

Maine Farm to School Network
A Report Analyzing the Results
of the Local Foods Procurement Survey

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TABLE OF CONTENTS

<u>Section</u>	<u>Page Number</u>
Acknowledgments	i.
Abstract	i.
Key Words	i.
Table of Contents	ii.
Table of Illustrations	iv
Introduction	1
Definitions	2
Scopes and Goals of the Survey	3
Methodology	3
Limitations of the Survey	4
Results	4
Question 1	5
Question 2	6
Question 3	7
Question 4	8
Question 5	9
Question 6	10
Question 7	11
Question 8	12
Question 9	13
Question 10	14
Question 11	15
Question 12	16
Question 13	17

Question 14	18
Question 15	19
Question 16	20
Trends	21
Recommendations	22
Questions for Further Analysis	22
References	23
Appendix A: Distribution of Respondents	25
Appendix B: The Survey	26

TABLE OF CHARTS

<u>Chart</u>	<u>Page Number</u>
National Farm to School Logo	Cover Page
Figure 1	4
Figure 2	5
Figure 3	6
Figure 4	7
Figure 5	8
Figure 6	9
Figure 7	10
Figure 8	11
Figure 9	12
Figure 10	13
Figure 11	14
Figure 12	15
Figure 13	16
Figure 14	17
Figure 15	18
Figure 16	19
Figure 17	20
Figure 18	25

INTRODUCTION

Created by the Maine Legislature in 2009, the Maine Farm to School Work Group is comprised of representatives from Healthy Maine Partnerships, the Maine Department of Agriculture, the Maine Department of Education, and other organizations and partnerships working on farm to school and food systems issues in Maine. The Procurement Subcommittee was created to: a) specifically look at successful local foods procurement programs in Maine; b) investigate the current barriers and opportunities facing farm to school in Maine; c) explore ways to replicate successful farm to school programs; and d) innovate strategies to overcome existing barriers and create appropriate place-based solutions.

During the fall of 2011, the Procurement Subcommittee commissioned a local foods procurement survey. The survey was sent out in October to every school district in Maine, including private schools as well. Jamel Torres, a graduate student studying community planning & development at the University of Southern Maine's Muskie School of Public Service, and an intern with the Procurement Subcommittee, was assigned to the project and charged with: a) researching the existing literature on flourishing farm to school efforts across the nation; b) developing the questions to be included in the survey; c) printing and sending of the surveys; d) analyzing the data; and e) developing this report. Mr. Torres and the subcommittee successfully sent out a total of 120 surveys and received a 40% return rate by December 2, 2011.

One of the key findings in the study was the fact that 80% of the respondents noted that farmer contact resulting in local food purchasing was a result of personal connections and farmers reaching out to schools. Thus, ample opportunities for food purchasers and producers to meet should be facilitated. This may include "meet-ups" based at a school or a farm, farmers doing more outreach to schools, or other formats that allow for personal interaction. Other key findings include the fact that 27% of the respondents indicated that they did not purchase Maine meat and eggs during the 2010/11 school year and 38% of the respondents also noted that they did not purchase Maine seafood during the 2010/11 school year. There is a significant opportunity for a regional market for local meat and eggs and local seafood among Maine's schools.

DEFINITIONS

Local:

According to the definition adopted by the U.S. Congress in the 2008 Food, Conservation, and Energy Act (2008 Farm Act), the total distance that a product can be transported and still be considered a “locally or regionally produced agricultural food product” is less than 400 miles from its origin, or within the State in which it is produced (Martinez, S., Hand, M., Da Pra, M., Pollack, S., Ralston, K., Smith, T., Vogel, S., Clark, S., Lohr, L., Low, S., & Newman, C, 2010)

Food System:

The chain of activities and processes related to the production, processing, distribution, disposal, and eating of food (Raja, S., Born, B., & Russel, J., 2008).

Conventional Food System:

Food production and processing is industrial in scale and relies on advances in bio-technology, food distribution occurs over large distances (estimates suggest food travels about 1,400 miles from farm to the fork), disposal of food generates a significant amount of packaging waste, and consumers are removed – both physically and metaphorically – from the source of their food. In such a system, corporations are agri-businesses and are not farmers, while being the dominant stakeholders (Raja, S., Born, B., & Russel, J., 2008).

Community Food System:

Emphasizes the strengthening and makes visible the relationships between producers, processors, distributors, and consumers of food. A community food system has several interrelated characteristics including, a) it is place-based; b) promotes local and regional networking; c) promotes the use of environmentally sustainable methods for producing, processing, and distributing food; d) espouses the idea of social justice; and e) facilitates residents’ access to healthful, affordable, and culturally appropriate foods at all times – recognized as “food security” (Raja, S., Born, B., & Russel, J., 2008).

Procurement:

The acquisition of goods and services.

Farm to School:

A program that connects schools (K-12) and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers (National Farm to School Network, 2011).

Food Processing:

When raw agricultural or fishery commodities are turned into end-products (Maine Policy Review, 2011)

School Districts:

Maine’s school districts and their organization are not particularly uniform in their structure. Some schools are part of a centralized school district, while some consist of just one individual school.

SCOPE AND GOALS OF THE SURVEY

The purpose of the survey was created to:

1. Collect information on current barriers and opportunities facing farm to school programs in Maine.
2. Obtain baseline data on the amount of local food procurement taking place in Maine's schools and the methods used to acquire local foods.
3. Understand from the school's perspective how local foods are, or could most easily be sourced and purchased through school breakfast and lunch programs.

METHODOLOGY

The first step in this process was to research farm to school programs across the U.S. Based on this research, a literature review outline was developed about farm to school programs across the country. The outline aided the process of drafting potential questions to be used on the survey. Important sources that aided the drafting process included Healthy Acadia's *Kitchen Spending on Local Food in 2010* survey, New Jersey's *Farm to School Survey*, and Minnesota's *Farm to School Survey*. These sources can be found in this document's reference list.

The next step was to finalize a draft of the survey, incorporating feedback from key partners, including the Maine Farm to School Network and the Maine Department of Education. Once the survey was approved by the committee, an online survey was created using Google forms and was sent out to members of the procurement subcommittee to test it out. The online survey was then made live and the Maine Farm to School Network, including staff from Maine Department of Education publicized the survey to schools across the state.

The survey was also administered using a paper survey that was sent to 120 Maine schools and included a stamped, self-addressed envelope for returns.¹ Surveys were mailed to individual contacts in the business offices of 120 schools. Contact information and addresses for Maine schools were obtained using a downloadable spreadsheet available through the Maine Department of Education website. Paper surveys were printed and packaged at Western Mountain's Alliance's office in Farmington, Maine. The paper surveys were mailed on October 20, 2011. A total of 34 paper surveys were completed and returned and a total of 14 online surveys were completed and submitted.

¹ The use of both paper and online surveys was recommended by Walter Beesely, a Maine Department of Education Health and Nutrition Representative who also served on the Procurement Subcommittee. Mr Beesley recommended paper surveys to increase the return rate. Surveys were sent to specific business managers in school districts, as opposed to food service managers, for similar reasons although the data indicates that food service directors were most likely to complete the survey.

Once the paper surveys were returned, Mr. Torres began analyzing the acquired data, from both the online and paper surveys. In order to have a sufficient amount of time for Mr. Torres to fully analyze the data and write this report, the online survey was closed on December 2, 2011. The data was analyzed, charts and graphs were created, and this report was completed at the end of Mr. Torres' semester.

LIMITATIONS OF THE DATA

Surveys were administered both public school districts and individual private schools in Maine. Using a database provided by the Maine Department of Education, the surveys were sent directly to the school's business managers. This was the method suggested by Walter Beesley. However, in some cases, the business managers may have been the least likely to directly respond to the surveys. This may have not been the best group to address the surveys to because some business managers may have "tossed" around the surveys before making it to a food service director or cook. Also, because the survey was not randomized, a bias may exist within the data towards schools already involved in farm to school practices. Or, in other words, schools with existing farm to school programs or procurement practices may have been more likely to complete the survey.

RESULTS

The survey was mailed on October 20, 2011. A total of 120 surveys were mailed out, and it was also made available online. The total response rate is 40%, as 48 of the 120 surveys were completed and returned. The following graph illustrates who completed the surveys by position title.

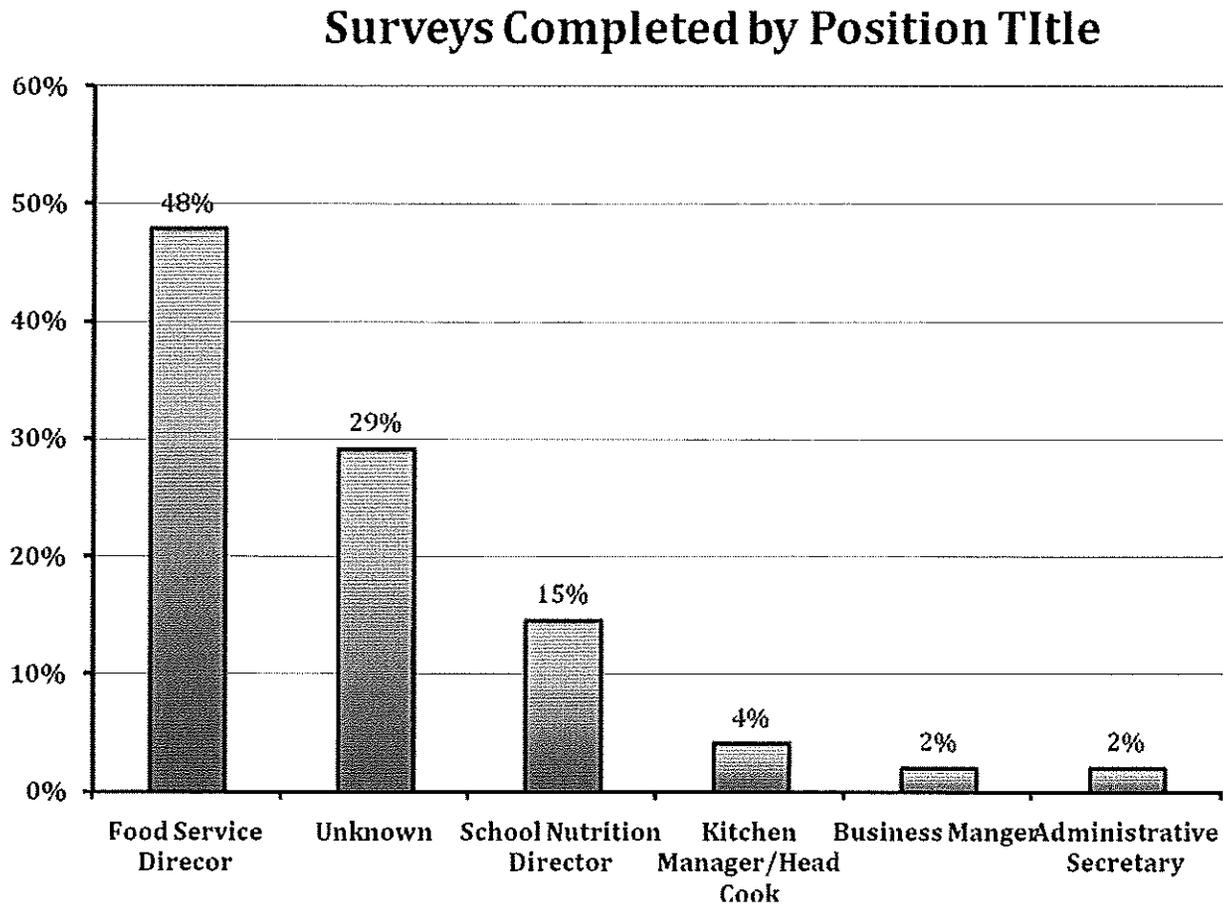


Figure 1 Histogram illustrating the surveys completed by position title

Question 1:

Overall, how would you rate your food service program's interest in using food from Maine farms?

