Implementation and Promotion

As USDA continues to see a rise in the number of farm to school initiatives developing around the country, the Team focused on collecting best practices and tips pertaining to the start-up process of those initiatives, who the key personnel and external partners were, what Child Nutrition Programs the local food items were used in, and what grants (if any) were used to begin those initiatives.

Child Nutrition Programs:

Of the school districts the Team visited, local food items were purchased primarily for reimbursable meals in the National School Lunch Program. Some school districts were purchasing local food items for their breakfast and summer programs as well, although this practice did not occur as frequently. School food service directors were also looking for ways to incorporate or expand their local food purchases into the Fresh Fruit and Vegetable Program (FFVP) and Department of Defense Fresh Fruit and Vegetable Program (DoD Fresh), both programs are discussed in more detail below.

Many of the school districts were able to offer fresh local fruits and vegetables to their students by way of a salad bar. It was noted that salad bars offer the capacity to substitute one type of produce for another depending on availability. Within the districts the Team visited, salad bars were offered as part of the reimbursable meal or as an “extra” to the reimbursable meal. Research and experience have suggested that children increase their consumption of fruits and vegetables when a variety of choices are available. Increased daily access to fresh fruits and vegetables can impact children beyond the school meal programs and promote healthy choices outside of school.^{1,2,3}

Fresh Fruit and Vegetable Program (FFVP):

In 2002, the Farm Security and Rural Investment Act of 2002 authorized \$6 million for a pilot program to promote children’s consumption of fresh fruits and vegetables. The pilot was limited to 25 schools in each of 4 States and 7 schools in 1 Indian Tribal Organization (ITO). In 2004, the Child Nutrition and WIC Reauthorization Act of 2004 amended the National School Lunch Act making the FFVP a permanent program for 25 schools in 11 States and 25 schools in 3 ITOs and provided \$9 million in permanent annual funding. Then in 2006, the Agriculture, Rural

¹ Anupama Joshi, Andrea Azuma and Gail Feenstra, "Do Farm-to-School Programs Make a Difference? Findings and Future Research Needs," Journal of Hunger and Environmental Nutrition, 2008, Accessed: 16 May 2011, <http://www.cahpf.org/GoDocUserFiles/504.Farm_to_School_Programs.pdf>.

² Stacy Kish, "Fresh Food Program Promotes Healthy Eating Habits Among Children," NRI Research Highlights, 2008, Accessed 5/12/2011 < <http://ddr.nal.usda.gov/dspace/handle/10113/15377>>.

³ May Wang, Pat Crawford, Suzanne Rauzon and Natalie Studer, "Changing Students' Knowledge, Attitudes and Behavior in Relation to Food: An Evaluation of the School Lunch Initiative," Berkeley, CA: University of California at Berkeley, September 2010, Accessed 16 May 2011 <http://www.school lunchinitiative.org/downloads/sli_eval_full_report_2010.pdf>.

Development, Food and Drug Administration, and Related Agencies Appropriations Act of 2006 gave a one-time appropriation of \$6 million and added 25 schools in 6 States.

The FFVP reached nationwide in 2008 with the Consolidated Appropriations Act of 2008, which provided \$9.9 million of one-time funding. Also in 2008, the Food, Conservation, and Energy Act of 2008 added FFVP to the National School Lunch Act (Section 19), and established a funding formula and eligibility criteria for FFVP. In 2010, FFVP was funded at \$101 million. In 2011 FFVP will be funded at \$150 million.

The FFVP provides children in participating schools with a variety of free fresh fruits and vegetables throughout the school day. It is an effective and creative way to introduce fresh fruits and vegetables as healthy snack options. The FFVP also encourages schools to develop partnerships at the State and local level for support in implementing and operating the Program.

The goals of the FFVP are to:

- Create healthier school environments by providing healthier food choices;
- Expand the variety of fruits and vegetables children experience;
- Increase children's fruit and vegetable consumption; and
- Make a difference in children's diets to impact their present and future health.

More information about the FFVP can be found at the following USDA website:
<http://www.fns.usda.gov/cnd/ffvp/>.

Department of Defense Fresh Fruit and Vegetable Program (DoD Fresh):

Beginning in August 1995, FNS and AMS entered an agreement with the U.S. Department of Defense (DoD) to supply fresh fruits and vegetables directly to schools along with deliveries made to military installations across the country. The DoD Fresh Program began in 1996 with eight pilot states that spent \$3.2 million and by 1998 exceeded the cap of \$20 million. The Farm Security and Rural Investment Act of 2002 allowed for a cap of \$50 million, and in 2009, the cap was removed and purchases continue to increase. Currently, the DoD Fresh Program is operating in 39 States and offers a wide variety of fresh fruits and vegetables (about 200 produce items). The Program is projected to reach \$78.4 million in school year 2012.

More information about the DoD Fresh Program can be found at the following USDA website:
<http://www.fns.usda.gov/fdd/programs/dod/default.htm> and is discussed further in the Procurement section of this report.

Start-Up Process:

The processes by which school districts initiate their farm to school efforts varies significantly. In some cases, the initial interest and energy came from within the school district (e.g., school

food service director, food service staff member, teacher, student group, administrator, board member, or another district employee). In other cases, the initial interest comes from an external stakeholder (e.g., parents, local nonprofit organizations, farmers market representatives, state farm to school coordinators, etc.). The Team observed both internal and external initiatives during the 2010 site visits.

Regardless of how the interest begins, the common piece of advice shared with the Team was to start slowly and on a small-scale basis. The school food service director in Burlington Public School District in Burlington, Vermont, has been conducting farm to school activities for the past 10 years and shared the following tips with the Team for getting started with purchasing local food items:

- Complete a self-assessment of current activities:
 - What local food items are currently being purchased?
 - What is working in purchasing the current local food items?
 - What challenges and opportunities exist to expanding the local food purchases?
 - Who are the existing partners?
- Complete a menu planning assessment:
 - What food items are currently on the menu that can be purchased locally?
- Complete an equipment assessment:
 - Is new equipment needed to support local food purchases (e.g., storage space, processing equipment, etc.)?
- Bring partners on board (e.g., direct supervisor, School Board, School Administrators, etc.) and get a funding commitment.
- Get students involved.
- Be deliberate and slow.
 - Introduce new products via student-led taste testings and surveys.
 - Develop the *process* in which to introduce or serve the local food item before the *product* is purchased (process before product).

Stakeholders:

During the site visits, many school food service directors stated that it was important to identify and engage a variety of key stakeholders, especially early in the process so that farm to school efforts are supported and reinforced. Other key stakeholders may include school food service staff, school administrators, custodial staff, students, parents, local food producers, local businesses and universities, and nonprofit organizations. As noted by numerous site visit participants, it may not be necessary to engage *all* of these individuals or groups initially, but it is important to think strategically and recognize the role they will play further down the road. Key school district personnel and community partners identified during the 2010 site visits were as follows:

Key School District Personnel

- School Food Service Director
- Farm to School Coordinator
- School Food Service Staff
- Janitors/Custodial Staff
- Administration/School Board
- Teachers
- Principals
- Afterschool Program Staff
- Future Farmers of America (FFA) and/or 4H
- School's Purchasing Department

Key Community Partners

- Parents/PTA
- Chefs
- Universities and Colleges
- Local Farmers and/or Farmers Market Managers
- State Department of Agriculture and Local Extension
- State Department of Education
- Volunteers
- Master Gardeners/Jr. Master Gardeners
- Local Media
- Nonprofit Organizations (local, State, regional, national)
- Local Distributor and Processors
- Local Food Policy Councils (for more on food policy councils visit: <http://www.cdc.gov/Features/Fruits&Veggies>)
- Local Governmental Agencies (e.g., Department of Health, etc.)

Managing and Staffing Farm to School Efforts:

School districts across the country are using a variety of strategies to manage their farm to school efforts by relying on both district staff and community partners. According to site visit participants, managing the day-to-day operations of a farm to school initiative requires a broad skill set and flexibility. Common responsibilities include:

- Connecting with farmers and visiting farms
- Overseeing logistics of purchasing and delivery of local food items
- Processing of local food items at the school
- Arranging for any needed volunteers
- Training volunteers
- Cooking and serving local food items in the school meal programs
- Facilitating nutrition and agriculture education
- Organizing the farm to school promotion and outreach

In order to accomplish these tasks, districts often rely on the school food service director to oversee and directly manage the farm to school efforts in addition to the director's existing responsibilities of operating the school meal programs. Of the school districts the Team visited, 13 of the 15 districts relied on the school food service director to oversee the district's farm to school activities. Only two districts the Team visited relied on a farm to school coordinator (i.e., Burlington School District in Burlington, Vermont, and Boston Public Schools in Boston, Massachusetts) to organize the logistics of their farm to school activities.

For example, in 2007, Burlington Public School District in Vermont used grant funds to hire a full-time farm to school coordinator to assist the district with efforts such as maintaining regular contact with local producers, coordinating distribution of product, preparation of unprocessed product, taste testing, etc. Similarly, Boston Public Schools in Massachusetts employs a farm to school coordinator to oversee local purchases, manage volunteers, organize education efforts, and assist in overall strategic planning. In both examples, the coordinators work under direct supervision of the district's school food service director.

School districts also rely on community partners and volunteers to help implement farm to school. For example, at Boston Public Schools, two AmeriCorps VISTA volunteers help implement day-to-day farm to school logistics. One position is dedicated to education and outreach, while the other involves technical assistance and information management (such as adding local food items to the district's procurement software to streamline the ordering process and track purchasing data). At Eugene School District in Oregon, a staff member from a local nonprofit organization helps facilitate student education and outreach to local producers. This person also reports directly to the district's school food service director.

Grants Used for Farm to School Initiatives:

Most schools indicated that they received some type of grant to assist them in initiating and maintaining their farm to school efforts. These districts indicated that the grant sources varied and were often one-time grant opportunities that assisted the school districts with the logistics, outreach, promotion, and/or education of farm to school. Grant amounts also varied from one-time grants of a few hundred dollars to multi-year grants for several thousand dollars. See Appendix A of this report for examples of USDA funding support for farm to school related initiatives.

Funding sources often included:

- State agencies (e.g., State departments of education, health, and agriculture);
- Federal agencies (e.g., USDA, Centers for Disease Control and Prevention);
- Local governmental agencies (e.g., city or county health departments);
- Private and community foundations;
- Nonprofit organizations (e.g., local, regional, and national);

- Agriculture industry groups;
- Universities and colleges; and
- Local business community.

And, funds were commonly used for the following:

- Purchasing local food items;
- Nutrition and agriculture education;
- Funding a farm to school coordinator position;
- Culinary and/or food safety training for school food service staff;
- Field trips to local farms;
- Purchasing kitchen equipment (e.g., salad bars, processing equipment, etc.);
- Farm to school promotion materials (e.g., posters, point-of-decision prompts, etc.); and
- School gardens and related efforts.

During the 2010 site visits, participants were asked to identify additional grant needs. Common responses included the need for additional funding for:

- Training school food service staff on culinary skills and handling for local unprocessed food items;
- Field trips to farms;
- Nutrition and agriculture education;
- Purchases of small appliances/equipment;
- Staffing school districts and/or State agencies for multiple years to implement and manage farm to school activities; and
- Assisting farmers with start-up costs and small-scale processing.

Expressed Challenges of Farm to School Implementation and Promotion:

A commonly expressed challenge to implementing farm to school included determining how to get started and how to maintain oversight and momentum. Farm to school activities require dedicated staff time, which can add to the already busy schedules of school food service staff. Many school food service directors said that it was often difficult to find farmers within their communities or regions and that introducing new local products can take significant effort.

For districts that utilize salad bars to incorporate local food items, school food service directors and staff noted that it may require additional labor to replenish and tidy or clean the salad bar during the schools' lunch periods. In addition, if the salad bar is part of the reimbursable meal, school food service staff may require additional training so that they are able to identify what qualifies as a reimbursable meal.

In addition, many districts mentioned that although the students were open to menu and curriculum changes of farm to school initiatives, it was often the adults (e.g., teachers, principals, parents, school food service staff, etc.) that were resistant to changes. School

districts also expressed that maintaining farm to school-related activities once a grant expires was a challenge due to the lack of funding to sustain the activities. Numerous stakeholders noted that long-term grants would help, as it typically takes several years to implement new initiatives.

With regard to promotion of the school district's farm to school efforts, many districts and community partners indicated that the general community was not aware of the efforts the district was making to incorporate local agriculture into their school meal programs. This was often due to the lack of funds and/or time to provide the necessary promotion of their farm to school efforts.

Addressing the Challenges of Farm to School Implementation and Promotion:

In meeting the many challenges of implementing farm to school initiatives, many stakeholders expressed how valuable it was to talk with other school food service directors, community partners, and/or farmers who have implemented, or were trying to implement, farm to school activities in their community. Learning from each other offered support and a way to share ideas on how to tackle common obstacles. Furthermore, numerous stakeholders turned to existing farm to school resources, especially for information regarding funding opportunities, and strongly recommended not "reinventing the wheel." Commonly noted networking opportunities included local, State, regional, and national events that addressed farm to school; *Know Your Farmer, Know Your Food*; food policy councils; and local governmental taskforces.

As a management strategy, some districts formed oversight committees to assist in their farm to school efforts, which enabled the stakeholders to stay engaged in the process. For example, the Independence Community School District in Independence, Iowa, received a farm to school grant from the Iowa Department of Agriculture and Land Stewardship in 2008. As a condition of the grant, the district was required to establish a "chapter" that consisted of nine individuals who would establish farm to school activity goals. The Independence Farm to School Chapter still exists today and includes the district's superintendent, food service director, teachers, principals, and community members. The chapter helped establish a district-wide plan, set goals, and now oversees the district's ongoing efforts.

To meet the demands of coordinating the farm to school logistics, school food service directors mentioned that they:

- Shifted their own schedules and took on new tasks and responsibilities;
- Shifted food service staff tasks and responsibilities;
- Collaborated with non-food service district personnel (e.g., teachers, janitors, etc.);
- Hired full- or part-time farm to school coordinators;
- Recruited, managed, and trained volunteers (e.g., AmeriCorps VISTA, parents)
- Worked with community partners (e.g., local, State, and regional levels)

For those districts that have a salad bar, food service directors stated that identifying a designated salad bar coordinator among their staff helped to maintain the overall quality of service. For example, at the Riverside Unified School District, the district has a designated salad bar coordinator responsible for training and assisting cafeteria staff, managing equipment needs, and tracking salad bar meals.

As farm to school activities are relationship driven, engaging district staff (such as school food service staff, custodial services, teachers, principals, etc.) early in the process seemed to have been the key to getting support and buy-in for new farm to school initiatives. Having regular meetings to listen to staff concerns and reinforce objectives and goals of the initiative were important. Involving staff in different aspects of farm to school activities also created excitement and momentum for the efforts. For example, in Tulsa, Oklahoma, the School Food Service Director in Union Public School District asked the food service staff to help create a stir-fry vegetable recipe that, when in season, would incorporate local vegetables. The result was “Yee’s Stir Fry Vegetable” – a recipe that not only served the purpose of offering more vegetables in the school meal, but also created pride among school food service employees.

To address the challenge of connecting with local producers, the Team found that many school districts relied on the USDA’s Agriculture Cooperative Extension Offices to find farmers within their communities. Also, for many of the districts, State departments of agriculture and community partners helped bridge the gap between farmers and schools. For example, the Oklahoma Department of Agriculture, Food, and Forestry has operated a statewide Farm to School Program since 2006, which includes a coordinator to oversee daily operations; maintains a list of Oklahoma farmers and products; provides technical assistance for schools and farmers; and conducts ongoing outreach and recruitment efforts. The program maintains an extensive website to share information and resources and works closely with district staff enrolled in the state program. Additionally, a number of districts used local food guides (e.g., Buy Fresh, Buy Local) to connect with local farmers and ranchers.

School districts were also organizing or participating in grower-buyer meetings, providing an opportunity for local producers, school food service staff, and community partners to come together to explore farm to school opportunities. In addition, several site visit participants suggested farmers markets as an ideal place to meet local producers.

To overcome the challenge of introducing new products into the school meal programs, many school food service directors started by introducing only one local food item to the district’s lunch program. This allowed them to work through any barriers that existed before purchasing food items on a larger scale. For example, in Eugene, Oregon, Bethel School District’s farm to school activities were first initiated in 2008 with the purchase of local apples for the school lunch program. By 2010, the district was buying a variety of products (apples, berries, carrots, corn, green beans, lettuce, potatoes, milk, and eggs) from nine local farmers and had developed a small database of local farmers who are interested in selling to schools.

Larger school districts stated that even starting with one item in only one or two schools was helpful prior to purchasing the food items for the entire district. Another tip was to start with a school site that was more receptive to change and where the outcome will be beneficial to all parties involved so that the excitement can build throughout the school district and community. At Riverside Unified School District, in Riverside, California, when introducing farm to school to the district, one of the first steps the school food service director took was to bring several members of his staff to neighboring schools that were already engaging in farm to school activities to learn about their farm to school initiatives and build excitement. From there, the director identified schools within his district that were willing to make changes, before moving onto schools where there might be more resistance.

To promote their farm to school efforts, districts are using a variety of ways to reach out to parents and community members. For example, at Jamestown Public School District in Jamestown, Rhode Island, the district hosts an annual “All Local Lunch Day,” and invites parents, community members, and local leaders to connect with the students and enjoy a meal comprised entirely of locally sourced items. Other common methods used to communicate with parents and the community to highlight farm to school activities include district newsletters, parent newsletters, and school menus that feature local food items.

As another example, the school food service director at Independence Community School District in Independence, Iowa, says that inviting local media, including radio, to feature farm to school efforts brings positive attention to the school meal programs and even draws interest from local farmers. The director advises working out the kinks of the district’s farm to school activity prior to contacting local media.

The table below provides more solutions to overcoming the common challenges of farm to school implementation and promotion as expressed by the 2010 farm to school site visit participants.

Farm to School Implementation and Promotion	
Expressed Challenges	Addressing the Challenges
<ul style="list-style-type: none"> • Not knowing where to get started 	<ul style="list-style-type: none"> ✓ Go slow/start small (e.g., begin with one product or one school) ✓ Start with the most receptive schools to show early successes ✓ Start with monthly promotions to highlight local foods ✓ Be flexible and open minded; take advantage of momentum

	<ul style="list-style-type: none"> ✓ Identify a farm to school “champion” within the school and community to keep momentum going and assist with farm to school logistics ✓ Establish an oversight committee to help organize farm to school efforts ✓ Involve internal and external partners in the district’s farm to school efforts (school food service staff, custodial staff, community members, teachers, students, and parents, etc.) ✓ Visit websites such as the USDA Farm to School website, local agriculture extension offices, and National Farm to School Network to find resources on implementation ✓ If able, fund a farm to school coordinator position at the district or State level to lessen burden on the school food service director ✓ If able, attend local, regional, or national conferences/meetings related to farm to school
<ul style="list-style-type: none"> • Connecting with farmers and finding local products 	<ul style="list-style-type: none"> ✓ Contact your State Department of Agriculture and/or local agriculture extension office to connect to local farmers ✓ Visit local farmers markets ✓ Visit USDA’s National Farmers Market Directory at http://apps.ams.usda.gov/FarmersMarkets/ ✓ Use local “market marker” to find local farmers ✓ Use a local directory, such as State agencies’ Buy Fresh, Buy Local guides, to find local farmers ✓ Establish/use farmer forums to meet farmers and determine product availability and cost
<ul style="list-style-type: none"> • Introducing new products can take significant effort 	<ul style="list-style-type: none"> ✓ Have a process in place for handling new local food items before they arrive in the kitchen ✓ Hold taste-testing events as a way to introduce new local foods to students ✓ Keep reintroducing new food items to students ✓ Stay consistent when introducing new food items (e.g., if local romaine lettuce is being introduced, continue to purchase romaine lettuce throughout the school year– even if it’s not local – so student can continue to make the same healthy choice) ✓ Start with one local food item at one school and/or meal before purchasing for the entire school district
<ul style="list-style-type: none"> • Adults resistance to change 	<ul style="list-style-type: none"> ✓ Engage district staff (e.g., food service staff,

	<p>custodial services, principals, teachers, etc.) early in the process</p> <ul style="list-style-type: none"> ✓ Have regular meetings to discuss concerns about the changes and reinforce mission and goals ✓ Involve staff by getting input on new menu items/recipes or other farm to school-related activities ✓ Visit neighboring districts already engaged in farm to school activities to build excitement
<ul style="list-style-type: none"> • Lack of multi-year funding can be prohibitive to farm to school efforts 	<ul style="list-style-type: none"> ✓ Visit websites such as the USDA Farm to School website and the National Farm to School Network to find available funding sources ✓ Look to State agencies (e.g. departments of education, health, and agriculture), Federal agencies (e.g., USDA; Centers for Disease Control and Prevention), private foundations, local and national nonprofit organizations, agriculture industry groups, universities, and the business community as funding resources
<ul style="list-style-type: none"> • Community not aware of a school district's farm to school efforts 	<ul style="list-style-type: none"> ✓ Invite parents and teachers to special meals featuring local food to advertise farm to school activities ✓ Engage local press and promote efforts in school newsletters and menus sent to parents ✓ Take advantage of State or local promotion opportunities that already exist

Farm to School Implementation and Promotion Conclusion:

With each and every visit, the most widely expressed components of successful and progressive farm to school efforts were communication and perseverance. Tapping into existing resources by talking or visiting with other farmers and/or school districts that have begun the implementation of farm to school (especially within their own region) was widely expressed as a best practice. Furthermore, successful farm to school efforts seem to have a “champion” both within the school district and in the local community who worked together to bring local products to school meals and to facilitate participation of local farmers.

Although not all of the school districts the Team visited obtained a grant in order to begin their farm to school initiative, it did seem that grants tend to give districts a jump-start on their activities. Grants to support the logistics of farm to school (e.g., staffing costs, coordination with growers, processing local food items, distribution, and/or equipment) seemed to be the most helpful. Grants that supported other aspects such as outreach (e.g., community liaison, farm to school marketing, and/or website development) and education (e.g., culinary and

nutrition education for staff, and/or nutrition and agricultural education for students) were also helpful in ensuring a successful start. While USDA offers a number of grant opportunities that support farm to school efforts (see Appendix A for a list of examples), the USDA should consider these needs when appropriations for grant opportunities become available.

To support local salad bar initiatives, the White House Task Force on Childhood Obesity developed *Let's Move Salad Bars to Schools* (<http://saladbars2schools.org/guidelines>) and to date has raised money to purchase more than 500 salad bars. This program allows any school, private or public, to apply for funding to purchase salad bars. These grants enable schools to avoid the upfront cost of purchasing salad bar equipment. Once a salad bar is in place, school districts can find resources on food safety, nutrition education, and salad bar design on the USDA's Farm to School website at <http://www.fns.usda.gov/cnd/F2S/f2s-resources.htm>.

On January 21, 2011, FNS issued a revised policy memorandum, SP 02-2010-Revised, *Salad Bars in the National School Lunch Program* (http://www.fns.usda.gov/cnd/Governance/Policy-Memos/2011/SP02-2011revised_os.pdf), to provide State agencies with information on how salad bars can effectively be used in the service of reimbursable meals. This memorandum includes information on portion size, point of service, nutrient analysis, and food safety for school meals.

School districts looking to find farmers in their area can access AMS's online National Farmers Market Directory, which lists points for contact for approximately 6,300 markets. The directory is updated annually and be accessed through the following link: <http://apps.ams.usda.gov/FarmersMarkets/>. In addition, USDA's *Know Your Farmer, Know Your Food* website also provides a number of resources on connecting school districts with local and regional farmers. This website can be accessed through the following link: www.usda.gov/knowyourfarmer.

It was noted during many site visits that lunch periods are relatively short – typically around 15-20 minutes for students to obtain and consume a meal. Research has shown that short lunch periods increase the amount of food waste and decrease the consumption of nutrients by school children.⁴ When lines are long, students may substitute a healthy meal with vending machine fare.⁵ In other studies, students given a short lunch period tended to eat more, since it takes about 20 minutes for the brain to realize that the stomach is getting full.⁶ School administration should consider the length of the student's lunch period or schedule recess

⁴ Ethan Bergman, Nancy Buerger, Timothy Englund, and Annaka Femrite, "The Relationship Between the Length of the Lunch Period and Nutrient Consumption in the Elementary school Lunch Setting," Journal of Child Nutrition and Management, Fall 2004.

⁵ Cynthia Curl Henderson, "The State of Nutrition and Physical Activity in Our Schools," The Environment and Human Health, Inc, 2004, Accessed: 16 May 2011 <http://www.ehhi.org/reports/obesity/obesity_report04.pdf>.

⁶ Rachana Bhat, "The Impact of School Lunch Length on Children's Health," Andrew Young School of Policy Studies Research Paper Series March 2009: 1.

before lunch, so students are calmer during the lunch period and do not rush through their meal in order to have more time for recess.⁷ When implementing farm to school activities, the school district may want to consider all aspects of the school meal programs to encourage the student's consumption of fresh, local products, including the amount of time given for meal service.

Existing USDA Efforts:

- Established a USDA Farm to School website to share information related to farm to school policies, best practices, tips and resources.
- Participated in numerous national and regional conferences to share information with stakeholders of farm to school.
- Provides a national online directory of farmers markets.
- Provides numerous grant opportunities that support farm to school activities.
- Supports the *Let's Move Salad Bars to Schools* initiative.
- Provides resources on salad bar design, nutrition education, and food safety through the USDA Farm to School and Team Nutrition websites.
- Provides resources related to local and regional food systems on the *Know Your Farmer, Know Your Food* website.
- Offers a resource for funding and connecting farmers to school districts through local Cooperative Extension Offices.
- Provides ongoing funding through USDA's Rural Development, Sustainable Agriculture Research and Education, and National Institute of Food and Agriculture's Community Food Project grants.

Suggestions for USDA Consideration:

- Consider staffing costs, coordination with growers, processing local food items, distribution, equipment, promotion, and nutrition and agriculture education for future grant opportunities as appropriations become available.
- Continue to support the *Let's Move Salad Bars to Schools* initiative.
- Continue to provide support to stakeholders through attendance at national and regional conferences and the *Know Your Farmer, Know Your Food* initiative.
- Continue to foster and support the sharing of best practices and resources between stakeholders through conference attendance, webinars, regional representation, guidance, and technical assistance through the USDA Farm to School website.
- Facilitate discussions to address ways for school districts to adapt salad bar usage to meet the reimbursable meal requirements.

⁷ Katie Bark, Molly Stenberg, Shelly Sutherland, and Dayle Hayes, "Scheduling Recess Before Lunch: Exploring the Benefits and Challenges in Montana Schools," *Journal of Child Nutrition and Management*, Fall 2010, Accessed: 16 May 2011, <<http://www.schoolnutrition.org/Content.aspx?id=14762>>.

Procurement

Bringing local farm products into school meal programs is the focus of farm to school efforts. One of the main purposes of the Team's site visits was to see how local purchases were being conducted and if the new geographical preference option was helpful in local food purchases. How school districts defined "local" is discussed further in the Local, State, and Federal Policy section of this report.

Geographic Preference:

The geographic preference option was authorized by Section 4302 of Public Law 110-246, the Food, Conservation, and Energy Act of 2008, which amended section 9(j) of the Richard B. Russell National School Lunch Act allowing institutions receiving funds through the Child Nutrition Programs to apply an optional geographic preference in the procurement of unprocessed locally grown or locally raised agricultural products. This provision applies to operators of all of the Child Nutrition Programs, as well as to purchases made for these programs through the DoD Fresh Program. The law also applies to State agencies making purchases on behalf of local agencies under any of the Child Nutrition Programs.

According to the final rule issued on April 22, 2011, "...'unprocessed locally grown or locally raised agricultural products' means only those agricultural products that retain their inherent character. The effects of the following food handling and preservation techniques shall not be considered as changing an agricultural product into a product of a different kind or character: cooling; refrigerating; freezing; size adjustment made by peeling, slicing, dicing, cutting, chopping, shucking, and grinding; forming ground products into patties without any additives or fillers; drying/dehydration; washing; packaging (such as placing eggs in cartons), vacuum packing and bagging (such as placing vegetables in bags or combining two or more types of vegetables or fruits in a single package); the addition of ascorbic acid or other preservatives to prevent oxidation of produce; butchering livestock and poultry; cleaning fish; and the pasteurization of milk."

The final rule for the *Geographic Preference Option for the Procurement of Unprocessed Agricultural Products in Child Nutrition Programs* can be found at the following website: <http://www.fns.usda.gov/cnd/Governance/regulations/2011-04-22.pdf>.