Analysis:

Most prevalent answer:

- 79% of the respondents are “very interested” in local foods procurement

Other significant information:

- 21% of the respondents are “moderately” interested in local foods procurement
- 0% of the respondents are “slightly interested” or “not interested” in local foods procurement

Interest in Local Foods Procurement

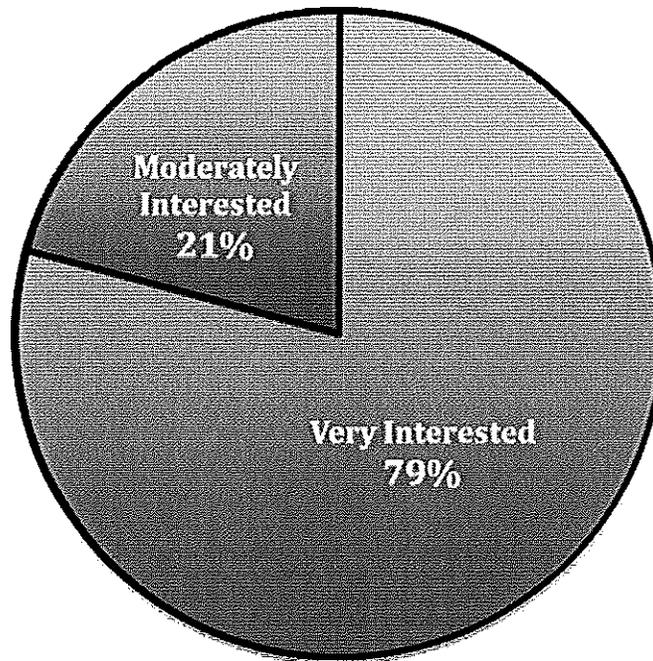


Figure 2 Pie chart illustrating the distribution of interest in local foods procurement

Question 2:

If your district's food service program is currently purchasing or interested in purchasing local foods, does the district have a targeted dollar amount allocated for this type of procurement?

Analysis:

Most prevalent answer:

- 37.5% of the respondent's current targeted dollar amount allocated for local food procurement is between \$1,000 - \$5,000

Other significant information:

- 16.7% of the respondent's current targeted dollar amount allocated for local food procurement is greater than \$10,000
- Each interval of \$0 – 500, \$500 - \$1,000, and \$5,000 - \$10,000 received 14.6% of the answers, respectively
- Only 2.1% of the respondents "did not buy local"

Current Targeted Dollar Amount Allocated for Local Food Procurement

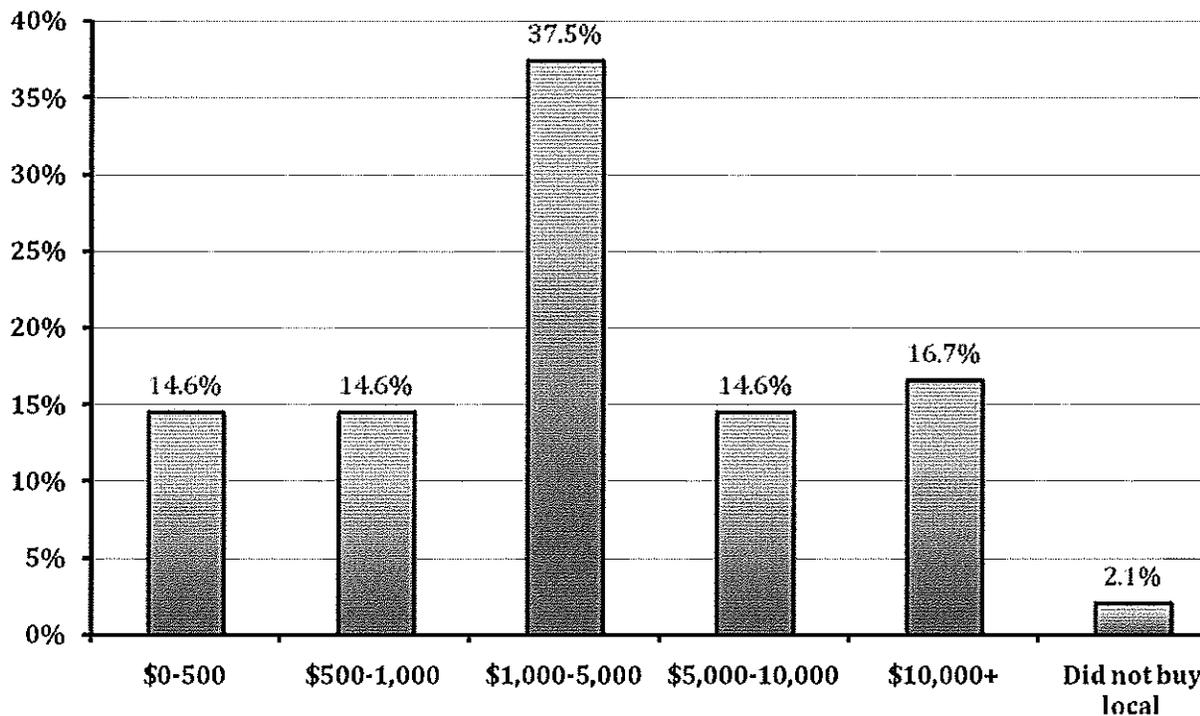


Figure 3 Histogram illustrating targeted dollar amount allocated for local foods procurement

Question 3:

Please estimate how much your food service program spent in the 2010/11 school year on local food purchases.

Analysis:

Most prevalent answer:

- 39.6% of the respondents estimated their school district spent between \$1,000 - \$5,000 on local foods in the 2010/11 school year

Other significant information:

- 18.8% of the respondents estimated their school district spent between \$0 - \$500 on local foods in the 2010/11 school year
- 16.7% of the respondents estimated their school district more than \$10,000 on local foods in the 2010/11 school year

Estimation of Money Spent on Local Foods 2010/11 School Year

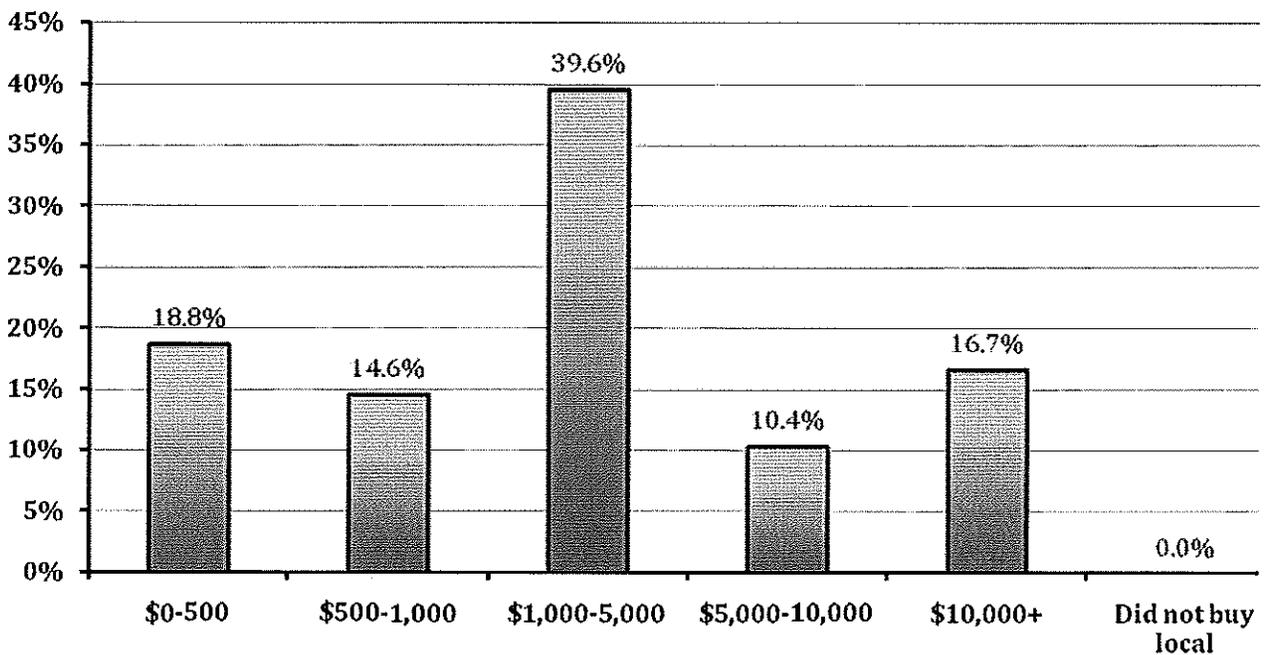


Figure 4 Histogram illustrating the estimated dollar amount spent in the 2010/11 school year on local food purchases

Question 4:

How is food purchasing done in your food service program?

Analysis:

Most prevalent answer:

- 56% of the respondent's food is ordered by a food service director and delivered to each individual school.