Informal and Formal Bidding Process:

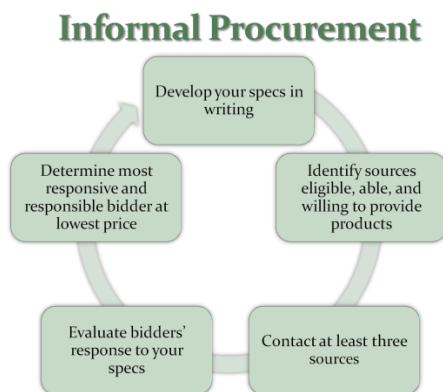
School districts that participate in the Child Nutrition Programs must follow specific procurement requirements when procuring for goods or services, such as food items. For the purposes of providing context for this report, the information below describes the Child Nutrition Programs' procurement requirements in general terms. Detailed information about these requirements can be found in the "policy" section of the USDA Farm to School website at <http://www.fns.usda.gov/cnd/F2S/f2spolicy.htm>.

Informal Procurement

If the cost of the goods or services meet or fall below the small purchase threshold, which is explained below, a school district may choose to conduct an informal procurement. In informal

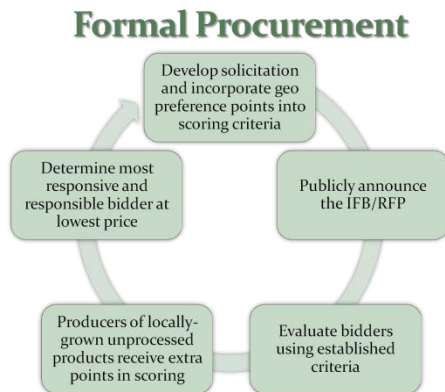
procurement under the small purchase threshold, school districts must still develop a written specification document outlining the product/service they are seeking. Though informal procurements follow a less rigorous process than the formal methods of sealed bidding or competitive negotiation, competition is still required and school districts must contact three or more potentially qualified sources. Unlike the formal procurement methods, which require public advertisement, when using an informal method a school district may directly contact potential competitive sources (i.e., farmers/suppliers). Therefore, in an informal procurement, the need to assign geographic preference points is generally unnecessary. As in the formal procurement method, the school district must still choose the qualified source who offers the lowest price.

A small purchase threshold is a set amount that indicates if the procurement of goods and services must be conducted in a formal or informal method. The current Federal small purchase threshold is \$100,000. State and local regulations may set the small purchase threshold at a lower, more restrictive, level than the Federal threshold (for example, \$50,000 State threshold instead of the Federal threshold of \$100,000). School districts must check with their administering State agency and local officials to determine the small purchase procedures that must be followed in their respective State or district.



Formal Procurement

If the cost of the goods or services exceeds the small purchase threshold a school district *must* conduct a formal procurement. In a formal procurement method, school districts use a sealed bidding process (i.e., invitation for bid or IFB) or a competitive negotiation process (i.e., request for proposals or RFP). Within the scoring criteria contained in these methods, the school district may incorporate the use of geographic preference points when procuring for unprocessed locally grown or raised agricultural products as long as the solicitation document clearly outlines how all bids will be evaluated and the school district's application of the geographic preference option leaves an appropriate number of qualified bidders, given the nature and size of the procurement, to compete for the contract. This indicates to bidders that—upon the school district's scoring of their solicitation for locally unprocessed agricultural products—preference points will be applied to the responsive bidders that met the geographic preference. The school district must choose the qualified bidder who offers the lowest price.



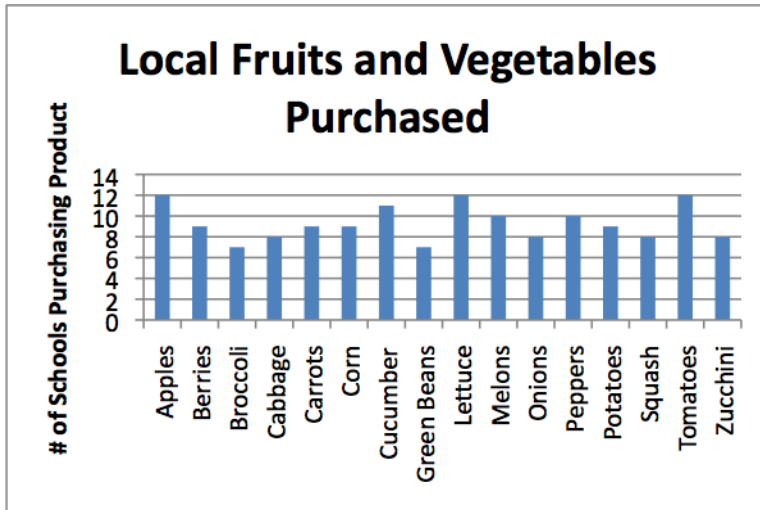
The majority of the school districts the Team visited indicated that their local purchases fell below the Federal, State, or local small purchase threshold which meant they were able to use the informal or small purchase method. Although the geographic preference option was intended to provide more flexibility to the formal procurement processes, school districts were applying a geographic preference to their informal procurement as well.

Quantity and Cost of “Local” Foods:

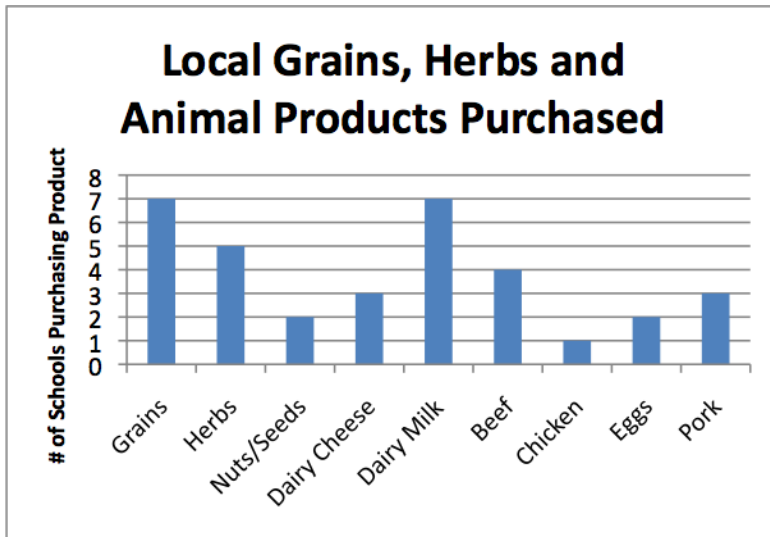
Although most of the school districts did not formally track the amount of local food purchases they made, anecdotal information showed that the percentage of local food purchases to overall food purchases ranged from under 1 percent to 35 percent. Those school districts that purchased less than 10 percent of local food items seemed to be working on overcoming the initial barriers as identified in the Farm to School Implementation and Promotion section of this report, or simply did not have the staff or time to increase their efforts to the initiative.

Again, since formal tracking or evaluations were not completed by the majority of the districts, it was difficult to identify whether local food purchases cost more or less than non-local food purchases. Many school food service directors indicated that when the local food items were in season, they often cost less than non-local food items. For those that felt local food items cost slightly more than non-local, the school food service directors felt the quality of the product (e.g., taste and appearance) and student acceptability far outweighed the cost difference of the product.

The chart below depicts the most commonly purchased local fruits and vegetables in the 15 school districts the Team visited. The most frequently purchased included apples, lettuce, tomatoes, cucumber, melons, and peppers.



Other local products were purchased by these school districts as well. The chart below shows the most frequently purchased food items, other than produce, included dairy, grains, herbs, and ground beef.



Distribution Options:

One aspect to purchasing local food items is determining how the food will travel from the farm to the school district. Determining the distribution of local food items impacts the cost of the product and should be considered in both the informal or formal procurement processes. There are several different distribution models and, depending on the school district’s size and location, as well as the equipment and available staff at the school and farm, the school district and farm must determine which model will work best for them. The following are examples of seven distribution methods:

- Direct purchasing from farmers
- Purchasing from a farmer cooperative (group distribution strategy)

- Purchasing using a buying cooperative
- Purchasing local and regional products at farmers markets
- Working with a food service management company
- Ordering local products through a contracted distributor
- Purchasing through the DoD Fresh Program

For a list of pros and cons for each of these distribution models, visit the USDA Farm to School website at www.fns.usda.gov/cnd/f2s/.

Expressed Challenges of Procurement:

Clearly understanding the procurement requirements of the Child Nutrition Programs, or how the geographic preference option may be implemented, has been an expressed struggle for many school districts across the country. To that end, school food service directors have requested more technical assistance on procurement, including specifications and bid examples.

In addition, school food service directors and farmers indicated that when procuring local food items the difference in terminology between the two industries could result in miscommunication. School food service staff often procure food in pounds, as they need to determine how many pounds of product will be needed to meet a certain amount of portioned servings, while farmers commonly sell their products by the bushel, peck, crate, or lug.

Some districts the Team met with indicated that, at times, local farmers were unable to supply the particular food item that the school district had ordered. It was indicated that these incidences were caused by insufficient or failed crops or, at times, unreliable vendors.

School districts that contracted with food service management companies (FSMCs) to manage their school meal programs may have experienced situations in which the FSMC's corporate policies impact the purchase of local food, thereby making the purchase of local food items more challenging. For example, as a general business practice FSMCs may require high product insurance policies for farms they purchase from that can be prohibitive for small or mid-scale farms to meet. Additionally, due to the volume of product commonly purchased by FSMCs as a whole, FSMCs often utilize existing distribution/manufacturer relationships under which they receive rebates, discounts, and applicable credits. Although the portion of those rebates, discounts, and credits allocable to the school district (based on a district's purchases) must be returned to the district, remaining volume discounts may go to the FSMC and, therefore, may impact the purchasing efforts of FSMCs and make it difficult for small and mid-scale farms to bid competitively for the school district's business.

With regard to distribution of local food items, many of the school food service directors and farmers said that finding the right method to deliver the local food items to the schools was initially a struggle. Many times challenges revolved around the school district and/or the farmer lacking proper equipment, staff, and time to pick-up or drop-off the local food items. Many school food service directors indicated that when working with multiple farmers directly, the administrative responsibilities, such as placing orders, paying invoices, arranging delivery

schedules, etc., increased as well. In those school districts that were working through a distributor to deliver their local food items, the school food service directors noted that some distributors were often unable or unwilling to differentiate and/or label local food items. This was particularly true of distributors for the DoD Fresh Program. For example, school districts participating in the DoD Fresh Program obtained fruits and vegetables from their DoD Fresh distributor. Some school districts wishing to incorporate local produce expressed frustration that not all DoD Fresh vendors could guarantee that the produce the district received through this program met the district's definition of "local." More information about how these school districts defined "local" is addressed in the Local, State, and Federal Policy section of this report.

An overarching challenge for school food service is to stay within budget. This is, of course, true when procuring for local and non-local food items alike.

Addressing the Challenges of Procurement:

School food service staff and farmers acknowledged that there is no one-size-fits-all procurement system that would work for every farm or school district. To address the challenges in local food procurement, school food service staff have learned to work closely with their State agency, develop clear specifications, plan school menus that align with the harvest seasons, and establish a distribution method that works for both the school district and farmer. Many times the successes that occurred required much trial and error before the system worked.

Many districts worked closely with the State administering agency of the Child Nutrition Programs to ensure proper procurement practices were followed, while others appeared to struggle to understand and, therefore, meet the requirements. Several school food service directors also noted that USDA guides, such as the *Food Buying Guide for Child Nutrition Programs* and *Fruits and Vegetables Galore*, were helpful for writing product specifications. These guides, as well as other resources, can be found at <http://www.fns.usda.gov/tn/resources>.

To address the terminology differences and miscommunication between farm and school food service metrics, the Maryland Department of Agriculture created a translation chart titled *Pecks to Pounds* (<http://www.marylandsbest.net/pdf/directory.pdf>), which lists the poundage equivalents to commonly used farm measurements. School food service directors indicated that a lesson learned for them was to be *very* specific when writing their product specifications and to keep the lines of communication open with the farmer to avoid any mishaps. Working out this language difference between the farmers and school districts is obviously an important step to ensuring the correct amount of product is provided to the school district.

The school food service directors also noted that planning menus in accordance with the harvest seasons enabled them to purchase local food items at lower prices and in the quantities they needed. Furthermore, the directors also recommended scheduling delivery date(s) with local farms in a way that would allow for the districts to order food items through their

contracted distributor, should the local farmer be unable to supply the ordered quantity.

With regard to school districts that contract with FSMCs, community partners noted that in order for the school district to be successful in purchasing local foods through an FSMC, it must make purchasing local food items a priority and incorporate language about local food items into the bid and contract when procuring for a company to manage its school meal programs. In addition, the school district must provide the management oversight of the contract to ensure local food purchases are being made according to the contract agreements. A local nonprofit organization in Rhode Island, which works closely with Jamestown School District, developed a prototype for districts to use.

FSMCs, in general, have begun to make efforts to incorporate local and regional food items into the school meal programs. For example, in Eugene, Oregon, at Eugene School District (4J), the FSMC sponsors a culinary competition for high school students, hosts monthly events to feature local agriculture, and at one elementary school in particular features “school garden day,” where a meal is prepared from the school garden’s harvest. In Jamestown, Rhode Island, with the help of a local nonprofit organization, Jamestown School District has worked hard to incorporate local food items into its menus.

During the site visits the Team observed a wide variety of distribution models. School food service directors and farmers pointed out that communication and flexibility in the methods of delivery were vital to selecting a successful model that addressed the needs of both the school districts and farmers. For example, although this method can be challenging for some districts, a few of the school food service directors indicated that they were willing to accept deliveries from local farmers outside their normal business hours. Other larger districts, like Jefferson County Public Schools in Louisville, Kentucky, felt that working through their contracted distributor to deliver local food items was ideal for them, as it reduced the administrative burden.

In addition to purchasing local food items in season, school food service directors suggested looking at the entire meal when budgeting labor and food costs. For example, at Harrisonburg City Schools in Harrisonburg, Virginia, the school food service director uses USDA Foods as the center-of-the-plate item and side dishes that require minimal preparation to offset any additional costs of processing and preparing the local food items purchased for the school meal programs.

The table below provides additional solutions to overcoming the common challenges of procuring local unprocessed food items, as expressed by the 2010 farm to school site visit participants.