Other significant information:

- 29% of the respondent's food is ordered and prepared by individual schools
- Only 9% of the respondent's food is ordered by a food service director and delivered to a central location

Method of Food Purchasing

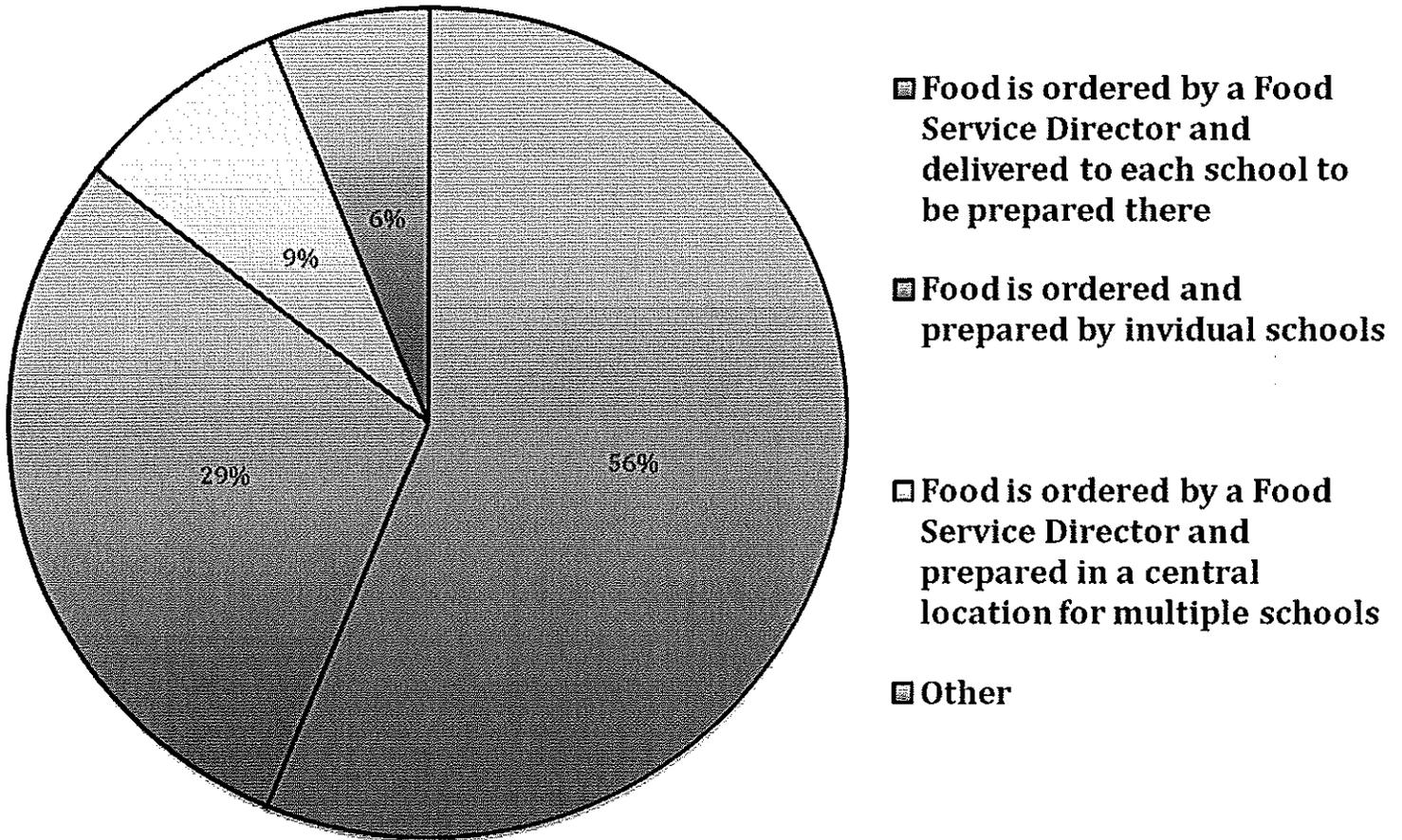


Figure 5 Pie chart illustrating the distribution of food purchasing methods

Question 5:

What is your approximate annual budget for food procurement?

Analysis:

Most prevalent answer:

- 31% of the respondents approximated that their annual budget for food procurement greater than \$300,000

Other significant information:

- 21% of the respondents did not know their approximate annual budget for food procurement
- The rest of the respondent's approximate annual budget for food procurement is equally distributed among the remaining intervals

Approximate Annual Budget for Food Procurement

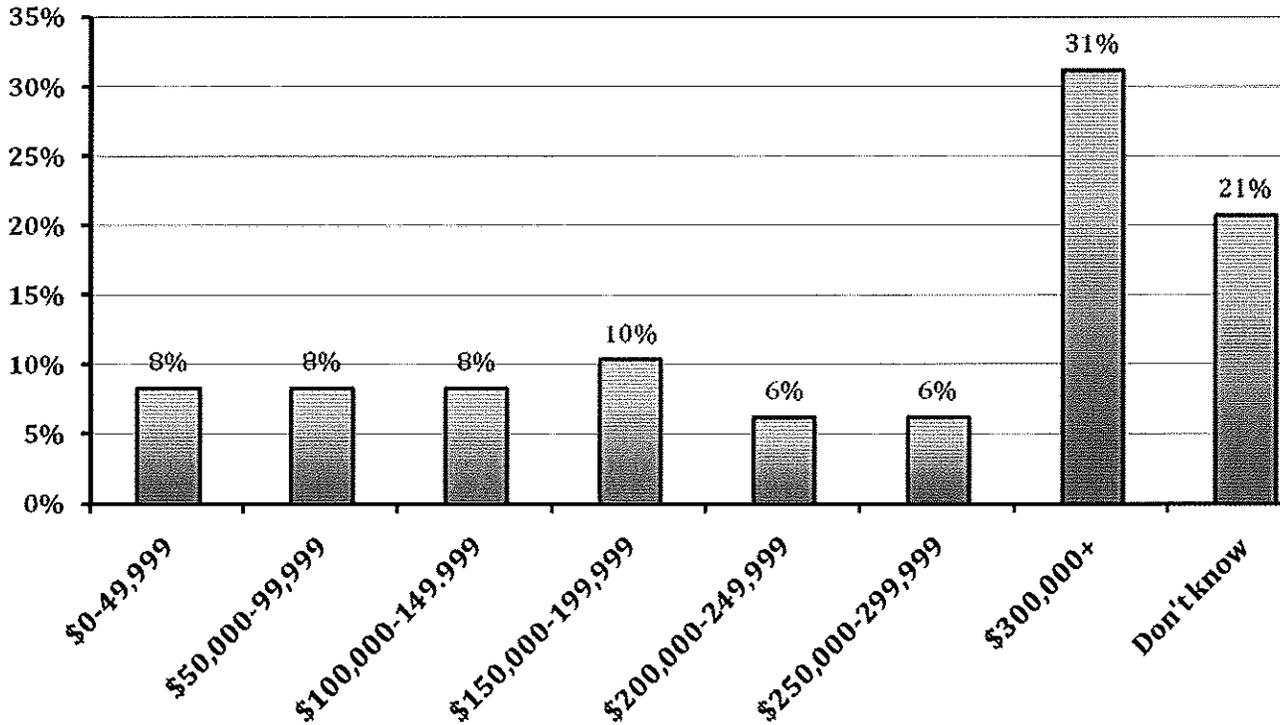


Figure 5 Histogram illustrating the distribution of approximate annual budget for food procurement

Question 6:

If your 2010/11 food service program included purchases of Maine meat and eggs, please estimate the dollar amount your district spent.

Analysis:

Most prevalent answer:

- 29% of the respondents estimated that they spent between \$0 - \$500 on Maine meat and eggs in the 2010/11 school year

Other significant information:

- 27% of the respondents did not buy Maine meat and eggs in the 2010/11 school year
- 19% of the respondents estimated that they spent between \$500 - \$1,000 on Maine meat and eggs in the 2010/11 school year

Note:

- We are assuming that those respondents who spent \$0 on Maine meat and eggs chose “did not buy local” and those that spent between \$1 - \$500 chose \$0 - \$500

Estimated Dollars Spent on Maine Meat & Eggs in 2010/11 School Year

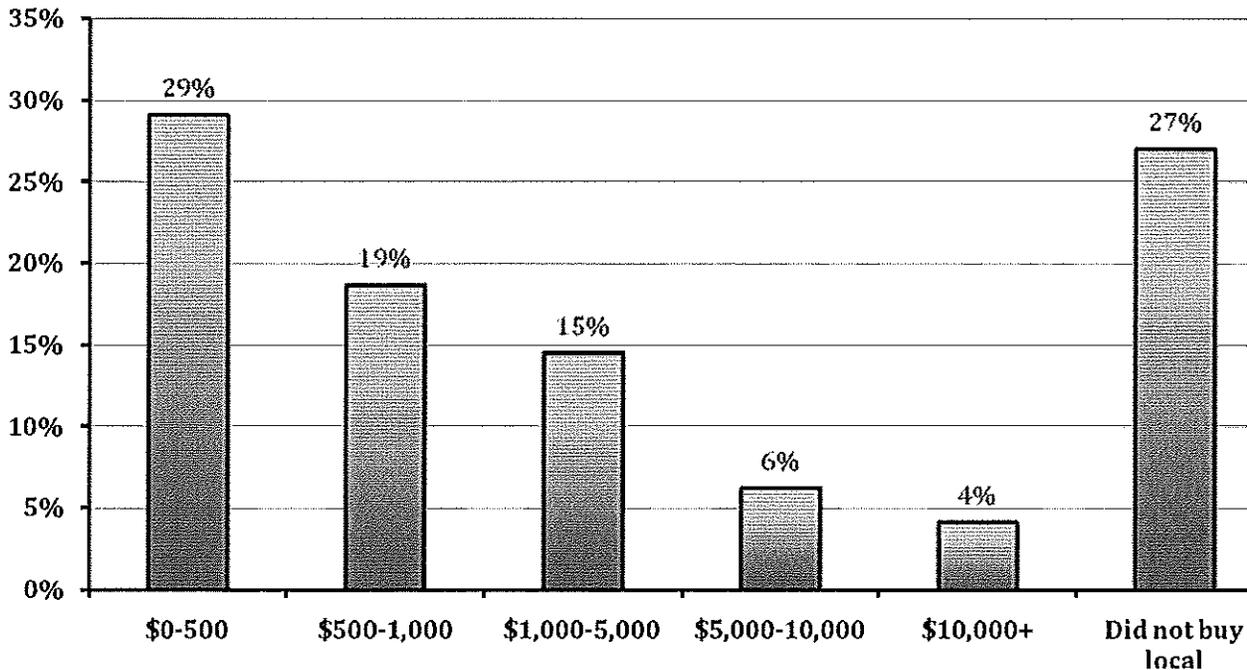


Figure 7 Histogram illustrating the distribution of estimated dollars spent on Maine meat and eggs in the 2010/11 school year

Question 7:

If your 2010/11 food service program included purchases of Maine seafood, please estimate the dollar amount your district spent.