Procurement	
Expressed Challenges	Addressing the Challenges
Procurement	

<ul style="list-style-type: none"> • Confusion around the Child Nutrition Programs' procurement regulations, including how to apply the geographic preference option 	<ul style="list-style-type: none"> ✓ Consult with the State agency administering the Child Nutrition Programs to ensure bidding procedures are within USDA guidelines (for both formal and informal procurement) ✓ Consult the "policy" section of USDA's Farm to School website for information on procurement requirements and policies (http://www.fns.usda.gov/cnd/F2S/f2spolicy.htm) ✓ Consult the USDA guides <i>Fruits and Vegetables Galore</i> (http://www.fns.usda.gov/tn/resources/fv_galore.html) and <i>Food Buying Guide for Child Nutrition Programs</i> (http://www.fns.usda.gov/tn/resources/foodbuyingguide.html) to help with writing product specifications
<ul style="list-style-type: none"> • Schools and farmers often have different industry terms and standards, resulting in miscommunication 	<ul style="list-style-type: none"> ✓ Establish communication between the schools and farmers to learn each other's industry and the terms in which to write or submit a bid proposal ✓ Establish a method of communication between the school and farmer (e.g., email, cell phone, etc.) ✓ Write clear expectations and specifications for size, quality, quantity, food safety requirements, cleanliness, payment schedule, etc. ✓ Only accept product that meets the district's specifications ✓ Consult the Maryland Department of Agriculture measurement translation chart titled <i>Pecks to Pounds</i> (http://www.marylandsbest.net/pdf/directory.pdf) ✓ Work with local Cooperative Extension Office to become familiar with common types of measurements a farmer may use
<ul style="list-style-type: none"> • Local supply can be inconsistent 	<ul style="list-style-type: none"> ✓ Create school menus with seasonality in mind ✓ Conduct procurement well enough in advance for local farmers to prepare their crops for the school's needs ✓ If a local producer is unable to provide needed quantity, supplement item with product from a contracted distributor or another local producer ✓ Time local deliveries with enough advance for backup ordering from the contracted distributor should the local product be unavailable or fall short

<ul style="list-style-type: none"> In districts contracted with a Food Service Management Company (FSMC) local purchases may be more challenging due to cooperate policies, such as high product liability insurance, rebates received for high-volume orders, existing cooperate contracts with distributors, local farmers not on FSMCs “approved” list, etc. 	<ul style="list-style-type: none"> ✓ When procuring for an FSMC, include language stipulating that local food purchases occur, when possible, in the bid and contract ✓ School district must provide oversight of the contract to ensure local food purchases are being conducted according to the contract agreements ✓ School districts with existing FSMC contracts should ensure the FSMC understands their interest in local purchases and seek options within the current structure to achieve that priority
Distribution Models	
<ul style="list-style-type: none"> Receiving product from multiple farmers can add administrative burden 	<ul style="list-style-type: none"> ✓ Conduct an assessment of needs and availabilities and establish a distribution plan (e.g., farmer delivers to one school within the district; the school will pick up from a farmers market or directly from farm; local product will be delivered through the school’s contracted distribution company; etc.) ✓ Establish one delivery day with a particular farmer, or one delivery day for all local farmers
<ul style="list-style-type: none"> Contracted distributors unwilling to purchase or differentiate “local” food items 	<ul style="list-style-type: none"> ✓ Establish communication with contracted distributor to find a way to purchase and ensure delivery of local food items ✓ When procuring for a contracted distributor, include language into the bid and contract that stipulates that local food purchases occur, when possible, and that local food items are identifiable upon delivery to the district
Costs	
<ul style="list-style-type: none"> Buying local food items and staying within budget 	<ul style="list-style-type: none"> ✓ Purchase local food items when in season (which also offers better quality product) ✓ If able to, purchase items in bulk ✓ Consider balancing the cost of the entire meal by incorporating USDA food products, especially for the center of the plate, then more dollars may be used to spend on local food items for the remaining components of that meal

Procurement Conclusion:

The Team recognizes the need to continue providing technical assistance and guidance to Regional and State agencies on procurement requirements for the Child Nutrition Programs and the geographic preference option, which in turn will be disseminated to local agencies. Due to the overall need for guidance on these requirements, the policy section of the USDA Farm to School website provides information and links to procurement regulations, policies, and frequently asked questions. Additionally, in 2009, USDA developed an online training course on procurement which is offered through the National Food Service Management Institute.

Originally, the training was only accessible to State agencies, but FNS has recently opened the free training to the general public. A link to the training's registration is available on the policy section of the USDA Farm to School website (<http://www.fns.usda.gov/cnd/F2S/f2spolicy.htm>). Funding to provide regional procurement training for State and local agencies via a contracted entity (e.g., National Food Service Management Institute) would also be beneficial.

To address the need for clarity on how to apply the geographic preference option, FNS published a memorandum on February 1, 2011, SP 18-2011, *Procurement Geographic Preference Q&As*, to answer common questions about the application of the geographic preference option in the procurement of unprocessed locally grown or raised agricultural products for the Child Nutrition Programs. Many of the questions that arose in the site visits were included in this memorandum.

In the past, FNS provided technical assistance and guidance on the Child Nutrition Programs procurement requirements and policies to the State agency administering the Child Nutrition Programs (typically the Department of Education). However, during the 2010 site visits, the Team learned that many school food service directors, farmers, and community partners seek help from the State Department of Agriculture or local Cooperative Extension Offices when beginning their farm to school efforts. These agencies may be unfamiliar with the procurement requirements that govern the Child Nutrition Programs; therefore, FNS will seek avenues in which to provide technical assistance and guidance on procurement to Farm to School Coordinators at various State agencies (e.g., State Department of Agriculture or Health) and Cooperative Extension Offices as well.

In addition, FNS recognizes the need to provide additional guidance in situations where FSMCs are purchasing on behalf of a school district. This guidance will need to include information for school districts to ensure that a FSMC's purchasing practices are reflective of the district's desires and are not solely beneficial to FSMC's general business practices (e.g., rebated or discounted pricing agreements, high product liability insurance, etc.).

Currently, in the ordering system for the DoD Fresh Program, local products are highlighted with an icon saying "local" in green lettering next to food items that are available for school districts to purchase within their region. USDA will continue to work with DoD and explore ways in which local food products can be purchased and tracked (e.g., requiring product origin on packages and/or invoices) through the DoD Fresh Program.

While school districts are unable to apply the geographic preference option to processed food items (as according to Federal regulation), the geographic preference option may be applied to minimally processed items that retain their inherent character (e.g., coiled or stick vegetables, frozen fruits and vegetables, etc.); however, many school food service directors expressed the lack of local minimal processing options. USDA has several programs and initiatives that support local food processing initiatives. For example, the Value-Added Producer Grant, administered by USDA Rural Development, may be used for planning activities, working capital for marketing value-added agricultural products, and for farm-based renewable energy. Within

this program there is a 10-percent set-aside for projects that focus on local and regional supply networks. Similarly, the Community Facilities Program, also administered by Rural Development, provides direct loans, guaranteed loans, and grants to support the success of rural communities by providing loans and grants for the construction, acquisition, or renovation of community facilities or for the purchase of equipment for community projects. Projects that support local and regional food systems that may qualify for community facilities funding include, but are not limited to: (1) farmers markets, (2) school kitchens and community kitchens, or (3) community food banks, food storage and distribution centers, and food preparation centers. Programs like these support local and regional food systems and may help school districts access local processed food items. USDA will continue to promote and support such initiatives and increase relevant outreach to farm to school stakeholders.

In addition, many school food service directors expressed an interest in alternative contract types with regard to purchasing local food items, such as Community Supported Agriculture (CSA) and/or growing contracts. USDA will investigate avenues in which to provide technical assistance for these interests, as well as continue to review Federal procurement requirements and policies as they relate to supporting local food purchases.

Through the *Know Your Farmer, Know Your Food* initiative, USDA is exploring ways in which to build stronger infrastructures through “food hubs” to assist in the distribution of local food items between farms and school districts. USDA has recently launched a “food hub corner” on its website (<http://www.ams.usda.gov/AMSV1.0/foodhubs>) to lend support and resources for this growing interest in distribution.

Existing USDA Efforts:

- Established a policy section on the USDA Farm to School website that provides technical assistance and guidance on procurement requirements, policies, and frequently asked questions.
- Developed an online procurement training course provided through NFSMI that is available to the public. A link to the training course is provided on the USDA Farm to School website.
- Published a memorandum SP 18-2011, *Procurement Geographic Preference Q&As*, which provides guidance on the application of the geographic preference option.
- Worked with DoD to identify local food items in the ordering system.
- Provides funding opportunities to support processing facilities.
- Established the “Food Hub Corner” webpage.

Suggestions for USDA Consideration:

- Continue to provide technical assistance and guidance on the Child Nutrition Programs’ procurement requirements and applying the geographic preference option.
- Provide additional guidance for school districts contracting with FSMCs that addresses purchases practices.
- Expand the outreach of policy and guidance materials to farm to school coordinators on

the Programs' procurement requirements beyond the State agency administering the Child Nutrition Programs.

- As appropriations becomes available, fund regional procurement training for State and local agencies through a contracted entity (e.g., NFSMI).
- Continue to work with DoD to explore methods for tracking product origin on packaging and/or invoices for the DoD Fresh Program.
- Continue to provide funding opportunities for local food processing facilities.
- Provide guidance for alternative contracting methods (e.g. CSA, growing contracts).
- Continue efforts that develop food hubs as an additional avenue for connecting school districts to local farms through the *Know Your Farmer, Know Your Food* initiative.

Farm to School Education

School districts often take part in activities that work hand-in-hand with purchasing local food items and provide educational opportunities for students, such as nutrition and/or agriculture lessons, school gardens, taste-testings, and field trips to nearby farms.

Most of the school districts the Team visited were incorporating some form of agriculture and/or nutrition education through classroom activities, students touring farms, farmers visiting schools, school gardens, and/or taste-testings. These districts relied heavily on community support (e.g., volunteers, local agriculture extension office, and nonprofit organizations) for materials and noted that educational efforts were reinforced with students when the school meal programs aligned with foods being highlighted in nutrition or agriculture education courses. Many of the educational activities were funded through grants. Overall, it was the involvement of school administrators, principals, teachers, and nonprofit partners that were imperative to the success of these educational activities.

In addition, many of the school districts had or were beginning to plant a school garden. Most of these districts did not use the harvest from these gardens for the school meal programs, but were more commonly used for educational purposes and taste-testings. A few school food service directors and teachers expressed a desire to one day provide educational opportunities through an online or virtual classroom, so students could learn about agriculture and gardening in other parts of the country.

Expressed Challenges of Farm to School Education:

The majority of the school districts felt they could do more agriculture and nutrition education; however, lack of classroom time, funding, and other district priorities were often a hindrance. In addition, some districts expressed that it was difficult to find nutrition or agriculture curricula that was easy to implement and met State standards.

In many school districts, the students and school faculty were not always able to identify local and non-local products offered in the school meals. Furthermore, there was often a disconnect between educational efforts and the school food service department. A few districts had Future Farmers of America (FFA) or 4H programs, but such programs were rarely connected with school food service activities.

During the site visits, both the school districts and farmers indicated that student field trips to nearby farms were beginning to dwindle because schools lacked the funds for transportation to and from the farm or to pay the minimal fees associated with field trips.

In looking at the challenges associated with school gardening, most districts lacked a garden coordinator, which made year-round garden maintenance more difficult. Additional challenges related to school gardens are addressed in the Food Safety and Local, State and Federal Policy sections of this report.

Addressing the Challenges of Farm to School Education:

The USDA Farm to School Team observed firsthand how the USDA-supported *Ag in the Classroom* provides support to school districts for improvement of agricultural literacy among PreK through 12th-grade teachers and students. During the site visit to Morrison Public Schools in Morrison, Oklahoma, the Team observed the Oklahoma Cooperative Extension Office present *Ag in the Classroom* curriculum to the elementary schools' teachers and principal. The Oklahoma Cooperative Extension Office's *Ag in the Classroom* program plays a prominent role in providing teachers with the necessary tips and resources to educate and excite students about the food they are consuming. This type of community support fosters enthusiasm and gives sustainability to the district's farm to school efforts.

Many States are finding ways to incorporate farm to school education into their State's curriculum standards. In another example from Morrison Public School District, the physical education (PE) teacher found free nutrition lessons online that incorporate physical activity. This PE teacher also created songs for the kids to sing and dance to, which the students proudly performed for the Team during the site visit. Additionally, Morrison's participation in the State-wide Oklahoma Farm to School Program gives them access to many resources, including educational materials, technical assistance, and a variety of Oklahoma-grown products.

The most common way school food service departments made local food items identifiable to students was through the use of signage in the serving lines. For example, school districts in Kentucky took advantage of the Kentucky Proud (KY Proud) Program, a statewide promotion program for Kentucky agriculture that already existed. Sponsored by the Kentucky Department of Agriculture, KY Proud promotes the use of local food purchases in restaurants and, more recently, in schools. The same KY Proud logo that highlights Kentucky products on menus at local restaurants also helps students identify local products in the school lunch line. Both Jefferson and Montgomery County Public School Districts in Louisville and Mount Sterling, Kentucky, respectively, identify the local food items served in the school meals with the KY Proud logos.

In addition, many of the districts educated students, parents, and faculty by providing information about the local food items offered in the school meals through their printed monthly menus and morning announcements. For example, the school food service director at Union Public School District in Tulsa, Oklahoma, uses short sound bites or nutrition "factoids" such as "Did you know that strawberries are a member of the rose family?" during the morning announcements when local food items are featured in the day's menu.

School districts are also working to educate students by personalizing school food service staff and local farmers. A good example of an innovative strategy comes from Montgomery County School District, in Mount Sterling, Kentucky, where the school food service director wants the students to be able to recognize her and the farmers from whom she purchases local food items. To this end, every school cafeteria features bright, colorful poster-size photographs of the school food service director and the local farmers who provide produce for school meals. By displaying these photographs, students recognized the farmers and the school food service director on school campus and within the community. Personalizing school food service and

farmers excites students, teachers, and parents about local agriculture.

Another inventive approach comes from a nonprofit organization in Rhode Island. They have developed “farmer trading cards,” which offer fun facts about the farmer and the products the farm produces. Jamestown Public School District in Jamestown, Rhode Island, has partnered with the nonprofit organization to offer these colorful trading cards to students when they go through the serving line.

In Ventura, California, a nonprofit organization supplied Ventura Unified School District and the community with “Farm of the Month” brochures, which highlighted a new local farmer every month. Likewise, several produce distributors the Team spoke with were willing and able to supply marketing materials to the school districts, including farmer bios with colorful pictures and product information. For example, the contracted distributor with Ventura Unified School District develops flyers on local farmers, indicating when the local products will be available as well as information about the farm.