Analysis:

Most prevalent answer:

- 50% of the respondents estimated that they spent between \$0 - \$500 dollars on Maine seafood in the 2010/11 school year

Other significant information:

- 38% of the respondents did not buy any Maine seafood in the 2010/11 school year

Estimated Dollars Spent on Maine Seafood in 2010/11 School Year

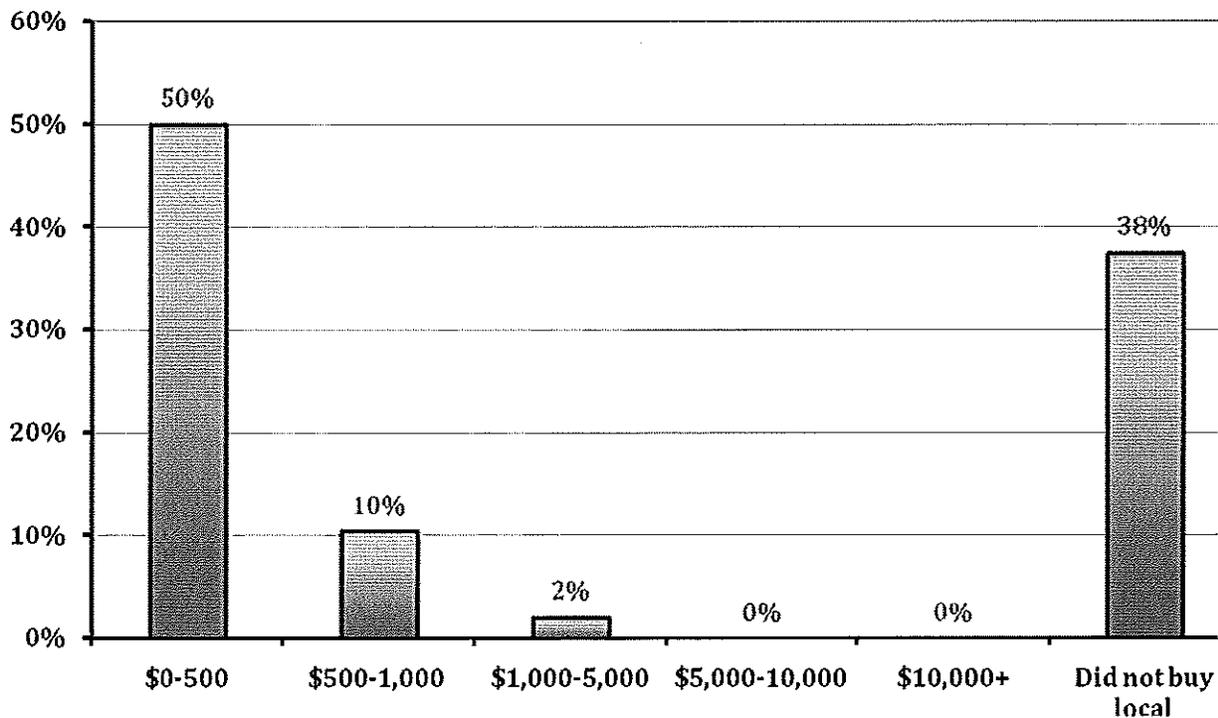


Figure 8 Histogram illustrating the distribution of estimated dollars spent on Maine seafood in 2010/11 school year

Question 8:

If your 2010/11 food service program purchased milk from Maine (i.e., Oakhurst, Maine's Own Organic Milk Company, Smiling Hill Farms, etc.), please estimate how much your district spent.

Analysis:

Most prevalent answer:

- 56% of the respondents estimated that they spent greater than \$10,000 on Maine milk in the 2010/11 school year

Other significant information:

- 19% of the respondents estimated that they spent between \$5,000 - \$10,000 on Maine milk in the 2010/11 school year
- 15% of the respondents estimated that they spent between \$1,000 - \$5,000 on Maine milk in the 2010/11 school year

Estimated Dollars Spent on Maine Milk in 2010/11 School Year

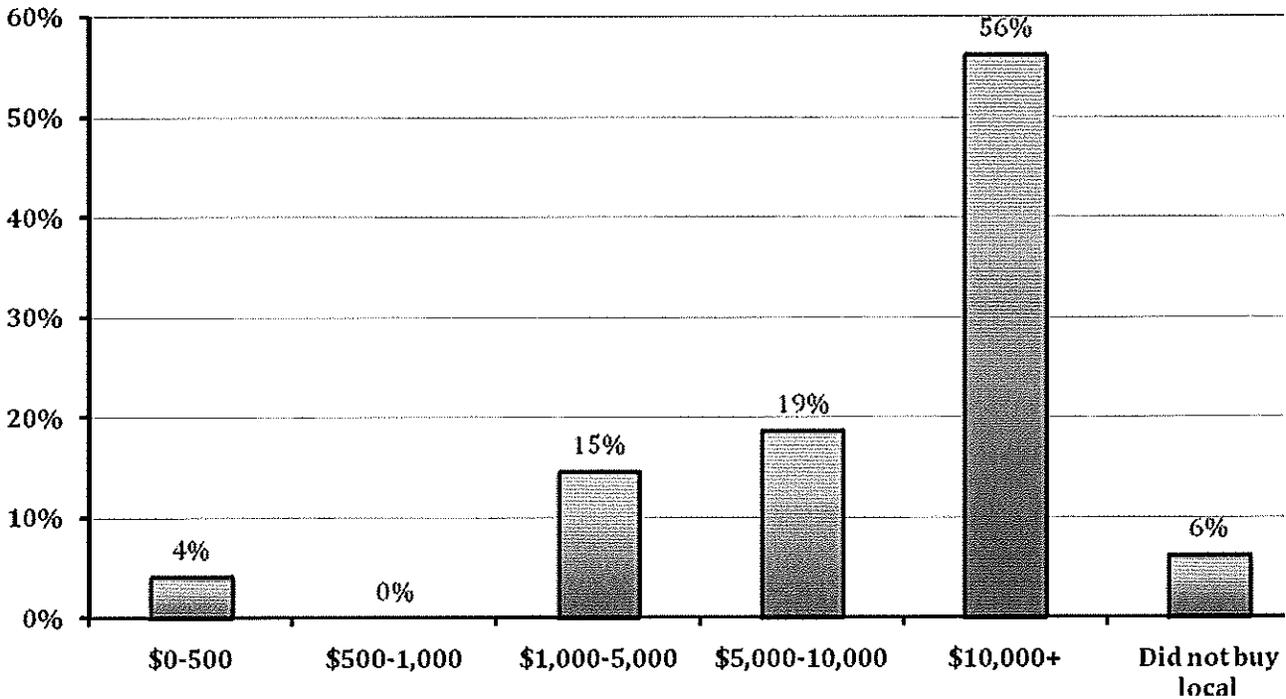


Figure 9 Histogram illustrating the distribution of estimated dollars spent on Maine milk in 2010/11 school year

Question 9:

*Which distributors does your food service program currently purchase from?
(Respondents were asked to choose all that applied)*

Analysis:

Most prevalent answer:

- 22% of the respondents purchase their food from Sysco

Other significant information:

- 21% of the respondents purchase their food from Northcenter
- 20% of the respondents purchase their food from Dennis Paper
- 12% of the respondents purchase their milk from Oakhurst
- Common answers in “other” included:
 - Garelick Farms
 - Spears Farm
 - Port Clyde Fresh Catch
 - Other local farms/farm stands

Distributors Used

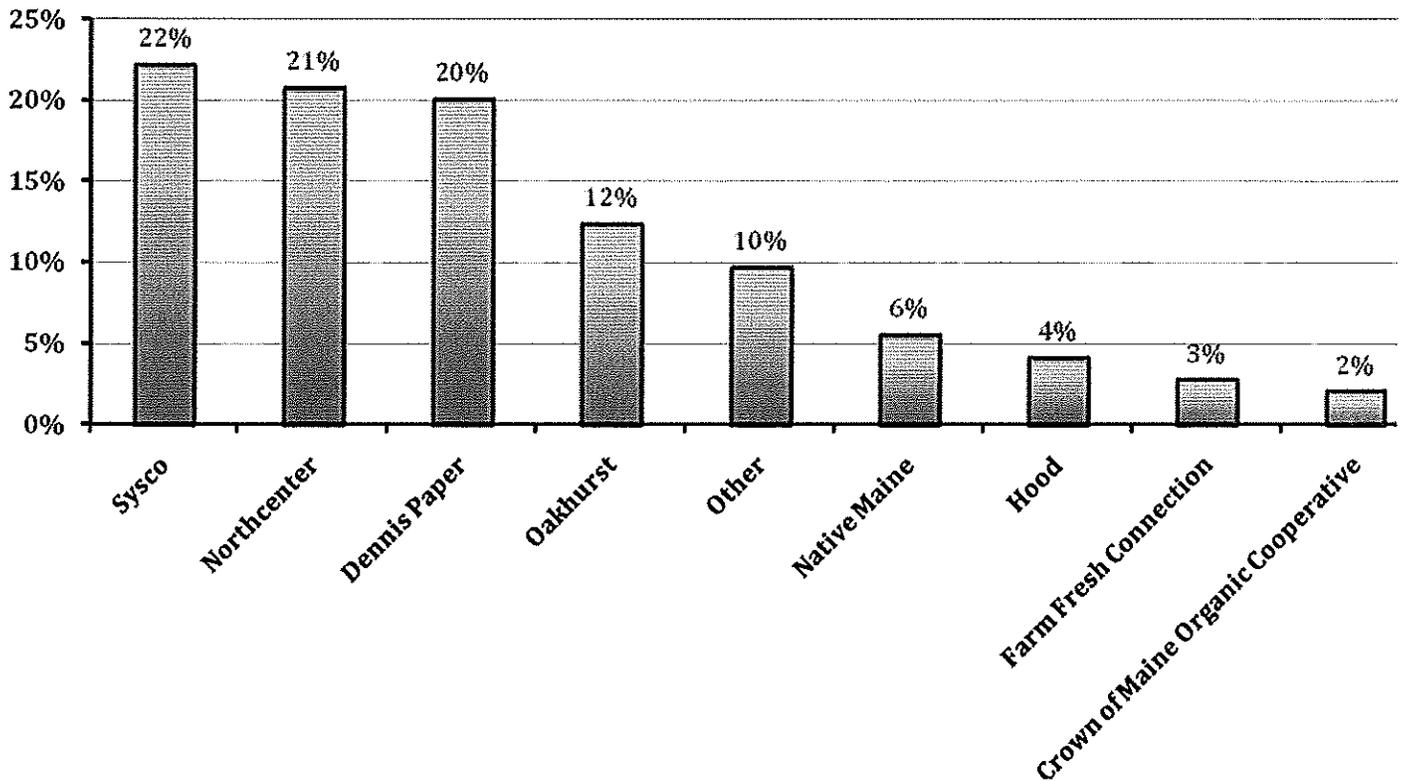


Figure 10 Histogram illustrating distribution of food distributors used

Question 10:

Does your food service program currently purchase foods directly from local farms? If yes, how does your food service program order from those farms?

Analysis:

Most prevalent answer:

- 84% of the respondents use the telephone to order from local farms

Other significant information:

- 8% of the respondents use email to order from local farms
- Only 2% of the respondents use an online ordering system to order from local farms

Method of Local Foods Ordering System

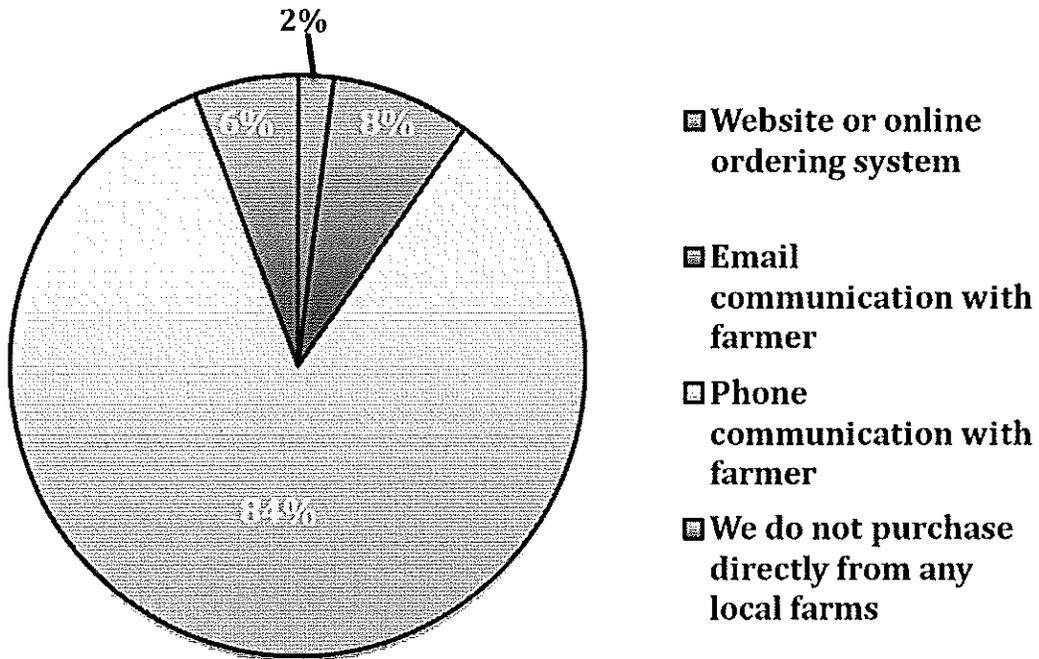


Figure 11 Pie chart illustrating the distribution of methods used for ordering from local farms

Question 11:

How does your food service program connect with local farms?

Analysis:

Most prevalent answer:

- 58% of the respondents connect with local farms via personal contact

Other significant information:

- 22% of the respondents were contacted by a local farmer
- 13% of the respondents connect with local farms through a farm to school coordinator

Method of Connecting with Local Farms

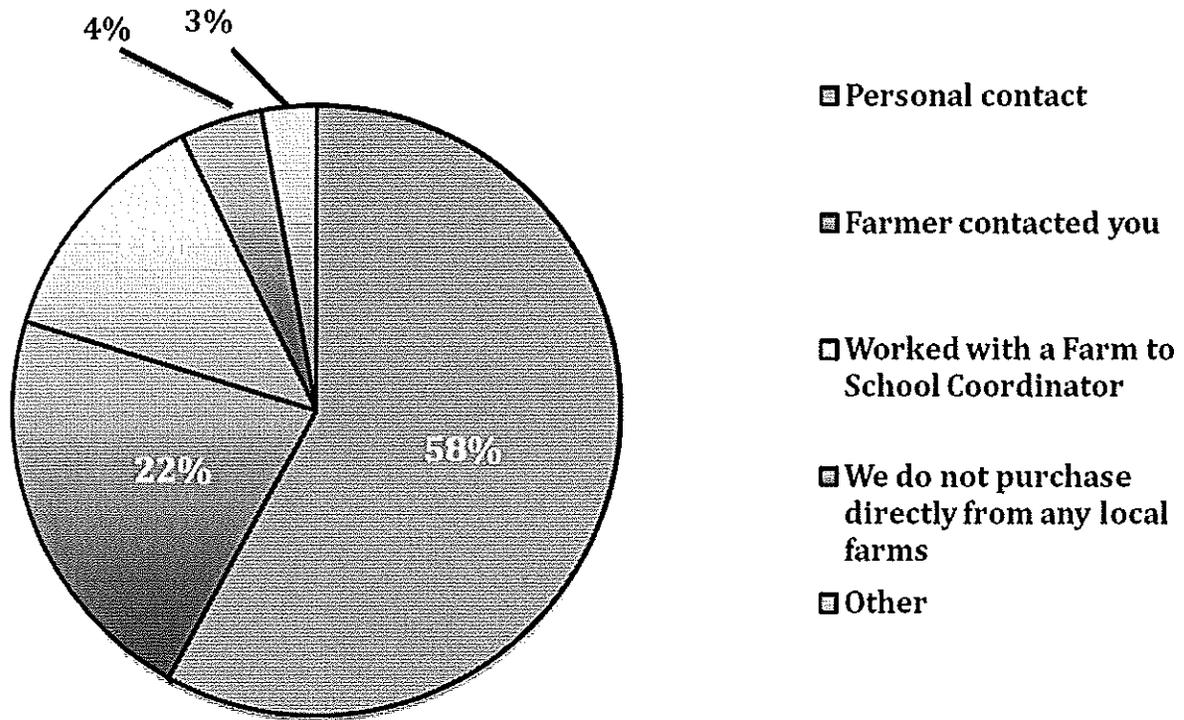


Figure 12 Pie Chart illustrating the distribution of methods used to connect with local farms

Question 12:

If your food service program purchases from local farms how do they acquire the product?

Analysis:

Most prevalent answer:

- 36% of the respondents have local farmers deliver their produce to individual schools within the district

Other significant information:

- 32% of the respondents have local farmers deliver their produce to a central location within the district
- 30% of the respondents have their food service program pick up produce from local farms

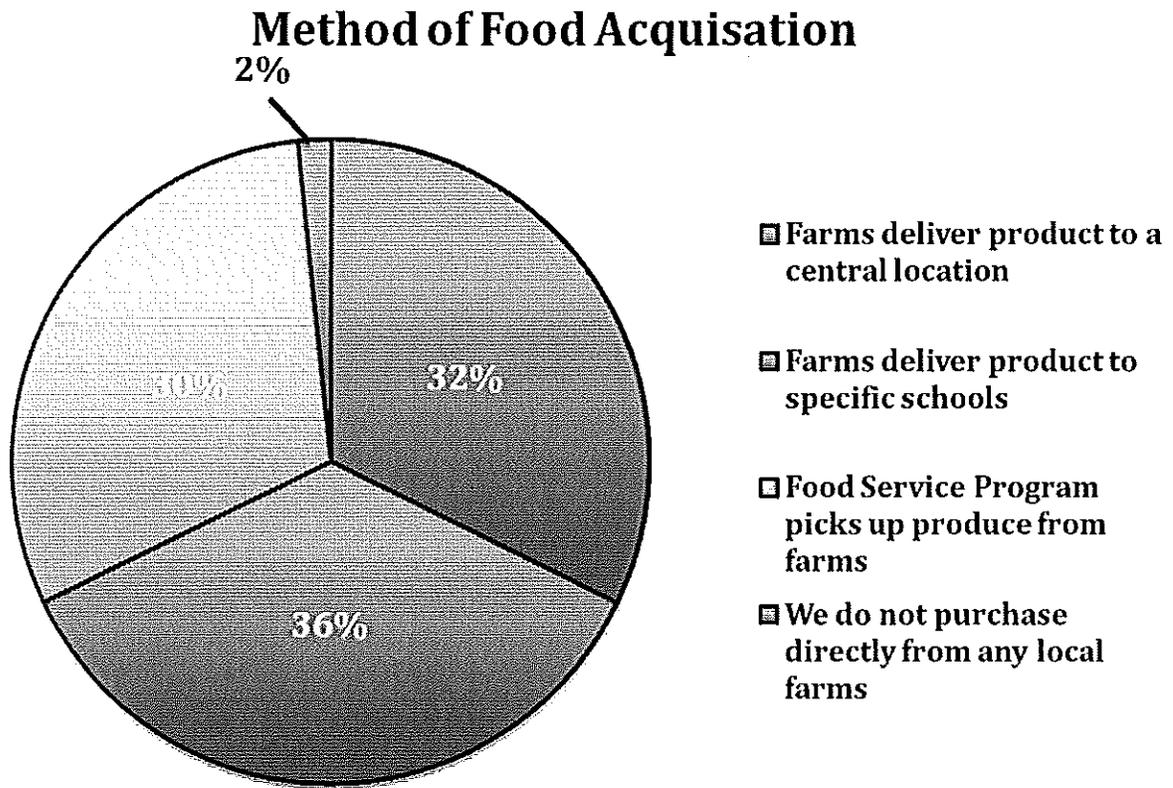


Figure 13 Pie chart illustrating the distribution of methods used for food acquisition

Question 13:

Did you participate in an advance purchase agreement with a farm (i.e., agreeing in the spring on the products you would buy weekly during the fall)?

Analysis:

Most prevalent answer:

- 81% of the respondents are not willing to participate in an Advance Purchase Agreement with a local farm

Other significant information:

- Only 19% of the respondents are willing to participate in an Advance Purchase Agreement with a local farm

Willingness to Participate in an Advance Purchase Agreement with a Local Farm

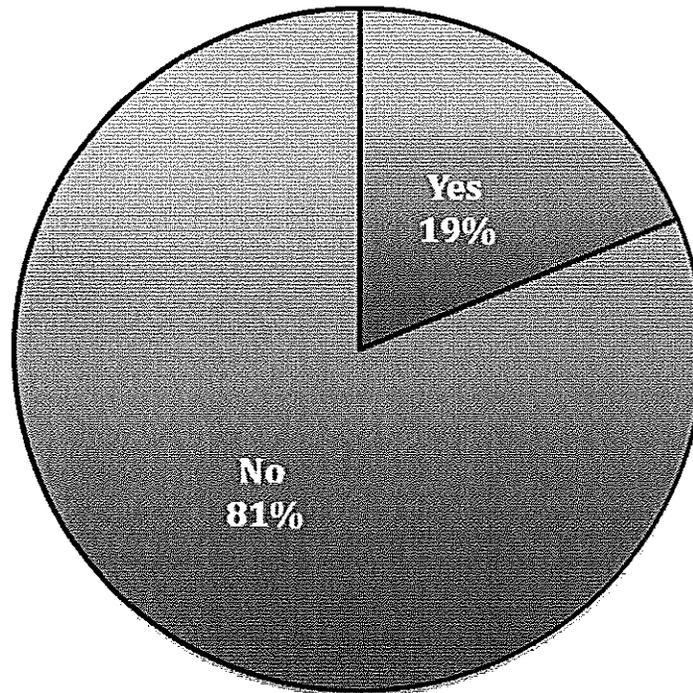


Figure 14 Pie chart illustrating the distribution of willingness to participate in an advance purchase agreement with a local farm

Question 14:

If your district is experiencing issues with purchasing more local food, which would you identify as the top three challenges your district faces?