In Burlington, Vermont, two nonprofit organizations have jointly hosted a Jr. Iron Chef event for the past 3 years. The statewide competition gave students an opportunity to gain hands-on experience preparing and cooking nutritious, farm-fresh foods. The event and training highlighted local agriculture and encouraged students to make healthy eating choices and learn more about nutrition, farm-fresh foods, the culinary arts, and school food systems. Local guest chefs participated with the students, and the winners received culinary scholarships. In 2009, the winning recipe was prepared for members of the State legislature to bring awareness of the event and farm to school to Vermont policymakers.

Although many districts lack a farm to school coordinator, they may be able to find volunteer help within nonprofit organizations. In Boston, Massachusetts, two AmeriCorps VISTA volunteers helped Boston Public Schools to implement their farm to school activities. The first position was dedicated to education and outreach within the school district. The second position provided technical and information management (e.g., adding local food items to the school district’s procurement software to streamline the ordering process and track purchasing data).

To contend with the diminishing funds for student field trips to local farms, some of the farmers the Team spoke with said they had visited the school districts to talk with the students about their farming operations. Some school food service directors also indicated a desire to link up with the directors of 4H or FFA programs as a way to continue to educate students about agriculture and how foods play a role in their diet.

Below is a table listing additional solutions to overcoming the common challenges of farm to school education as expressed by the 2010 farm to school site visit participants.

Farm to School Education

Expressed Challenges	Addressing the Challenges
<ul style="list-style-type: none"> • Finding nutrition or agriculture curricula that meet State standards 	<ul style="list-style-type: none"> ✓ Work with the State Department of Education to expand options ✓ Create an elective or afterschool club/class on agriculture or nutrition education ✓ Consult USDA’s Team Nutrition website (http://www.fns.usda.gov/TN/) for curricula on nutrition and school gardens ✓ Consult local Cooperative Extension Office or universities
<ul style="list-style-type: none"> • Lack of easy-to-implement education materials 	<ul style="list-style-type: none"> ✓ Use Ag in the Classroom – it offers a variety of tools (http://www.agclassroom.org/) ✓ Consult USDA’s Team Nutrition website (http://www.fns.usda.gov/TN/) for curricula on nutrition and school gardens ✓ Consult USDA’s Farm to School website (http://www.fns.usda.gov/cnd/F2S/) for available farm to school resources ✓ Local produce distributors may be able to supply educational materials (e.g., farmer bios with pictures, monthly harvest materials, etc.) ✓ Contact State agriculture agencies/nonprofit organizations that may have nutrition or food related educational materials ✓ Link with directors of FFA or 4H Programs for cost-effective educational programs that can be incorporated with other classroom curricula
<ul style="list-style-type: none"> • Disconnect between education efforts and school food service <ul style="list-style-type: none"> ○ Students and teachers are not able to identify local from non-local food items 	<ul style="list-style-type: none"> ✓ Education and communication between teachers, principals, school administrators, and school food service staff will help to bridge the gap ✓ Keep open dialog between school food service and other school district employees about educational efforts that involve nutrition and agriculture ✓ Reinforce educational efforts in the classroom with the food items served in school meals ✓ Post signs to highlight local food items in the school meals; if possible, include information about the best season to eat each local item ✓ Highlight local food items and their health benefits in morning announcements ✓ Involve the farmers (e.g., farmer trading cards, farmer of the month, photos of farmers in cafeteria, ask farmer to classroom for Q&As, etc.) ✓ Identify local foods in weekly/monthly menus

<ul style="list-style-type: none"> • Lack of funding for education programs, including school gardens and student field trips to farms 	<ul style="list-style-type: none"> ✓ Search potential funding sources, including local agriculture extension offices, State agencies (e.g., departments of education, health, and agriculture), Federal agencies (e.g., USDA; Centers for Disease Control and Prevention), private foundations, local and national nonprofit organizations, agriculture industry groups, universities, and the business community
<ul style="list-style-type: none"> • Lack of a garden coordinator at school district 	<ul style="list-style-type: none"> ✓ Partner with community gardening groups, such as Jr. Master Gardener or Master Gardener programs ✓ Establish a “champion” with the school district or community to act as the garden coordinator

Farm to School Education Conclusion:

Providing nutrition and agriculture education is imperative to sustaining a healthy lifestyle for students. The USDA (among other organizations) has numerous education materials available; however, the biggest barriers seem to stem from the curriculum not meeting individual State standards and/or a lack of interest or time from the teachers and principals.

Many of the USDA’s educational materials can be found on the Team Nutrition website at <http://teamnnutrition.usda.gov/> where teachers, parents, and school food service can find a number of classroom curriculum and activities on nutrition in the “resource library.” Educational materials range from preschool to high school, and educators can find these resources at <http://www.fns.usda.gov/tn/educators.html>. For example, the most recent toolkit released by FNS is *Grow It! Try it! Like it!*, which provides garden-based nutrition education for 3- to 5-year-olds for childcare providers participating in the Child Nutrition Programs.

As a way to provide guidance to school districts who had or were beginning to establish a school garden, on July 29, 2009, FNS issued a policy memorandum, SP 32-2009, *School Garden Q&As* (http://www.fns.usda.gov/cnd/governance/Policy-Memos/2009/SP_32-2009_os.pdf), that addressed several questions regarding the operation of a school garden as it relates to the nonprofit school food service account and serving the school garden’s harvest in the school meal programs.

A link to these educational resources, as well as a map to Cooperative Extension Offices, will be posted to the USDA Farm to School website at <http://www.fns.usda.gov/cnd/F2S/>.

Existing USDA Efforts:

- Created nutrition educational materials to span the grades of preschool through high school.
- Supports Ag in the Classroom through local Cooperative Extension Offices.
- Established a resources section on the USDA Farm to School website for agriculture and nutrition education materials.

- Provided guidance to school districts on the operation of school gardens as it relates to the Child Nutrition Programs.
- Provides funding to State agencies for improving children’s eating and physical activity habits through Team Nutrition grants.

Suggestions for USDA Consideration:

- Continue to provide funding to support nutrition- and agriculture-related educational opportunities.
- Provide links to available educational tools and Cooperative Extension Offices on the USDA Farm to School website and update on a periodic basis.
- Highlight innovative and effective educational tools and efforts, such as Ag in the Classroom.
- Continue to promote/foster connections between school districts, local farmers, and chefs as a way to provide an educational experience for students.
- Emphasize and connect farm to school to USDA initiatives such as Chefs Move to Schools and Healthier US School Challenge.

Food Safety

Each school food service director the Team met with indicated that food safety was always a concern at the forefront of his or her mind and viewed food safety as a high priority to providing safe meals for the students. Food safety addresses handling, preparation, and storage of food in ways that prevent foodborne illness. Standard operating procedures must be followed to avoid potential contamination of food, including proper handling both on the farm and in the kitchen, safe handling during transportation, adequate storage temperatures and conditions, and proper handling during preparation and service in schools. Foods handled improperly at any point—from farm to fork—can potentially cause illness.

The USDA Farm to School Team was interested in learning what, if any, food safety concerns schools had in purchasing local food items and whether or not districts were requiring local farmers to be certified in Good Agricultural Practices or retain liability insurance prior to allowing purchases of the farm's harvest. The Team also looked at what food safety practices were being followed at the district if school gardens were available.

The majority of the directors were equally concerned about the safety of non-local food items, reflecting that food safety is a high priority for school food service directors. None of the districts the Team visited had experienced any problems related to foodborne illness due to local food items.

The Team met with distributors and farmers who both shared that they had systems in place should a product recall be necessary. Although some districts had experienced recalls of non-local food items (e.g., ground beef), no local food item recalls occurred.

Good Agricultural Practices (GAP) and Product Liability Insurance:

GAP is a collection of principles which apply to on-farm production and post-production processes. These principles evaluate chemical, microbiological, and physical hazards and require producers to take proactive, preventative controls which reduce the opportunity for those hazards to affect the safety of the product. With the increasing focus on GAP programs to verify that farms are producing food in the safest manner possible, the retail and food service industries are frequently requiring their suppliers to participate in third party audits to document their agricultural best practices.

Product liability insurance protects growers from people who claim to suffer illness or injury due to the product the farmer provided. Many grocery stores, farmers markets, schools, and hospitals require farmers to have liability insurance. Different buyers require sellers to maintain different amounts of insurance coverage. In general, buyers should require sellers to maintain a specific amount of insurance coverage, determined by the buyer or jointly by the buyer and seller. Buyers and sellers should contact their insurance agent for more information.

Although the school districts visited by the Team did not require their farmers to be GAP certified, they did require farmers and/or the wholesale distributor to maintain product liability insurance before they would consider purchasing food items from them. The amount of

product liability insurance varied widely from district to district, ranging from \$100,000 to \$3 million.

Expressed Challenges of Food Safety:

While some of the school food service directors felt they could trust (or had more trust) in local food items purchased than non-local food items, the majority of them felt they were ill-equipped to qualify the safety of the farm and its products. In addition, these directors expressed the need for additional training and guidance to assist them in knowing what food safety considerations should be addressed when talking to farmers or visiting a farm themselves.

Many of the farmers were aware of GAP, but most had not taken steps to pursue GAP certification. In fact, they felt that if USDA required schools to purchase food items from only GAP-certified growers, this would pose a large obstacle for selling their products directly to school districts. The school food service directors, however, reported mixed feelings about the USDA requiring GAP certification. On one hand, the school food service directors agreed with the farmers, but, on the other hand, if GAP certification was required, the school food service directors would be alleviated from the burden of feeling obligated to verify the safety of the farm and its products.

The majority of the school food service directors expressed their biggest food safety concerns were with regard to raw meat products. As identified in the School Food Service Infrastructure section of this report, most school sites are ill-equipped and have small facilities in which to safely handle raw meats.

Community partners expressed frustration that many local or State Health Departments have strict food safety requirements for incorporating a school garden's harvest into the school meals. See the Local, State and Federal Policy section of this report for more information regarding food safety policies on school gardens.

Addressing the Challenges of Food Safety:

Several of the school food service directors visited the farms they were considering purchasing local food items from as a way to observe first-hand the overall cleanliness and condition of the farm and to ask questions regarding chemical usage, access of animals to farm fields, and steps taken on the farm to reduce the likelihood of foodborne illness. The school food service director at Independence Community School District in Independence, Iowa, turned to Iowa State University for a GAP checklist which she includes in her procurement process. While not requiring GAP certification, each farmer is required to complete the checklist prior to the district purchasing products from them. Other directors who were purchasing local food items via their contracted distributor relied on the distributor to make the determination of a farm's safety.

While not certifying farmers, the Kentucky Department of Agriculture offers Kentucky farmers free State GAP training. The Kentucky farmers the Team met with stated that they appreciated

the training as it offered them additional insight on how to provide a safer product to local school children.

As one way to address the problem with local meat processing, Burlington Public Schools in Burlington, Vermont, purchases a precooked local meat product. In 2010, the district contracted with a local poultry producer to purchase chicken legs for use in school lunches. To avoid handling raw product in the school kitchens, the district contracted with a third party to have the product precooked before it is delivered to the school district. In this situation, the school was able to procure the local chicken product at a competitive price, while the local producer was able to find a steady market for the product.

The table below provides a list of additional solutions to overcoming the common challenges of food safety with farm to school as expressed by the 2010 farm to school site visit participants.

Food Safety	
Expressed Challenges	Addressing the Challenges
<ul style="list-style-type: none"> • School food service directors feel ill-equipped to certify safety of growers' farm and product 	<ul style="list-style-type: none"> ✓ Contact the local extension office, which may provide food safety training, technical assistance, and access to additional resources (http://www.nifa.usda.gov/Extension/index.html) ✓ Contact universities to obtain assessment tools that can be used to verify on-farm food safety practices ✓ Include a self-assessment instrument that the farmer completes as a self-audit (e.g., a checklist) in the procurement process ✓ Check farmer's references and talk to other customers buying from that farm/farmer ✓ Consult the National GAP Network for Education and Training (http://www.gaps.cornell.edu) to be more informed about what to look for when visiting a farm
<ul style="list-style-type: none"> • Expense of GAP certification 	<ul style="list-style-type: none"> ✓ Contact the State Department of Agriculture which may provide free or reduced-cost GAP training of local farmers ✓ Look to State agencies (e.g., Departments of Education, Health, and Agriculture), Federal agencies (e.g., USDA; Centers for Disease Control and Prevention), private foundations, local and national nonprofit organizations, agriculture industry groups, universities, and the business community as a funding resource

<ul style="list-style-type: none"> • Concern for bringing raw meat into school kitchens 	<ul style="list-style-type: none"> ✓ Consult State and county Health Departments to identify any local health and safety requirements that must be followed ✓ Develop appropriate standard operating procedures for the school food safety plan and train staff accordingly - raw meat can be handled safely through appropriate temperature control, proper cooking, and avoiding cross-contamination ✓ Consider alternatives, such as contracting to have local raw meat processed into a pre-cooked form
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Food Safety Conclusion:

Everyone is concerned about food safety, and this topic is especially important to school food service directors and school food service employees who are responsible for feeding thousands of children each day. Schools participating in the National School Lunch Program have historically done an outstanding job of serving safe food and preventing foodborne illnesses. School districts are eager to support their local farmers and, at the same time, they want to ensure that the food that they serve is grown and handled in a safe manner. Food safety concerns regarding locally procured foods can be addressed with education and training for all partners in the supply chain.

The largest food safety barriers with regard to farm to school have been assessing whether non-GAP-certified farms practice safe handling practices and the expense of GAP certification for small and mid-scale farms. Self-assessments, or the use of an agricultural handling checklist, can help guide the school food service directors in their discussion with local farmers. There are a number of Cooperative Extension Offices across the country that have developed self-assessments guides to assist farmers in the development and implementation of on-farm food safety plans. Cooperative extension offices at universities such as University of California-Davis, Penn State, Cornell, and Iowa State have these guides available. A link to these resources is available on the USDA Farm to School website at <http://www.fns.usda.gov/cnd/F2S/>.

Additional food safety resources include:

- **Cooperative Extension**
(<http://www.nifa.usda.gov/Extension/index.html>)
- **Joint Institute for Food Safety and Applied Nutrition (JIFSAN)**
(<http://www.jifsan.umd.edu/training/gaps.php>)
- **Produce Safety Alliance**
(<http://producesafetyalliance.cornell.edu/psa.html>)
- **National Good Agricultural Practices Network for Education and Training**
(<http://www.gaps.cornell.edu/index.html>)
- **USDA Good Agricultural Practices (GAP) and Good Handling Practices (GHP)**
(<http://www.ams.usda.gov/gapghp>)
- **Food and Drug Administration (FDA)**

(<http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/default.htm>)

To address cost concerns, USDA's AMS is assessing baseline data on the actual cost to conduct a GAP audit and the percentage of small and mid-scale farms completing the audit successfully. AMS is also conducting a pilot study on group certification of GAP (i.e., GAP training and audits will be conducted for small and mid-scale farms in a grouped area) to explore alternate ways of providing GAP training and certification for small and mid-scale farms. The results of these assessments should become available in 2011. USDA will continue to evaluate of how the GAP certification process can be made easier for small and mid-scale farms.