Analysis:

Most prevalent answer:

- 23% of the respondents indicated cost to be the top challenge with purchasing local foods

Other significant information:

- Falling close behind cost, 22% of the respondents indicated inadequate local supply to be the top challenge with purchasing local foods
- 12% of the respondents indicated challenges with delivery from farms/fisheries to be the top challenge with purchasing local foods
- 11% of the respondents indicated insufficient processing capacity within the district to be the top challenge with purchasing local foods
- 1 respondent noted they had food safety concerns with packaging, processing, and delivery
- 1 respondent noted they would need a weekly “availability email” to describe the products, price, delivery, and amount available

Top Challenges with Purchasing Local Foods

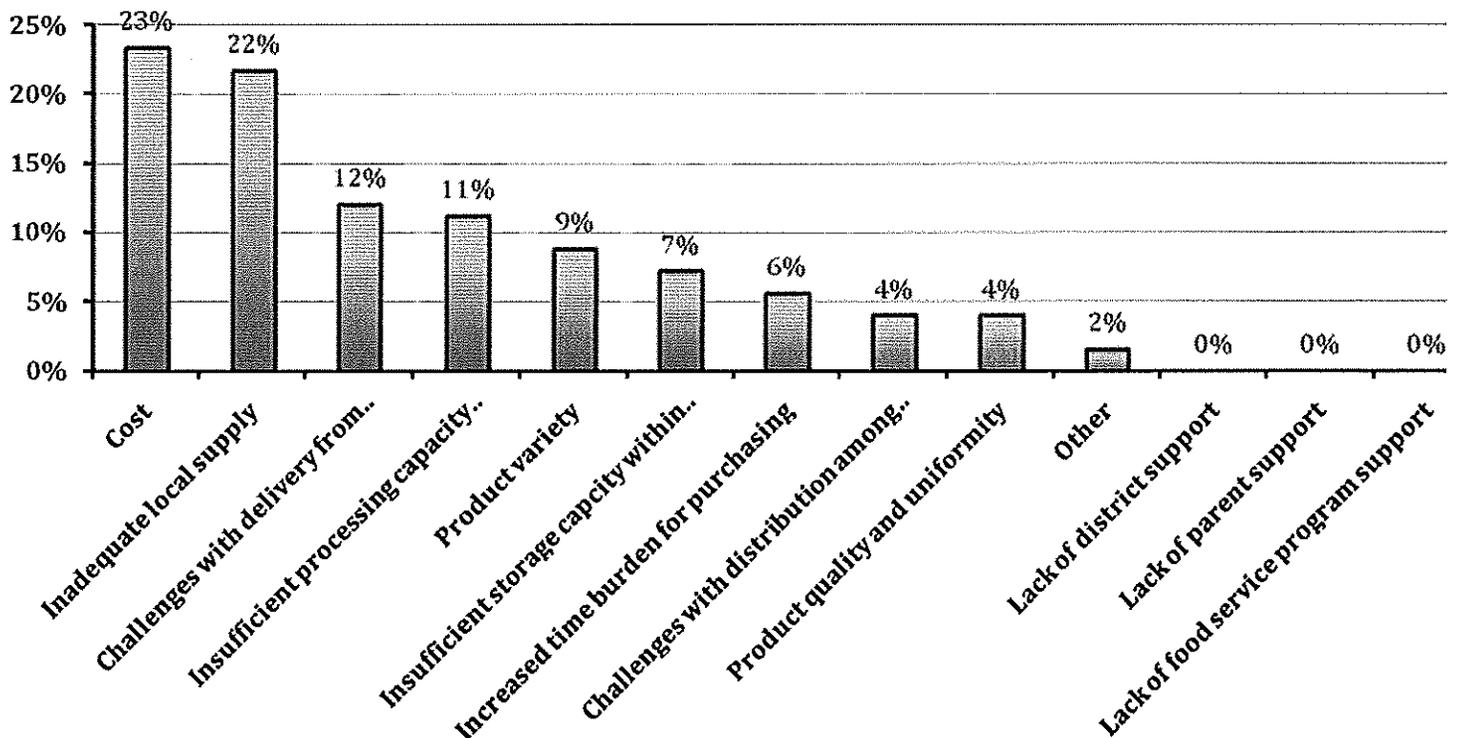


Figure 15 Histogram illustrating the distribution of the top three challenges with purchasing local foods

Question 15:

How many schools in your district provide a salad bar?

Analysis:

Most prevalent answer:

- 54% of the school districts have between 0 – 4 schools with salad bars

Other significant information:

- 33% of the school districts have between 5 – 9 schools with salad bars
- 13% of the school districts have greater than 10 schools with salad bars

Number of Schools with Salad Bars within Your School District

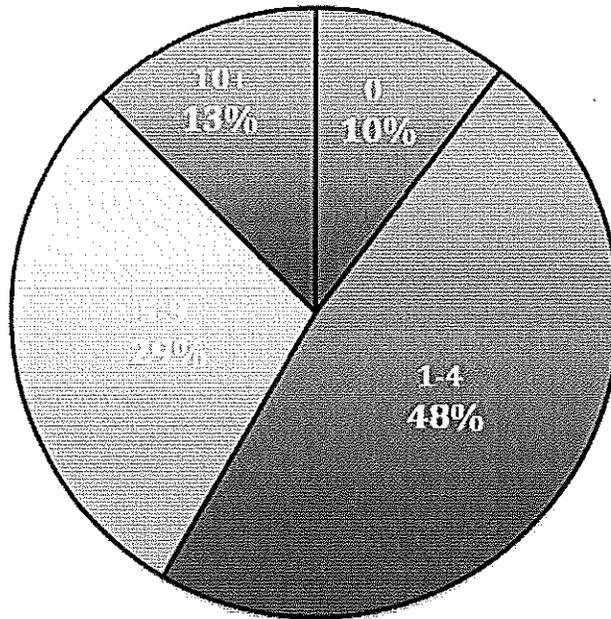


Figure 16 Pie chart illustrating the distribution of the number of schools that provide a salad bar within their school district

Question 16:

Would you be willing to provide a district kitchen outside of school hours for farms to process their produce?

Analysis:

Most prevalent answer:

- 42% of the respondents are not willing to provide a district kitchen outside of school hours for local farms to process their produce

Other significant information:

- 29% of the respondents are willing to **provide** a district kitchen outside of school hours for local farms to process their produce
- 29% of the respondents are willing to **discuss** providing a district kitchen outside of school hours for local farms to process their produce
- Most respondents noted they need the school district's school board approval before they can provide a district kitchen for food processing

Willingness to Provide a District Kitchen for Local Farms to Process their Produce

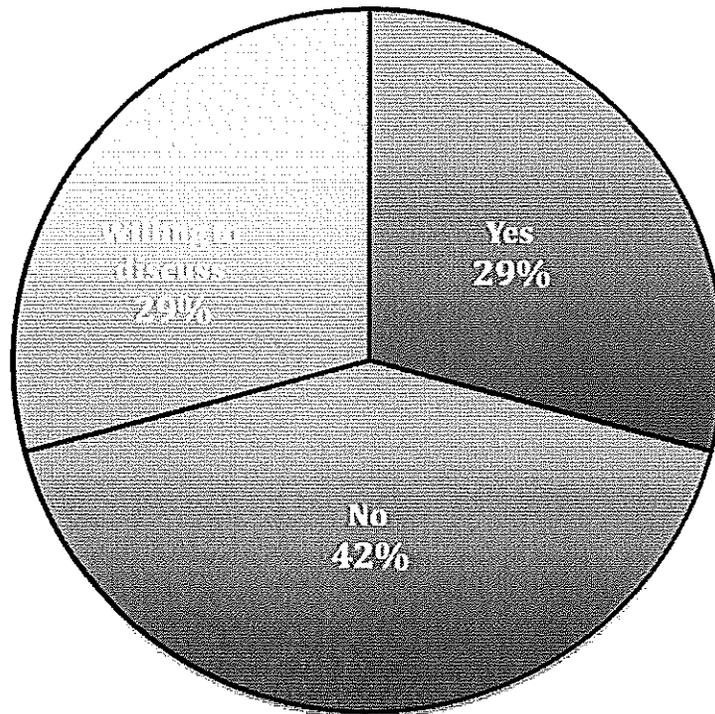


Figure 17 Pie chart illustrating the distribution of the willingness to provide a district kitchen for local farms to process their produce

TRENDS

- There is a strong interest in local food procurement, as 79% of the respondents indicated they were very interested.
- 79% of the respondents indicated very strong interest in local foods procurement, yet 27% of them did not purchase local Maine meat and eggs during the 2010/11 school year.
- 79% of the respondents indicated very strong interest in local foods procurement, yet 38% of them did not purchase Maine seafood.
- 56% of the respondents purchased greater than \$10,000 on Maine milk during the 2010/11 school year.
- The majority of respondents noted they have a targeted dollar amount for local foods procurement between \$1,000 and \$5,000.
- The majority of respondents estimated that the amount of money spent on local food procurement during the 2010/11 school year was between \$1,000 and \$5,000.
- Of the 48 respondents, the average annual budget for food procurement is \$257,291.10.
- 14.6% of the respondents noted they spent approximately between \$500 and \$1,000 on local foods during the 2010/11 school year and 57% of them noted they spent less than \$100,000 on all food procurement annually.
- 39.6% of the respondents who noted they spent approximately between \$1,000 and \$5,000 on local foods during the 2010/11 school year. 54% of them noted they spent more than \$200,000 on all food procurement annually.
- 16.7% of the respondents who noted they spent approximately greater than \$10,000 on local foods during the 2010/11 school year. 75% of them noted they spent more than \$200,000 on all food procurement annually.
- There is no relationship between the amount of money the respondents spent on local foods during the 2010/11 school year and how they initiated contact with local farms.
- Of the 9 respondents who did participate in an advance purchasing agreement with local farms, the majority of them estimated they spent over \$5,000 on local foods during the 2010/11 school year.
- 18.8% of the respondents who estimated they purchased less than \$500 in local foods during the 2010/11 school year and the majority of them order and prepare their foods at individual schools.
- Similar to other states, respondents in Maine found cost, inadequate local supply delivery, and insufficient processing capacity to be the predominate barriers faci procurement.

- One of the top challenges with local foods procurement is having difficulty with delivery from local farms. The methods of food procurement are varied throughout the respondents and schools are developing local context solutions to their delivery implications.

RECOMMENDATIONS

1. Advance purchase agreements between schools and farms hold potential for increasing local foods procurement, despite the fact that 81% of respondents indicated no interest. Indeed, the respondents that did participate in such agreements spent more on local foods than schools that did not. We strongly encourage schools who are interested in increasing local foods procurement to learn more about and consider an advance purchase agreement with a farm. These agreements take on various forms, but typically do not involve advance payment, rather a non-binding, general agreement in the early spring about what the school would like to purchase the following fall. This allows farmers to plan accordingly and ensure an adequate supply of appropriate foods for the school, as well as helping to strengthen relationships and communication between both parties
2. Considering that 80% of farmer contact resulting in local food purchasing is a result of personal connections and farmers reaching out to schools, ample opportunities for food purchasers and producers to meet should be facilitated. This may include “meet-ups” based at a school or a farm, farmers doing more outreach to schools, or other formats that allow for personal interaction.
3. 27% of the respondents indicated that they did not purchase Maine meat and eggs during the 2010/11 school year. This may present a regional market for local meat and eggs within Maine’s schools.
4. 38% of the respondents indicated that they did not purchase Maine seafood during the 2010/11 school year. With over 3,000 miles of coastline, Maine has an abundant supply of seafood. This may present a regional market for local seafood within Maine’s schools.
5. Most respondents who estimated they spent greater than \$5,000 on local foods during the 2010/11 school year indicated they had annual food procurement budgets of greater than \$200,000. Thus, local farms may want to first consider schools in Maine with food procurement budgets greater than \$200,000.

QUESTIONS FOR FURTHER ANALYSIS

1. Is the size of a school district's local foods budget related to the proximity to farming communities?
2. Is the size of a school district's local foods budget related to the median income per capita in the region that the school district is located?
3. At what locations would it be financially feasible and/or desirable to locate regional food processing facilities?
4. Cost is the predominate challenge facing local foods procurement. Have studies been conducted to quantify the nutritional, economic, educational, and community benefits of local food procurement and whether the additional cost justifies the public investment?
5. Do models exist where small farms are aggregating product, delivery and/or marketing to realize greater economies of scale and the ability to lower costs to institutional buyers such as schools?
6. 12% of the respondents indicated delivery challenges as a barrier to local food procurement; what specific issues exist with the delivery practices currently being used by schools and farms?

REFERENCES

- Beal, A. (2011, January 5). Recipes for Success: Multi-District Case Study; Local Foods in Maine Schools. Portland, ME. *Cultivating Community*
- Beck, R., Carleton, N., Steinhoff, H., Wallace, D. & Lapping, M. (2011). Maine's Food System: An Overview and Assessment, *Maine Policy Review 20(1)*, 18-35.
- Bellows, B., Dufour, R. & Bachmann, J. (2003, October). *Bringing Local Food to Local Institutions: A Resource Guide for Farm-to-School and Farm-to-Institution Programs*. National Sustainable Agriculture Information Service.
- Berkenkamp, J. & Mader, L. (2011, March 10). *Farm to School in Minnesota: Third Annual Survey of School Food Service Leaders*. Washington, DC. Institute for Agriculture and Trade Policy.
- Better School Food. (2011). *School Gardens: What is a School Garden?* Retrieved September 1, 2011, from http://www.betterschoolfood.org/what_you_can_do/school_gardens.cfm
- Colorado Farm to School. *Resources for Schools, Colorado-Specific Resources*. Retrieved September 6, 2011, from http://coloradofarmtoschool.org/index.php?option=com_content&view=article&id=47&Itemid=54
- Ecotrust. (2011). *Farm to School*. Retrieved August 31, 2011, from <http://www.ecotrust.org/farmtoschool/>
- Farm to School. (2011). *Maine Profile*. Retrieved August 30, 2011, from <http://www.farmtoschool.org/state-home.php?id=25>
- Farm to School. (2011). *Vermont Farm to School Programs*. Retrieved August 30, 2011, from <http://www.farmtoschool.org/VT/programs.htm>
- Farm to School. (2011). *What is Farm to School?* Retrieved August 30, 2011, from <http://www.farmtoschool.org/whatis.php>
- Hiskes, J. (2011, June 15). FoodHub Learns What Farmers and Local Food Buyers Need. *Sustainable Industries*. Retrieved from <http://sustainableindustries.com/articles/2011/06/foodhub-learns-what-farmers-and-local-food-buyers-need>
- Joshi, A & Azuma, A. (2008). *Bearing Fruit: Farm to School Program Evaluation, Resources and Recommendations*. National Farm to School Program
- Live Well Colorado. (2010). *Live Well Colorado in Action – Colorado School Food Operations*. Retrieved on September 6, 2011, from <http://about.livewellcolorado.org/livewell-in-action/freshen-up-school-food-initiative/colorado-school-food-operations/colorado-school-food-operations>

Maine Organic Farmers and Gardeners Association. (2011). *Maine Harvest Lunch/Farm to School*. Retrieved August 31, 2011, from <http://www.mofga.org/Resources/MaineHarvestLunch/tabid/817/Default.aspx#Statewide%20Resources>

Martinez, S., Hand, M., Da Pra, M., Pollack, S., Ralston, K., Smith, T., Vogel, S., Clark, S., Lohr, L., Low, S., & Newman, C (2010). *Local Food Systems: Concepts, Impacts, and Issues*. *United States Department of Agriculture: Economic Research Service, Economic Research Report Number 97*. 1-77.

Missouri Farm to School. (2010). *School Food Service Directors' Survey Results*. Retrieved August 31, 2011, from <http://mofarmtoschool.missouri.edu/stories/survey.shtml>

Northeast Iowa Food & Fitness Initiative. (2009, May). *Northeast Iowa School Foodservice Director Survey: Farm to School*. Retrieved August 31, 2011, from [www.iowafoodandfitness.org/uploads/PDF File 83938823.pdf](http://www.iowafoodandfitness.org/uploads/PDF%20File%2083938823.pdf)

Raja, S., Born, B., & Russell, J. (2008). *A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating*. Chicago, IL. American Planning Association

Real Food Challenge. *Real Food Calculator*. Retrieved August 30, 2011, from <http://realfoodchallenge.org/realfoodcalculator>

Vermont Feed. *Vermont Farm to School Network*. Retrieved August 30, 2011, from <http://www.vtfeed.org/farmtoschoolnetwork>

APPENDIX A: DISTRIBUTION OF RESPONDENTS

Note: An interactive map including the name of the schools/school districts and contact information can be found at: <http://batchgeo.com/map/52bc57fabab1d437ace422a12d3c9193>

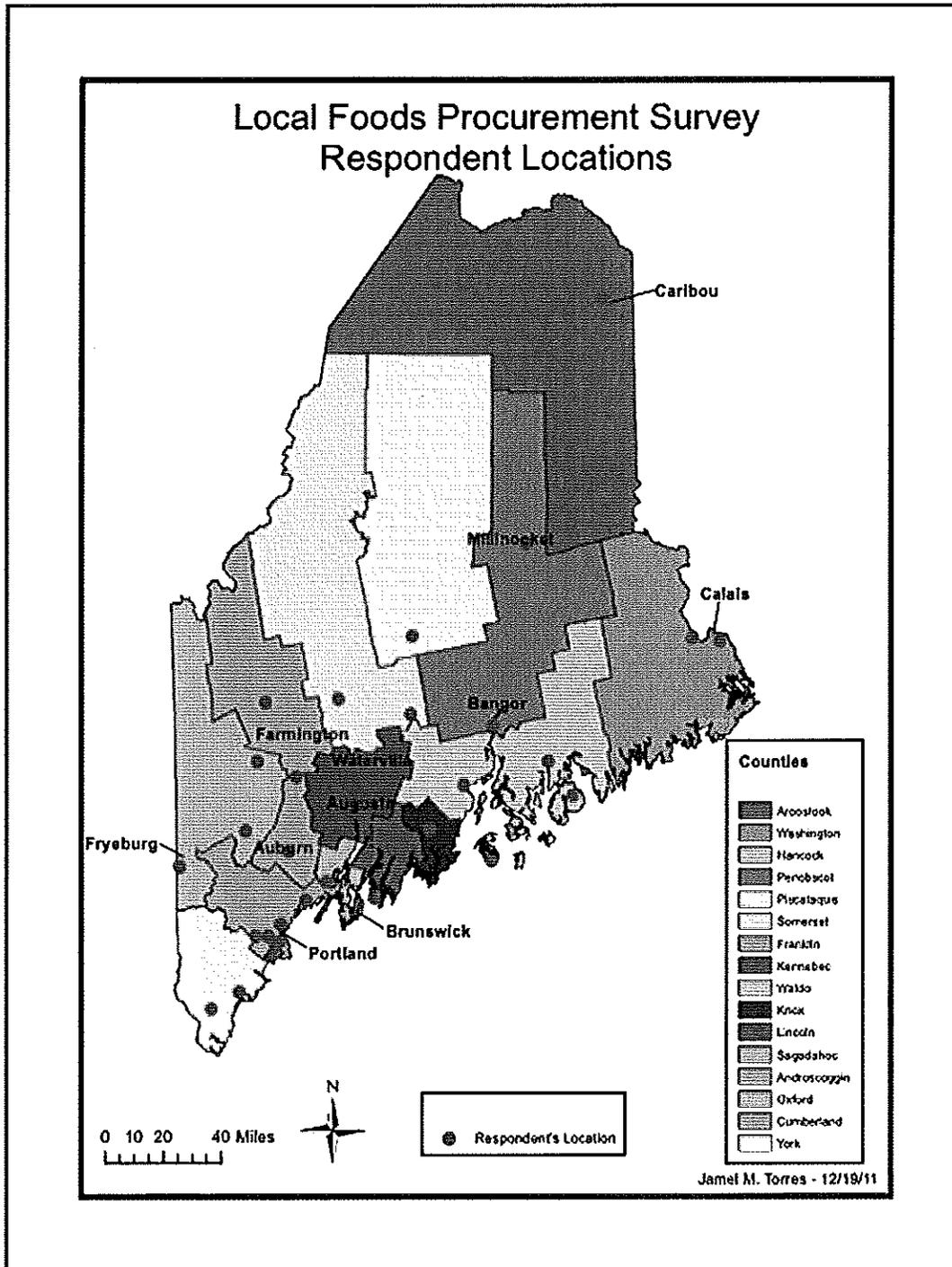


Figure 18 Map illustrating the distribution of survey respondents

APPENDIX B: LITERATURE REVIEW OUTLINE

Review of the Literature – Existing Studies and Information Related to School Local Food Procurement Practices throughout the U.S.

➤ INTRODUCTION

- Why farm to school?
- Whom does it benefit?
 - Local Farmers
 - Students
 - Food Service
- What are the barriers?
 - Local Farmers
 - Food Service

➤ BENEFITS

→ Local Farmers

- Supports small and medium-sized local and regional farms
- A “new” and reliable market
- Cheap “advertising”

→ Students

- Improves student nutrition
- Health and nutrition education
- Composting/waste management education
- Gardening and agricultural education
- Understanding the process of where their food comes from
- Affordable, healthy meals (benefit for parents)
- Field trips to local farms (farm tours)

→ Food Service

- Increase in school lunch participation
- Increase in revenue due to an increase in school lunch participation
- Unique hands-on educational opportunities for staff & students
- Save \$ on shipping costs
- Save \$ on waste management (less packaging = less volume in waste)

➤ BARRIERS

→ Local Farmers

- Lack of local processing facilities (who will process the food?)
- May lack sufficient produce to meet the demands of large school districts
- Food safety policies (do the farms meet the food safety requirements [i.e. GAP] that the school requires?)

→ Students

- Anticipated initial rejection of healthy (non-conventional cafeteria) foods

→ Food Service

- Initially difficult to find farmers to purchase from directly
- Price (fitting F2S into current school budget)
- Extra labor/preparation time (need of “chefs” instead of “cooks”)
- Lack of local processing facilities (who will process the local food?)
- Food safety issues (what requirements must the farm meet to serve food at schools?)