The Team recognizes the need for more guidance on food safety and local agriculture for both school food service staff and farmers. Along those lines, in 2010, USDA's FNS and AMS created a "train the trainer" course known as the Produce Safety University (PSU). Three courses were offered in 2010, and five courses will be offered in both 2011 and 2012. PSU is a weeklong, hands-on train-the-trainer course which covers all principles of produce: how it is grown, harvested, processed, packaged, and shipped before reaching school food service where it is prepared and served, sometimes using novel delivery systems outside of the school cafeteria, to children. Special emphasis is placed on farm to school and school gardens. FNS has worked with State agencies of the Child Nutrition Programs and Food Distribution Programs to identify participants from State agencies and local school districts.

All PSU participants receive training materials and are encouraged to train others at regional, State, and local workshops. A number of educational materials were developed for this course, including train-the-trainer materials consisting of six sets of lesson plans, five fact sheets on handling fresh produce in school settings, 12 information sheets on specific types of produce, and videos for training employees on best practices for handling produce from receiving through service. All PSU materials will be made available on both the USDA Farm to School website (<http://www.fns.usda.gov/cnd/F2S/>) and the National Food Service Management Institute website (www.nfsmi.org).

Furthermore, in 2010, FNS published a four-page fact sheet entitled *Best Practices: Handling Fresh Produce in Schools* (http://www.fns.usda.gov/fns/safety/pdf/best_practices.pdf). This fact sheet describes best practices for handling all types of produce with practices specific to leafy greens, tomatoes, melons, and sprouts, as well as a number of steps that school food service staff can take to minimize the chances for fruits and vegetables they handle to become contaminated. And, through funding from USDA's Risk Management Agency, the Community Food Security Coalition published a report and brochure on food safety practices and liability insurance and the impact on small and limited-resource farmers. The report and brochure are titled *Food Safety and Liability Insurance: Emerging Issues for Farmers and Institutions* and *Food Safety and Liability Insurance for Small-Scale and Limited-Resource Farmers*, respectively. The USDA Farm to School Team will provide a link to these resources on the USDA Farm to School website.

In visiting with school districts and farmers, there also seemed to be a need to clarify the difference between Hazard Analysis Critical Control Points (HACCP), GAP, and Good Handling Practices (GHP). While USDA provides definitions of these three safety measurements on the USDA website, the Team will add clarification to the USDA Farm to School website (<http://www.fns.usda.gov/cnd/F2S/>).

With regard to school gardens, most districts did not test the soil in which the school garden was planted. Like commercial farming, schools must take precautions to ensure that all foods served to students, including food from the school garden, are safe from biological, chemical, and physical hazards. These precautions would apply to gardens grown in raised beds as well. Local Cooperative Extension Offices can assist the school districts with obtaining the proper soil testing. Resources regarding school garden food safety practices will be made available on the USDA Farm to School website. For example, University of Maryland's College of Agriculture and Natural Resources website provides food safety information about school gardening (<http://www.growit.umd.edu/YouthGardening/Garden%20and%20Food%20Safety.cfm>) and the U.S. Environmental Protection Agency's Urban Agriculture & Improving, Local Sustainable Food Systems website has a number of resources related to community gardens that could apply to school gardens as well (<http://www.epa.gov/brownfields/urbanag/index.html>).

Existing USDA Efforts:

- Provide links to self-assessment tools for the handling of agriculture on the Farm to School website.
- Assessing baseline cost data for GAP audits and the percentage of small and mid-scale farms completing the audit successfully.
- Conducting a pilot study on group certification of GAP.
- Created a train-the-trainer course titled *Produce Safety University*.
- Created train-the-trainer materials on handling fresh produce in school settings, information sheets on specific types of produce, and videos for training employees on best practices for handling produce from receiving to service.
- Published a four-page fact sheet entitled *Best Practices: Handling Fresh Produce in Schools*.
- Provided funding to the Community Food Security Coalition to publish a report and brochure on food safety practices and liability insurance and the impact on small and limited-resource farmers.
- Provide assistance to school food service staff and farmers (e.g., providing self-assessment tools, soil testing, etc.) through local Cooperative Extension Offices.

Suggestions for USDA Consideration:

- Once available, release the results of the baseline GAP cost data and group GAP certification.
- Continue to explore ways to make GAP certification more accessible for small and mid-scale farms.
- Provide more guidance to school food service staff and ranchers on the safe handling of

local meat and dairy products in school cafeterias.

- Provide clarification to the three food safety measures (HACCP, GAP, and GHP) on the Farm to School website.
- Provide links to school garden food safety materials on the Farm to School website.

Impact and Evaluation

Farm to school efforts have the ability to impact many people within a community—students, local farmers, teachers, administrators, and parents—but to what extent? During the 2010 site visits, the Team inquired about how the potential impact of the school district’s farm to school activities was being measured.

The Team received a wealth of anecdotal evidence indicating that farm to school activities were having a positive effect on improving students’ eating habits, as well as their understanding of how food comes from the farm to their fork. Many people relayed their observations to the Team that their farm to school efforts brought an extremely positive response from the local community to an area that is often criticized —the school meal programs. Also, many noted that farm to school has had a positive effect on the local economy by supporting local farmers and keeping more of the district’s food dollars in the local economy. However, the majority of the school districts had little or no formal evaluation to support their observations or measure the impact that their farm to school efforts were making on the students and others in the community. This lack of data may pose a barrier to policy improvements that would support farm to school at the local, State, and Federal levels.

Expressed Challenges of Impact and Evaluation:

As expressed by the school districts, the primary reason that most school districts were unable to evaluate the impact of their farm to school efforts was because they lacked the time and/or the resources required to conduct a formalized study. Nonetheless, there was a universal agreement that (a) schools need evaluation tools to benchmark and track the impact of their farm to school efforts; (b) a formal study would serve to validate their casual observations; and (c) a thorough, peer-reviewed study would be extremely useful in their efforts to sustain and expand support for their farm to school efforts, especially with school administrators, school board members, parents, and State and local education officials. Similarly, many noted that they would be open to utilizing evaluation resources that had been developed by others and could be accessed from the Internet, but simply had not looked for them or did not know where to look to find these resources.

Addressing the Challenges of Impact and Evaluation:

Although most of the schools did not measure the impact of their farm to school efforts, some found ways to do so. For example, Eugene and Bethel School Districts in Eugene, Oregon, tested each of their students both before and after receiving farm to school education in order to measure the extent to which the students’ knowledge has changed in several key areas. Specifically, the tests measured changes in the students’ preference for fruits and vegetables, knowledge of where food comes from, and changes in actual consumption of fruits and vegetables as reported by the students. During the Team’s visit, these assessments showed a positive increase in all of these areas in the second and third graders tested.

Although Independence Community School District in Independence, Iowa, does not have a formal process for evaluating the success of its farm to school efforts, the district’s food service director developed an informal evaluation tool for the school food service managers to track

how the local food items are placed on menus, how well the students accepted the local food items, and what the cost difference would be if the food items were purchased from the contracted distributor. The director also noted that more teachers were eating school meals since the introduction of local food items and younger students, in particular, have shown a willingness to sample new items such as asparagus.

At Riverside Unified School District in Riverside, California, the school food service director offers a “Farmers Market Salad Bar Program” which primarily features local food items. A self-assessment of the salad bar program is conducted twice a year. More formally, groups such as the University of North Carolina, Occidental College, and Kaiser Permanente have conducted studies to evaluate the impact the salad bars have had on school food service and the health of the children.

Providing opportunities for students to have meaningful input into the farm to school effort can pay big dividends. At Jamestown Public Schools in Jamestown, Rhode Island, students participated in both planning and evaluating phases of farm to school and also served on focus groups that provided important feedback about new foods that were introduced in the school meals. By providing students with opportunities to have direct input into the products purchased and menu items served, they became promoters of farm to school and their opinions heavily influence their peers. Similarly, with regard to school gardens, staff had noted that kids who were involved in growing and harvesting produce were more likely to begin making healthful food choices in the lunchroom.

Finally, some schools had partnered with universities as a way to develop evaluation tools and receive assistance with conducting evaluations. When completed, this work will help them quantify the effects of the farm to school efforts in a way that is statistically meaningful and has been measured by an independent third party.

Below is a table listing additional solutions to overcoming the common challenges of farm to school’s impact and evaluation as expressed by the 2010 farm to school site visit participants.

Impact and Evaluation	
Expressed Challenges	Addressing the Challenges
<ul style="list-style-type: none"> Districts need baseline data in order to accurately determine the effects of their farm to school efforts 	<ul style="list-style-type: none"> ✓ Modify existing database to track local products instead of adding a parallel system ✓ Chronicle work to develop a baseline and benchmarks to track farm to school efforts
<ul style="list-style-type: none"> Not aware of where to find evaluation resources 	<ul style="list-style-type: none"> ✓ Contact local universities and/or the CDC for evaluation tools and assistance with conducting evaluations ✓ Visit the USDA Farm to School and National Agriculture Library websites for examples of evaluation tools ✓ Contact nonprofit organization such as the

	National Farm to School Network or School Nutrition Association for evaluation tools
<ul style="list-style-type: none"> Lack of time and funding to conduct evaluations 	<ul style="list-style-type: none"> ✓ Contact local universities and/or the CDC for assistance with conducting evaluations ✓ As time and a study's focus permits, participate in third party studies to assess farm to school efforts ✓ Look to State agencies (e.g. Departments of Education, Health, and Agriculture), Federal agencies (e.g., USDA, Centers for Disease Control and Prevention), private foundations, local and national nonprofit organizations, universities, and the business community as a funding resource ✓ Look to nonprofit organizations, such as AmeriCorps VISTA, for volunteer assistance in conducting evaluations of farm to school efforts

Impact and Evaluation Conclusion:

The USDA Farm to School Team recognizes a need to evaluate and benchmark the impact of purchasing local food items and other farm to school-related activities at the national level. Efforts have begun to take place to fill in these gaps. For example, USDA's Economic Research Service (ERS), in collaboration with Occidental College and the National Farm to School Network, will soon begin conducting a Farm to School Census Survey aimed at schools and districts currently engaged in farm to school activities. The information gathered from this survey will be used to create an inventory of existing farm to school initiatives and will establish baseline information on current farm to school operations. The information collected will be used to expand ERS's existing Food Environmental Atlas (<http://www.ers.gov/foodatlas/>).

In addition, USDA has been involved in other evaluations on local food purchases including FNS's *School Food Purchase Study* and the Centers for Disease Control and Prevention's (CDC) *School Health Policies and Practices Study*. In the *2011 School Food Purchase Study*, FNS included survey questions regarding the purchases of local food items; results of this study are expected to be published in December 2011. The USDA also provided input to CDC's *2012 School Health Policies and Practices Study*, which will conduct a field survey of school, district and State level respondents beginning in January 2012. The study includes several questions regarding farm to school, such as how local food items are being used, how local food items are being promoted to students and families, and other questions regarding farm to school activities.

USDA's National Agricultural Library (NAL) has developed a Farm to School Bibliography, which provides a collection of available resources including books, scientific peer-reviewed journal articles, and Grey literature/pamphlets related to farm to school for schools and other institutions. This bibliography is available at <http://www.nal.usda.gov/afsic/pubs/srb1102.shtml>. A link to the bibliography will be made

available on the USDA Farm to School website. NAL also dedicates several webpages to farm to school and school gardens which provides access to many resources, including evaluation tools. Links to these webpages can be found in the resource section of the USDA Farm to School website at http://www.fns.usda.gov/cnd/F2S/resource_supplement.htm#NAL.

Finally, because of the expressed need for finding appropriate evaluation tools for Farm to School, the USDA Farm to School Team has provided links to example evaluation tools that school districts could adapt to assess their farm to school efforts. As more evaluation resources become available, the Team will provide links on the USDA Farm to School website (<http://www.fns.usda.gov/cnd/F2S/>).

Existing USDA Efforts:

- Funded a national Farm to School Census Survey.
- Included questions on local food purchases in the *2011 School Food Purchase Study*.
- Provided input on local food purchases in CDC's *2012 School Health Policies and Practices Study*.
- Created a Farm to School Bibliography.
- Provides examples of evaluation tools through the USDA Farm to School website.

Suggestions for USDA Consideration:

- Continue to engage and support national research on the impact of farm to school for students, school food service, teachers, parents, and community members.
- Engage in and/or support national research that focuses on farm to school's impact on farmers.
- Continue the evaluation of USDA efforts that support farm to school initiatives nationwide.
- Utilize the ERS Farm to School Census Survey to develop baseline statistical information.

Local, State, and Federal Policy

Local, State, and Federal policies can have a significant influence on a community's farm to school efforts. Within this topic area, the USDA Farm to School Team explored how local, State, or Federal policies supported or hindered farm to school efforts, as well as how "local" was defined in the school meal programs.

State level farm to school policy has shaped local initiatives, as numerous State governments across the country have passed legislation establishing statewide programs and funding to support farm to school. For example, in 2006, the State of Oklahoma passed House Bill 2655, creating the Oklahoma Farm to School Program Act, establishing a statewide coordinator within the Oklahoma Department of Agriculture, Food, and Forestry; a website; and guidelines for program implementation. The nonprofit organization, National Farm to School Network, has compiled a comprehensive list of State policies that support local and regional food systems.

Nonprofit organizations and food policy councils also served as a resource for school districts and farmers. For example, a nonprofit organization in Rhode Island worked with schools and communities to adopt policies that supported healthy school food environments. This included working with schools to review their contracts with food service management companies to ensure these types of contracts support local initiatives such as farm to school.

At the national level, many school food service directors and farm to school community stakeholders indicated that USDA's most recent focus on supporting local and regional food systems through the *Know Your Farmer*, *Know Your Food* and farm to school initiatives have had a positive impact on their local efforts. Stakeholders shared with the Team that the presence of Federal support lends credibility and legitimacy to local initiatives. Along those lines, school food service directors and community members felt the amendment of the National School Lunch Act to allow for the geographic preference option in the Child Nutrition Programs has been an asset to their efforts and demonstrates general USDA support for farm to school. The geographic preference option is discussed in the Procurement section of this report.