➤ SURVEY METHODS/TECHNIQUES

- Concise = more responses to survey
- Go through state’s Dept. of Education (for exact number of recipients)
- Scope of product sourcing
 - Discuss amounts and types of:
 - Fruits
 - Vegetables
 - Dairy products
 - Meats
 - Other foods desired
- How to incorporate farm items into school menus:
 - Consider using:
 - Salad bar
 - Monthly item highlight
 - Single fruit/vegetable display and/or classroom snack
 - Seasonal selection of produce
- Financial
 - Think about:
 - Budget constraints/requirements/limitations
 - Methods of payment
 - Start-up funding ideas
 - Operating expenses
- Distribution/Delivery
 - Strategies include:
 - Farmers’ markets
 - Farm cooperatives & partnerships
 - Local wholesalers
- Existing school district infrastructure
 - Consider:
 - Food prep. capabilities
 - Menus
 - Contracts to abide by
 - Current space & required equipment
 - Additional staff training

➤ CLOSING THOUGHTS

APPENDIX C: THE SURVEY

Local Foods Procurement Survey

Name:

Title:

School District:

1. Overall, how would you rate your food service program's interest in using food from Maine farms?
 - Very interested
 - Moderately interested
 - Slightly Interested
 - Not Interested
 - I don't know

2. If your district's food service program is currently purchasing or interested in purchasing local foods, does the district have a targeted dollar amount allocated for this type of procurement? If so, in what range:
 - \$0-500
 - \$500-1,000
 - \$1,000-5,000
 - \$5,000-10,000
 - \$10,000+

3. Please estimate how much your food service program spent in the 2010/11 school year on local food purchases (This can include produce purchased directly from farms or through a distributor)
 - \$0-500
 - \$500-1000
 - \$1000-5000
 - \$5000-10,000
 - \$10,000+
 - Did not buy local

4. How is food purchasing done in your food service program?
 - Food is ordered by a Food Service Director and delivered to each school to be prepared there.
 - Food is ordered by a Food Service Director and prepared in a central location for multiple schools.
 - Food is ordered and prepared by individual schools.
 - Other (please explain)

5. What is your approximate annual budget for food procurement?

6. If your 2010/11 food service program included purchases of **Maine meat and eggs**, please estimate the dollar amount your district spent (This can include food purchased directly from farms or through a distributor)

- \$0-500
- \$500-1000
- \$1000-5000
- \$5000-10,000
- \$10,000+
- Did not buy local

7. If your 2010/11 food service program included purchases of **Maine seafood**, please estimate the dollar amount your district spent (This can include seafood purchased directly or through a distributor.):

- \$0-500
- \$500-1000
- \$1000-5000
- \$5000-10,000
- \$10,000+
- Did not buy local

8. If your 2010/11 food service program purchased milk from Maine (i.e., Oakhurst, Maine's Own Organic Milk Company, Smiling Hill Farm, etc.), please estimate the dollar amount your district spent (This can include milk purchased directly or through a distributor):

- \$0-500
- \$500-1000
- \$1000-5000
- \$5000-10,000
- \$10,000+
- Did not buy local

9. Which distributors does your food service program currently purchase from?
(Check all that apply)

- Sysco
- Northcenter
- Dennis Paper
- Farm Fresh Connection
- Market Fresh
- Native Maine
- Hood
- Oakhurst
- Crown of Maine Organic Cooperative
- Other

10. Does your food service program currently purchase foods directly from local farms? If yes, how does your food service program order from those farms?
(Check all that apply)

- Website or online ordering system
- Email communication with farmer
- Phone communication with farmer
- We do not purchase directly from any local farms
- Other (Please describe)

11. How did your food service program connect with local farms?

- Personal contacts (you know the farmer)
- Farmer contacted you
- Worked with a Farm to School Coordinator or other organizational staff person
- We do not purchase directly from any local farms
- Other (Please describe)

12. If your food service program purchases from local farms, how do they acquire the product?
(Check all that apply.)

- Farms deliver product to a central location
- Farms deliver product to specific schools
- The food service program picks up produce from farms.
- Other (Please describe)

13. Did you participate in an advance purchase agreement with a farm (i.e., agreeing in the spring on the products you would buy weekly during the fall)? If yes, would you do another agreement next year? Why or why not?

14. If your district is experiencing issues with purchasing more local food, which would you identify as the top three challenges your district faces? (Please check up to three.)

- Inadequate local supply
- Product variety
- Insufficient processing capacity within the district (e.g. ability to clean, cut, and store fresh fruits and vegetables)
- Insufficient storage capacity within the district
- Challenges with delivery from farms / fishers
- Product quality or uniformity
- Challenges with distribution among schools in the district
- Cost
- Increased time burden for purchasing
- Lack of district support
- Lack of parent support
- Lack of food service program support
- Other (Please describe.)

15. How many schools in your district provide a salad bar?

16. Would you be willing to provide a district kitchen outside of school hours for farms and/or local food processors to process their products?

Please use the enclosed self-addressed, stamped envelope to return your survey by November 4, 2011 or you can complete the survey online by visiting (insert link.) If you have questions on this survey, please contact Jamel Torres at jamelmtorres@gmail.com and/or 207-890-1462

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- ❖ Maine Department of Education
- ❖ Maine Farm to School Network
- ❖ The Opportunity Alliance
- ❖ Western Mountain Alliance

ABSTRACT

Farm to School is a growing national movement that developed from the desire to improve our student's health, support localized food systems, and to strengthen and support small family farms. Currently in Maine there is a strong demand for offering healthy food diets within the state's school lunch programs. The Maine Farm to School Work Group has formed a Procurement Subcommittee that specifically focuses on the acquisition of local foods.

In October 2011, the subcommittee sent out a survey to all of Maine's public school districts and private schools. The purpose of this survey was to collect information to gain a better understanding of where local food procurement stands within Maine's schools. The results indicate that the majority of respondents have budgeted between \$1000 and \$5000 to be spent on local food procurement. While there is a very strong interest in local foods procurement among Maine's schools, there are still some challenges to overcome. Some of these challenges include a lack of local food processing, high cost, inadequate local supply, and various challenges with delivery from the local farms. Recommendations include improved systems to make local food procurement more accessible to all: farmers, producers, and fishers.

KEY WORDS

*Local
Food System
Conventional Food System
Community Food System
Procurement
Farm to School
Food Processing
School Districts*

Times/Date	What is your name? What is your professional title? What school district do you represent?	1. Overall, how would you rate your food service program's interest in using food from Maine farms?	2. Please estimate the amount allocated for this type of procurement?	3. Please estimate the amount spent in the 2010/11 school year on local food purchases?	4. How is your food service program currently procuring local food?	5. What is your annual budget for food procurement?	6. If your 2010/11 program included Maine meat and eggs, please estimate the dollar amount your district spent?	7. If your 2010/11 food service purchases of Maine meat and eggs, please estimate the dollar amount your district spent?	8. If your 2010/11 food service program purchased milk from Maine (i.e., Culture, Nature's Choice, etc.), please estimate how much your district spent?	9. Does your food service program currently purchase local items? If yes, how does your food service program currently purchase from these farms?	10. How did your food service program connect with local farms?	11. How did your food service program connect with local farms?	12. If your food service program purchases from local farms, how do they acquire the product?	13. Did you enter into an agreement with a farmer to purchase products during the last year?	14. If your district is experiencing issues with purchasing from local farms, what are the challenges?	15. How many schools in your district provide a salad bar?	16. Would you be willing to provide a list of school districts that you are currently purchasing from?
10/24/2011 14:38:59 MSAD 72	Nancy Emmons, MSAD 72 Director	Very interested	\$500-1,000	\$10,000+	Food is ordered and prepared by individual schools. Food is ordered by a Director and delivered to each school to be prepared there.	125,000 \$0-500	\$0-500	\$10,000+	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Farms deliver product to specific schools	No	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	I am willing to explore the possibility - however I do have the following issues with others using our equipment (use of original to the building), & inventory 4 security.
11/2/2011 13:46:53 MSAD 72	Martha Pelquin, Falmouth Schools Food Service Director	Very interested	\$10,000+	\$10,000+	Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	200,000 \$10,000+	\$0-500	\$10,000+	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	both farmer delivers and food service program picks up from farms	No	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	I would be willing to discuss and consider 3 I.
11/9/2011 16:50:46 MSAD 874	Terry Connor, Food Service Director, Aniakchik, AK	Very interested	\$1,000-5,000	\$300-1,000	Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	125,000 \$0-500	\$0-500	\$10,000+	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Farms deliver product to a central location	Yes	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	Daily-1, Elm Schools as Menu demands
11/4/2011 10:35:10 NMS Office		Very interested	\$0-500	\$0-500	N/A	Did not buy local	Did not buy local	\$1,000-5,000	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	delivered to an employee	No	Insufficient storage space within the district. Challenges with delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	Not at this time.
11/7/2011 11:18:25 Treboon AOS 801	Teresa Grey, Food Service Director, Treboon AOS 801	Very interested	\$1,000-5,000	\$1,000-5,000	Food is ordered and prepared by individual schools. Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	300,000 \$500-1,000	Did not buy local	\$1,000-5,000	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	The food service program picks up produce from farms	No	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	No, because we have students with 1 allergy.
11/9/2011 19:16:52 MSAD 48	Storm Handelson, Food Service Director, MSAD 48	Very interested	\$1,000-5,000	\$5,000-10,000	Food is ordered and prepared by individual schools. Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	70,000 \$500-1,000	\$500-1,000	\$10,000+	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Farms deliver product to specific schools	Yes	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	7 Not sure right now
11/9/2011 19:10:44 A. School		Very interested	\$0-500	\$0-500	Food is ordered and prepared by individual schools. Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	70,000 \$500-1,000	Did not buy local	\$5,000-10,000	We do not purchase directly from any local farms	We do not purchase directly from any local farms	We do not purchase directly from any local farms	We do not purchase directly from any local farms	The food service program picks up produce from farms	No, I did not visit a week	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	Good idea
11/9/2011 19:16:52 MSAD 47 - Orrington	Wendy McDonald, School Food Service Director, MSAD 47 - Orrington	Moderately interested	\$200-500	\$200-500	Food is ordered and prepared by individual schools. Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	300,000 \$0-500	\$0-500	\$5,000-10,000	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Farms deliver product to specific schools	No	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	Difficult to answer, to many "local" farms
11/9/2011 13:22:29 B. School		Very interested	\$500-1,000	\$100-1,000	Food is ordered and prepared by individual schools. Food is ordered by a Director and prepared there. Food is ordered by a Director and delivered to each school to be prepared there.	80,000 \$0-500	\$0-500	\$0-500	Phone communication with farmer	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Personal contacts (you know the farmer)	Farms deliver product to specific schools	No	Insufficient processing capacity within the district (i.e., ability to clean, store, etc.) from fruits and vegetables. Challenges with delivery from farm/fishers, cost of delivery from farm/fishers, increased burden for participants	15. How many schools in your district provide a salad bar?	1 school, 2 salad bars