Likewise, stakeholders applauded a number of other Federal efforts that support farm to school-related activities, including: The People's Garden and People's Garden School Pilot Program; *Let's Move!* campaign (including *Chefs Move to Schools* and *Salad Bars Move to Schools*); establishment of the USDA Farm to School Team, and the 111th House of Representatives passing a proclamation noting October as National Farm to School Month. Most recently, this support includes the recent passage of the Healthy, Hunger-Free Kids Act of 2010, which provides additional support for farm to school. In accordance with this Act, competitive Farm to School Grants will be provided through the USDA that may be used for training, operations, planning, purchasing equipment, developing school gardens, developing partnerships, and implementing farm to school activities. According to the Act, individual grants are not to exceed \$100,000; funding for these grants will become available annually in October 2012 (i.e., fiscal year 2013) through fiscal year 2015 to administer these grants and provide technical assistance.

Defining “Local” in School Meal Programs:

As mentioned in the Procurement section of this report, the authority to define “local” when applying the geographic preference option for the Child Nutrition Programs lies with the institution or State agency making purchases on behalf of the institution.

Local School Wellness Policies:

Congress recognizes that school districts play a critical role in promoting student health, preventing childhood obesity, and combating problems associated with poor nutrition and physical inactivity. To reinforce and encourage this role, as a part of the Child Nutrition and WIC Reauthorization Act of 2004, each local educational agency (i.e., school district) participating in the Child Nutrition Programs was required to establish a local school wellness policy by school year 2006.

Then, in December 2010, the Healthy, Hunger-Free Kids Act was signed into law which expands upon the requirements for local school wellness policies, stating that USDA will provide guidelines for local wellness policies in the areas of nutrition education, physical activity, and other school-based activities that promote student wellness, and provide nutritional guidelines for all foods available on each school campus. The wellness policy should also include provisions so that parents, students, representatives of school food service, the school board, school administrators, and the general public are allowed to participate in the development, periodic review and update of the wellness policy. In addition, school districts should inform and update the public on the content and implementation of the school wellness policy and one or more local educational officials should be designated to ensure that each school complies with the policy.

Expressed Challenges of Local, State, and Federal Policy:

With regard to applying the geographic preference option to the procurement of local unprocessed food items, a challenge that many communities expressed was coming to a consensus on how to define “local.” Many school districts and community members expressed concern over using State lines to define “local,” indicating that this could hamper the intent of supporting local and regional food systems.

Regarding the Child Nutrition Programs’ procurement requirements in general, some school food service directors indicated that strict local and State small purchase thresholds serve as a challenge to purchasing local products. For example, the Federal small purchase threshold is currently set at \$100,000; some State and local thresholds are lower, making them more restrictive and requiring the school to follow the more rigorous formal procurement method. See the Procurement section of this report for more information on formal and informal procurement methods and the geographic preference option.

All of the school districts the Team visited had a wellness policy in place; however, most of the school food service directors noted that the wellness policy did not include support for their farm to school efforts. To that end, these directors indicated that they would like to include

language to support farm to school in the next review of the policy and requested example language from the Team.

As noted throughout this report, school gardens are an important part of the educational component of farm to school in many communities. Many school districts identified the lack of clear guidance or policies pertaining to food safety in school gardens as an ongoing challenge. School districts and community members expressed a need for more information about using the harvest from the school garden in the school meal programs, food safety requirements and liability issues.

Addressing the Challenges of Local, State, and Federal Policy:

Among the school districts the Team visited, defining “local” in the procurement process often meant a tiered approach rather than a fixed number of miles from the district. For example, the first tier may be the school district’s county or a number of miles closest to the district; the second tier may include neighboring counties or a number of miles further from the district; the third tier may include all agricultural products produced within that State or a number of miles even further from the district; and the final tier may include neighboring States (especially in the Northeast where States are in close proximity to each other). This seemed to give the school districts a wider net of producers who were eligible to receive a geographic preference.

As mentioned in the Procurement section of this report, many school districts worked closely with their State administrating agency of the Child Nutrition Programs and their district’s procuring office (if applicable) to ensure proper procurement practices were followed, while others appeared to struggle to understand and, therefore, meet the requirements. School food service directors requested more technical assistance and guidance on proper procurement practices.

As noted in the conclusion of the Food Safety section of this report, most districts did not conduct soil testing on the land prior to establishing a school garden. With regard to local policies surrounding the establishment of school gardens, some school districts felt that establishing a “school garden policy” is an important tool to ensuring proper use and care for the soil where a school garden may be planted and to address other general food safety concerns. For example, Jefferson County Public Schools in Louisville, Kentucky, have a grounds use policy that outlines best practices and guidelines for how public space is managed and maintained; however, school district staff mentioned that they would like to add clearer school garden guidelines (e.g., soil-test standards, raised-bed material standards, food safety steps, etc.) to that existing policy.

Furthermore, local and State agencies may have stricter food safety policies related to allowing produce from school gardens to be used in the Child Nutrition Programs. It is best to contact the State agency that administers these programs and the State or county Health Department for more information.

The table below provides a list of additional solutions to overcoming the common challenges of

local, State, and Federal policy as expressed by the 2010 farm to school site visit participants.

Local, State, and Federal Policy	
Expressed Challenges	Addressing the Challenges
<ul style="list-style-type: none"> • Defining “local” strictly within State lines could hinder farm to school efforts 	<ul style="list-style-type: none"> ✓ Consider a tiered approach when defining “local” (e.g., 1st tier = within county, 2nd tier = neighboring counties, 3rd tier = State agriculture, 4th tier = neighboring States)
<ul style="list-style-type: none"> • Strict State and/or local small purchase threshold requirements (i.e., State or local threshold set lower – or more restrictive – than the Federal small purchase threshold of \$100,000) 	<ul style="list-style-type: none"> ✓ Consult with the State agency administering the Child Nutrition Programs and district procurement office, if applicable, to ensure bidding procedures are within USDA guidelines (for both formal and informal procurement) ✓ Consult the USDA Farm to School website for information on procurement requirements and policies ✓ Work with local food policy council groups and/or the local school board to include requirements and policies that support local and regional food systems
<ul style="list-style-type: none"> • Lack of farm to school support in local school wellness policies <ul style="list-style-type: none"> ○ Stakeholders need model State and/or local policies to support local and regional food systems 	<ul style="list-style-type: none"> ✓ Consult USDA’s Team Nutrition website for examples of local school wellness policies (http://teammnutrition.usda.gov/healthy/wellnesspolicy.html) ✓ If able, fund a State or local farm to school coordinator to help establish local policy and credibility; this position might also serve as an advocate for local agencies at the State level ✓ Involve nonprofit organizations that can play a role in State and local policies, and provide support to school districts on nutrition and agriculture education, farm to school efforts, general health, food supply chain, etc. ✓ Involve food policy councils, which provide an opportunity for schools to connect with other groups working on local food initiatives (for more on food policy councils, visit: http://www.cdc.gov/Features/Fruits&Veggies)
<ul style="list-style-type: none"> • Strict food safety requirements from local or State health departments for incorporating school garden harvests into school meals 	<ul style="list-style-type: none"> ✓ Contact local and State Health Departments to receive food safety guidelines with regard to school gardens ✓ Consider establishing a “School Garden Policy” to outline best practices for school gardens ✓ Select someone at the school or community level as a garden coordinator who will make sure that all State and local requirements are consistently

Local, State, and Federal Policy Conclusion:

Supportive policies at the local, State, and Federal levels have positively impacted local farm to school initiatives. Through the 2010 site visits, the Team learned that USDA's most recent initiative, *Know Your Farmer, Know Your Food*, and the focus on farm to school have been extremely supportive to the schools and farmers in their efforts to support local agriculture and provide fresh, healthy foods to students.

Local agencies (i.e., school districts) could ensure support of farm to school efforts by incorporating the district's farm to school mission and goals into their local school wellness policy and reviewing that policy on a regular basis. School food service directors asked the USDA Farm to School Team for examples of local wellness policies. The following USDA Team Nutrition webpage offers a step-by-step guide on how to create and implement a local wellness policy, and provides examples: http://www.fns.usda.gov/tn/Healthy/wellnesspolicy_steps.html. In the summer of 2011, FNS will be issuing a memorandum to all school districts participating in the Child Nutrition Programs regarding the implementation of the new wellness policy requirements set forth in the Healthy, Hunger-Free Kids Act of 2010. Links to this resource will be made available on the USDA Farm to School website.

USDA should continue to provide support via conference attendance, regional representation, guidance, and the USDA Farm to School website to foster relationships between the USDA and State and local agencies. These events give stakeholders an opportunity to share expertise and experiences with one another, as well as provide the USDA with insight on what additional support and guidance may be needed.

The Farm to School Team also encourages the USDA to continue to promote and collaborate with other Federal Departments that support farm to school-related activities, such as the Centers for Disease Control and Prevention and U.S. Departments of Education and Health and Human Services.

Existing USDA Efforts:

- Provides support to local, State, and regional food systems through *Know Your Farmer, Know Your Food* and farm to school initiatives.
- Provides information on how to create and implement a local school wellness policy, as well as examples, through the Team Nutrition website.

Suggestions for USDA Consideration:

- Create guidance on the new local school wellness policy requirements (to be issued in the summer of 2011).
- Provide specific farm to school examples for local school wellness policies.
- Continue to provide support of farm to school through conference attendance, regional representation and the USDA Farm to School website to foster relationships and share

information with interested stakeholders.

- Continue to collaborate with other Federal Departments to support farm to school efforts.
- Continue to support national initiatives which support farm to school such as *Let's Move!*, *Chef's Move to Schools*, *Let's Move Salad Bars to Schools*, and *Know Your Farmer, Know Your Food*.

Farmers' Perspective in Selling to Schools

Across the country, farm to school efforts have opened up new and reliable markets to which farmers can sell their goods. The USDA Farm to School Team met with dozens of farmers across the country during the 2010 site visits and was interested to learn, from the farmer's perspective what challenges and opportunities existed for them in this fairly new niche.

During the site visits, the Team spoke with farmers who harvested produce, cattle, grains, and nuts. Almost all of these farmers sold their products to school districts as a secondary market. All of the farmers considered themselves to have small or mid-scale farms.

Expressed Challenges of Farmers' Perspective in Selling to Schools:

The most widely expressed challenge by both the farmers and school food service directors was seasonality. In much of the country, many produce items can only be produced in the summertime when school is not in session. Also, most small-scale farms and school districts stated they did not have the resources or facility to process and freeze the farm's production for use later in the year. Furthermore, farmers said that local commercial processors, which could process and freeze local produce, were scarce.

Many farmers voiced their concern of not having the production capacity at their small or mid-scale farms to supply the quantity needed by the school district, especially if it was a large district in the community. Some farmers said this concern initially held them back from selling to the local school district.

Some farmers and most school food service directors spoke about how difficult it is for school districts to meet the wholesale price point of a farmer's product. However, despite this, most farmers indicated that they would like to sell their products to more schools in their area, but did not know how to go about finding schools that were interested.

Other challenges expressed by the farmers the Team spoke with during the site visits, such as differences in terminology and the concerns over requiring GAP certification and liability insurance, were discussed in the Procurement and Food Safety sections of this report, respectively.

Addressing the Challenges of Farmers' Perspective in Selling to Schools:

All of the farmers the Team met with shared that although there were some initial challenges to overcome, their experience in selling to schools has been a positive one. For one farmer the Team talked with in Burlington, Vermont, schools were a natural segue for wanting to work within, and give back to, the community. Having a clear and accessible contact at the school districts and/or with a State agency (e.g., farm to school coordinator) helped facilitate the partnership between local farmers and schools.

To address the most common challenge in selling to school districts, seasonality, some farmers indicated that they were able to extend their growing season through the use of hoopouses and greenhouses. Others were interested, but expressed the need for funding to support this

activity. Farmers and school districts also shared that hydroponically grown produce offers an opportunity for the farmer to sell to the school district year-round.

The School Food Service Infrastructure section of this report contains information regarding the lack of storage and processing facilities the school districts face. However, from the farmers' perspective, the need for funding to support local or regional small-scale processing facilities was shared with the Team on a number of occasions. One farmer the Team spoke with in Morrison, Oklahoma, stated that she initially tried to mill the wheat she grew herself, but later found a nearby processing company that would do it for her, which alleviated much of her time and created a value-added product for her customers. This same farmer was working on a USDA value-added grant for developing a bratwurst product.

With reference to the farmers' concern of not having enough supply for the districts' food demands, the school food service directors were quick to point out that they did not expect nor require the local farmers to completely replace their traditional food supply channels. The directors stated that their goal was to offer local food items in the school meal programs to whatever extent was possible for the local farmers and that if additional quantities were needed, they could work through their contracted distributor to purchase the remaining quantity. For example, many of the school districts offered local food items in their salad bars. This gave the school district more flexibility if a product (local or non-local) was unexpectedly not available or in short supply. Another shared example was that some small-scale farmers found that selling their products through a local distributor provided a solution to meeting the demands of the school district. In this model, the school district would purchase a food item through the district's contracted distributor and that item may come from many small-scale local area farms that would not otherwise be able to meet the quantity demands of the school district.

Almost all of the farmers sold to districts as a secondary market, but many indicated that the school district's demand for certain products had influenced the crops that they choose to grow. Although the school districts were not able to meet the price point of other commercial markets, the farmers the Team met with felt that selling to local school districts was agreeable to them because the districts were a reliable buyer with steady demand and volume from one year to the next. Indeed, many felt that the benefits gained through selling to a reliable, higher volume buyer often outweighed the district's inability to meet the same price point. In addition, many farmers mentioned that school districts offer an outlet for certain sizes or grades of fresh produce that does not exist elsewhere. For example, farmers in Chilton, Wisconsin, found that local districts wanted to buy their smaller-sized apples because they present the perfect size for younger children. The farmers noted that before selling to the local school districts, they had difficulty selling smaller apples in the commercial marketplace, and, instead, had to press them to make apple juice or cider which returned fewer dollars per pound. None of the farmers found the district's payment schedule (e.g., 30 days of receipt) to be a problem as long as they understood the terms up front and the district paid on time.

Furthermore, many farmers expressed their enjoyment in participating in farm to school as it connected them to their local community. The farmers took pride in the fact that their harvest stayed in the local area to feed and nourish their community. Many farmers shared that once they began selling to the local school districts, their visibility in the community increased which resulted in new customers. For example, several farmers shared the example of school children telling their parents about their experience of visiting a local farm through a school trip or the information they learned at school about the farmer who supplied their school meal, and the parents return to that same farmer for “pick your own” opportunities or to buy directly from the farmer at the local farmers market.

Most of the farmers stated that the school food service director or State Farm to School Coordinator had approached them initially by either a phone call or through a farmers forum or market. Other farmers said they reached out to the school food service directors of local school districts or through word of mouth from other farmers in the community who had been selling their products to schools. Some stated that attending community farmer forums was a way to meet other farmers and school districts interested in farm to school.

Many farmers and school food service directors said the winter months seemed to be the best time for these farmer forums to take place because farmers had more time during the off-season and school food service directors were planning their menus for the next school year. School food service directors stated that during these meetings they would discuss their needs for the next school year with the farmers, which then allowed the farmers to plan ahead before the planting season begins. The directors stated that these forums gave them an opportunity to talk to prospective new farmers as well as farmers they had previously purchased from. Similarly, the farmers stated these meetings helped them to understand what the school districts needed and an opportunity to talk with existing and potentially new school districts about the products they could offer.

For example, the school food service directors for Chilton and Hilbert Public Schools in Wisconsin host a growers meeting each winter. At this meeting, the school food service directors outline the district’s farm to school efforts and provide details on their purchasing process. The directors then contact the growers again before the start of the school year to get updates from the farmers on which items they expect to produce, and checks back weekly to be prepared for any unexpected changes in availability. Because both districts offer open salad bars in their schools, the directors have the flexibility to purchase a wide range of produce items grown in the local area and can more easily change the purchasing plans based on unexpected changes in price and availability.

Overall, both the school food service directors and farmers expressed the need for flexibility and open communication, especially during the initial stages of the local food purchasing. Based on the Team’s visits with the farmers, it seemed the farmers were finding the need to be flexible when it came to planting, packing, delivery and pricing of products. For example, a number of school food service directors noted that when initially implementing farm to school purchases, they found that farmers would pack food items in a way that was too heavy for the

school food service staff to handle, so they needed to work with their local farmer to adjust his or her packing method in a way that was conducive for the district employees.

In that vein, based on the Team’s visits, school food service directors were finding they also needed to be flexible with packing and delivery methods, in addition to the harvest variations and menu planning. For example, many directors noted that planning the school district’s menus in a way that was complementary to the seasonal harvest made the purchase and incorporation of local food items easier.

The table below provides a list of additional solutions to overcoming the common challenges from the farmers’ perspective in selling to school districts as expressed by the 2010 farm to school site visit participants.

Farmers’ Perspective in Selling to Schools	
Expressed Challenges	Addressing the Challenges
<ul style="list-style-type: none"> • Seasonality <ul style="list-style-type: none"> ○ Lack of resources for processing and storage for later use 	<ul style="list-style-type: none"> ✓ Check if the school district has the ability to process, freeze, and store produce for later use ✓ Check if local processors are able to process, freeze, and store produce for the districts to use at a later date ✓ Consult with the State Department of Agriculture or local Cooperative Extension Office to find out what type of information is available to support the adoption of season extension technology, e.g., hoopouses or greenhouses ✓ Consult the USDA’s Farm to School website for available crop and hoopouse grants.
<ul style="list-style-type: none"> • Having the production capacity to meet the school district’s food supply needs 	<ul style="list-style-type: none"> ✓ Talk to the school food service director; many school districts do not expect small or mid-scale farms to meet all of their food demands and can supplement their needs through traditional methods ✓ Consider selling products through a local distributor or co-op
<ul style="list-style-type: none"> • Schools unable to meet the same price point as other commercial customers 	<ul style="list-style-type: none"> ✓ Determine if the high volume purchased by the school district, as well as the district’s financial stability and reliable payment schedule offsets a lower price point
<ul style="list-style-type: none"> • Difficulty finding local school districts to purchase their products <ul style="list-style-type: none"> ○ Whom to contact within the school district 	<ul style="list-style-type: none"> ✓ Talk to the district school food service directors in the area ✓ Consult the State Departments of Agriculture and Education or local Cooperative Extension Office – many have a farm to school coordinator who can help farmers connect

	<p>with local school districts</p> <ul style="list-style-type: none"> ✓ Attend local farmer forums/meetings ✓ Consult local farmers market manager for possible school districts to work with ✓ Consider hosting students at the farm and/or speaking at the school about farming ✓ Attend local and/or State farm to school meetings ✓ Contact agricultural nonprofits organizations, the State Department of Agriculture, and local Cooperative Extension Offices for information on Farm to School
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Farmers’ Perspective in Selling to Schools Conclusion:

As mentioned above, good communication between farmers and school food service directors is extremely important. School districts that worked proactively to make this happen—by hosting farmer meetings where information could be shared and gathered and by making frequent calls to farmers and/or visits to their farms—seemed to be more successful than those that did not. In order to facilitate this communication, the USDA will provide clear guidance and tips to farmers on how to sell to schools via the USDA Farm to School website.

The farmers the Team spoke with expressed a need for technical and financial assistance for season extension technology (e.g., hoopouses, greenhouses, and processing). USDA currently offers grants for hoopouses through its Natural Resources Conservation Service’s Environmental Quality Incentives Program and funding for crops through the Specialty Crop Block Grants. Links to these funding sources are available in the grants section of the USDA Farm to School website (<http://www.fns.usda.gov/cnd/F2S/f2s-grants.htm>).

Finally, the USDA will continue to assist farmers in their outreach to school district officials by participating in discussions with organizations, such as the National Farm Bureau, to promote farm to school and to inform farmers that school districts are increasingly embracing purchases of local food items.

Existing USDA Efforts:

- Offers grants for hoopouses through the Environmental Quality Incentives Program.
- Provides funding for specialty crops through the Specialty Crop Block Grants.
- Provides funding for value-added products through the Federal-State Marketing Improvement Program.

Suggestions for USDA Consideration:

- Provide guidance to farmers on how to effectively sell to schools through USDA’s Farm to School website.
- Continue to offer funding for crops and season extension options.
- Continue to reach out to national and regional organizations that focus on farming.

- Facilitate cross-learning opportunities for Cooperative Extension Offices to share information on how to best support farm to school initiatives.
- Develop a webinar for Cooperative Extension Offices to discuss best practices.
- Work within USDA to facilitate co-op development and other strategies for improving producers' access to school food service buyers.
- Work within USDA to improve the support and outreach local Cooperative Extension Offices give to school districts and farmers seeking to begin or expand their farm to school efforts.

Conclusion

Across the United States, farm to school efforts continue to grow and the USDA's 2010 site visits highlight the diverse aspects of serving local food items in school meals and the various ways in which communities are using local food systems to educate children about where food comes from, how it is produced, and how these foods can play an integral role in supporting a healthy and nutritious diet. The site visits were the first steps to expand upon earlier work by USDA to support local and regional food systems and help clarify the challenges and opportunities faced by school food service directors and staff, school district administrators, local farmers, distributors, local and State authorities, students, teachers, parents, and community partners.

Through these firsthand accounts, research and webinars, the Team identified common threads to farm to school implementation, as well as offered suggestions for how USDA can continue to support farm to school efforts in the future. The USDA and Farm to School Team will provide guidance and develop mechanisms for:

- Assisting schools in accessing local markets;
- Enabling food producers to effectively service their local schools; and
- Facilitating communication between interested stakeholders.

Although farm to school is not a one-size-fits-all operation, this report provides concrete examples of successes that can serve as inspiration for communities around the country and be replicated by others. Although this report speaks to how USDA's support can aid in the growth of farm to school initiatives, successful farm to school initiatives happen at all levels – local, State, and Federal.

To continue the process of connecting schools with local and regional food systems, the USDA will attend and facilitate networking meetings, increase collaboration with nonprofit groups and expand outreach and awareness initiatives. As mentioned in this report, the USDA will be awarding farm to school grants in fiscal year 2013 in accordance with the Healthy, Hunger-Free Kids Act of 2010. In addition, the USDA Farm to School website will continue to provide a public platform to announce USDA policy and disseminate information on farm to school implementation and best practices.

In closing, the USDA Farm to School Team would like to thank all of the many people throughout the Nation that generously gave their time and shared their concerns and successes. Without you, this report would not have been possible.

Appendix A
Examples of USDA Funding Support for Farm to School Initiatives

Federal-State Marketing Improvement Program

- **Recipient/Year:** New Jersey Department of Agriculture/2010
- **Project Budget:** \$51,215
- **Title:** *From Farms to Schools: Developing Value-Added Agricultural Products for the National School Lunch Program*
- **Summary:** Grant awarded to the New Jersey Department of Agriculture, in cooperation with Rutgers University Food Innovation Center, and the Department of Family and Community Health Sciences, to develop and launch New Jersey grown and processed value-added products that meet the nutritional and cost requirements of the National School Lunch Program.

- **Recipient/Year:** Oregon Department of Agriculture/2008
- **Project Budget:** \$60,200
- **Title:** *Broadening Links Between Agricultural Producers and School Food Purchasers and Other Institutions*
- **Summary:** Grant awarded to the Oregon Department of Agriculture, in cooperation with the Oregon State University Food Innovation Center, the Oregon School Nutrition Association, the Oregon Department of Education, and industry partners, to conduct phase two of a project to expand opportunities for agricultural producers and processors through the development of products for Oregon school food programs.

- **Recipient/Year:** Oklahoma Department of Agriculture, Food and Forestry/2007
- **Project Budget:** \$56,365
- **Title:** *Developing Farm to School Distribution Models and Producer Guidelines for Addressing Food Safety and Participation*
- **Summary:** Grant awarded to the Oklahoma Department of Agriculture, Food and Forestry, in cooperation with Oklahoma State University, Kerr Center for Sustainable Agriculture, and the Oklahoma State Department of Education, to develop food distribution models for small, medium, and large producers, and to create safe handling guidelines to foster use of locally grown and produced food products in school systems throughout the State.

- **Recipient/Year:** New Mexico Department of Agriculture/2007
- **Project Budget:** \$12,300
- **Title:** *Enhancing Sales to New Mexico Institutional Buyers*
- **Summary:** Grant awarded to the New Mexico Department of Agriculture, in cooperation with Farm to Table, New Mexico Apple Council, the Mid-Region Council of Governments, and the New Mexico Extension Service, to develop a directory of New Mexico farmers wishing to sell to institutions, as well as what the farm produces and a seasonality chart.

People's Garden School Pilot Program

- **Recipient/Year:** Washington State University and Cornell Cooperative Extension/2011
- **Project Budget:** \$1,000,000
- **Title:** *Healthy Gardens, Healthy Youth: A People's Garden*
- **Summary:** The grant aims to create new school gardens and education programs in 70 high-poverty schools in four States (Arkansas, Iowa, New York, and Washington). The school garden program will improve students' access to nutritious food, their knowledge of nutrition and agriculture production, and allow them to contribute to their communities.

Rural Development

- **Recipient/Year:** Franklin County (MA) Community Development Corporation on behalf of the National Farm to School Network's Northeast Regional Steering Committee/2011
- **Project Budget:** \$250,000
- **Title:** *Collaboration for a Regional Food System*
- **Summary:** Rural Development entered into a cooperative agreement with the National Farm to School Network's Northeast Regional Steering Committee—which includes representatives from Connecticut, Maine, Massachusetts, Rhode Island, New Hampshire, and Vermont—to build a stronger regional food system connecting New England farms to New England institutions through cross-State collaboration and infrastructure development.

Specialty Crop Block Grant Program

- **Recipient/Year:** Hawaii Department of Agriculture/2010
 - **Project Budget:** \$49,850
 - **Title:** *Buy Local Educational Campaign for Hawaii Schools, Phase II*
 - **Summary:** Partner with Kokua Hawaii Foundation's Actively Integrating Nutrition & Agriculture in Schools Program to provide educational materials and cafeteria procurement and preparation guides highlighting Hawaii specialty crops for use by Hawaii schools participating in the Fresh Fruits and Vegetables Program.
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- **Recipient/Year:** New Jersey Department of Agriculture/2010
 - **Project Budget:** \$40,000
 - **Title:** *Jersey Fresh Consumer Education and Grower Direct Marketing Outreach Programs*
 - **Summary:** Partner with the New Jersey Farm Bureau to collaborate with New Jersey Farm-to-School in order to provide consumer education related to the benefits and accessibility of locally grown produce to school food service professionals and work with the Rutgers Cooperative Extension to facilitate specialty crop producer seminars, which concern the benefits of direct marketing and provide point-of-purchase materials that will help promote the benefits of fruits and vegetables.

Sustainable Agriculture Research and Education (SARE)

- **Recipient/Year:** Appalachian Sustainable Agriculture/2007
- **Project Budget:** \$170,000
- **Title:** *Appalachian Grown: Farm to School Project*
- **Summary:** The Appalachian Grown: Farm to School Project was awarded grant funds to determine the viability of the farm to school market for farmers in western North Carolina. The project would not only determine if there is a market, but also how many farmers it might support and which crops are most profitable within this market. Concurrently with the research, the team would implement educational farm to school programming for children, to see the impact not only on the children themselves but what influence it can have on the market. In 2010, Appalachian Sustainable Agriculture was granted an additional \$78,303 for a project titled *Building Capacity: Farm to School*, which is designed to build the capabilities of extension, agricultural professionals, and communities in the development of Farm to School initiatives.

- **Recipient/Year:** S & S Center for Sustainable Agriculture and Homestead Farm/2004
- **Project Budget:** \$7,441
- **Title:** *Agricultural Science Class: Principles of Ecological Food Production*
- **Summary:** This grant aimed to teach students the skills for producing vegetables year round using low-cost production techniques on Lopez Island located in the Puget Sound. The community of 3,000 people can only be reached by ferry, and this grant helped promote self-sufficient production and consumption.

USDA Team Nutrition Training Grant

- **Recipient/Year:** Ohio Department of Education/2011
- **Project Budget:** \$230,000
- **Title:** *Healthier Ohio School Challenge Team Nutrition Mini-Grants*
- **Summary:** Grants of \$11,500 will be awarded to 20 eligible schools in Ohio. Schools will be required to implement a physical activity program and plant a school garden. The majority of the mini-grants will go towards funding a coordinator to implement the mini-grant activities.

- **Recipient/Year:** Montana Office of Public Instruction/2008
- **Project Budget:** \$6,000
- **Title:** *Montana Farm to School Mini-Grants*
- **Summary:** This grant helped eight schools in Montana expand their farm to school efforts. Two schools built greenhouses and incorporated gardening into their science and health curriculum. Other schools focused on promotion activities, such as creating a local food festival and replacing traditional fundraisers with Montana-grown foods for fundraising activities.