



# A Roadmap to Farm to School Sustainability in Maryland

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# Executive Summary

The Maryland State Department of Education (MSDE) Office of School and Community Nutrition Programs (OSCNP) has undertaken a significant project titled ‘A Roadmap to Farm to School Sustainability in Maryland.’ This project had two primary objectives:

- 1) To implement an environmental scan of the Maryland Farm to School program.
  - a. Assess farm to school programming to determine challenges and barriers to local foods procurement.
- 2) To develop a Farm to School (F2S) roadmap to sustainability in Maryland.
  - a. Propose actionable steps to enhance local food procurement, distribution, and implementation for inclusion in school meals.

The environmental scan incorporated various research methods, including virtual interviews, focus groups, surveys, literature reviews, and participatory observations. Interviews and surveys were conducted with Maryland’s local education agencies (also known as school districts), agricultural producers, and community stakeholders. The stakeholders group included local farmer advocates, legislators, National Farm to School representatives, agricultural educators, food hub partners, and the Maryland Department of Agriculture. The analysis was conducted with confidentiality to protect participants’ privacy.

## Key Findings from the Environmental Scan

1. The definition of “local” varied among local education agencies (LEAs), with most defining it based on a distance from their own location.
2. Many LEAs expressed interest in buying fruits and vegetables from local farmers, but cited logistical challenges, labor, processing capacity, and inventory management as common obstacles of F2S purchasing.
3. Most LEAs purchased local foods through distributors rather than directly from farmers. Notably, 78% of local food acquisitions were from USDA DoD Fresh, the Department of Defense Fresh Fruit and Vegetable Program operated under the auspices of the U.S. Department of Agriculture (USDA) as part of the USDA Foods Program. However, there are no requirements for selected vendors to source locally other than producing a “plan” that speaks to what is sourced locally from which producers, and ideas on how local food purchases can be expanded in the unspecified future.
4. Agricultural producers (e.g., farmers, ranchers) expressed challenges in selling directly to LEAs, citing cost-related issues, limited production capacity, and difficulties in navigating the procurement process.
5. While there was high interest in selling directly to schools, many small to medium scale producers also lacked the food processing capacity and, in some cases, the Good Agricultural Practices (GAP) certification required by some LEAs.
6. Across stakeholders (e.g., producers, farmer advocates, and LEAs), price was identified as a significant barrier to selling and procuring local foods for school meals. Each emphasized the need for a fair, equitable, mutually beneficial pricing structure. For example, producers and LEAs agreed that pricing among small-scale local producers often could not compete with pricing negotiated between USDA DoD Fresh or large distributors and commercial farms.

7. A commitment to buy from local producers, coupled with the lack of collaborative, long-term planning between LEAs and producers, underscores a significant challenge arising from the mismatch between the growing season and the school year.
8. LEAs also noted staffing limitations, costs, and logistical challenges of having food transported in the time and form that is needed.

## The Roadmap to Sustainability

For the purpose of this report, sustainability is defined broadly as an LEA's ability to procure directly from local producers. "Local" is thought to be within Maryland or potentially within 400 miles of the Maryland delivery site. However, the definition of local remains to be officially defined and is a recommendation of the report. Local producers are farmers/ranchers operating in Maryland (or within the defined local area) who can supply food products independently or through aggregators (to include distributors who prioritize local producers) to Maryland school districts for breakfast and lunch meals. Although frequency is not defined, the intent of sustainability is to include local foods in school meals regularly, consistently, and beyond special tastings.

While several challenges were identified from the environmental scan, several recommendations to grow and sustain F2S efforts in Maryland emerged. Foremost, there is a need for collaboration and commitment among all stakeholders to address the complexities of procurement processes and regulations. The sustainable integration of local foods into Maryland school meal programs will require strategic planning, partnerships, enhancements to procurement processes, infrastructure investments, legislation, and more.

With a vision towards fresh, nutritious foods, education, economic development, eco-friendly food systems, food security, and equity, the Roadmap's goal is to provide actionable steps over the next five to ten years to increase the incorporation of locally sourced foods in school meals across the State.

## Key Recommendations for Sustainability

### **Recommendation 1: Establish a Formal, Long-Term, Working Coalition to Set Strategic Statewide Goals, Benchmarks, and Definitions to Increase Local Foods in Schools**

- To include developing funding strategies, lead systems change, and recommend policy.

### **Recommendation 2: Ensure the Prioritization of Local Foods by Contracted Parties**

- To include local producer mandates in LEA food contracts (to the extent allowed within Federal Procurement regulation compliance). The Certified Local Farm and Fish Program, for example, utilizes a legal and constitutional contracting process that may provide useful insight, guidance, and goals that parallel some of the desired outcomes of the Maryland Farm to School program.

### **Recommendation 3: Establish and Strengthen Relationships Between Producers and Schools/Local Education Agencies (LEAs)**

- To foster connections with local producers in order to create a pathway for schools to access fresh, healthy, and sustainable local food sources for school meals, benefiting students' nutrition.

**Recommendation 4: Identify and Secure Multifaceted Investment to Sustain Local Foods in School Meals**

- Funding sources include, but are not limited to: the Certified Local Farm and Fish Enterprise Food Aggregation Grant Fund Program (Maryland Agricultural and Resource-Based Industry Development Corporation [MARBIDCO]), the Local Food Promotion Program (LFPP), and the Regional Food System Partnerships Program (RFSP) which are part of USDA's Local Agriculture Market Program (LAMP), Community Food Projects Competitive Grants Program (USDA), The Growing Justice Fund (foundation), etc.

**Recommendation 5: Enhance Human Capacity Across all Facets of Maryland's Farm to School Program**

- To include partnering with organizations (including those that prioritize BIPOC communities), to provide training, workshops, and technical assistance for producers.

**Recommendation 6: Invest in Food System Infrastructure**

- To include strengthening structural capacity for processing foods among producers and LEAs;
- To encourage and utilize producer aggregation systems (e.g., food hubs.); and
- To address producer infrastructure challenges through one-time investment grants and resources.

**Recommendation 7: Improve Local Food Procurement Processes and Guidelines**

- To include leveraging existing programs, application processes, and funding mechanisms such as the Certified Local Farm and Fish Program, and funding to align with recommendations and strategic goals; and
- To adopt a singular, state-wide, one-stop-shop, electronic database system for real-time inventory and streamlined procurement process between LEAs and producers, with consideration for public-private partnerships for ideating, development, and maintenance.

**Recommendation 8: Develop Equitable Support for Historically Disadvantaged Producers and Partners**

- To include partnering with socially and historically disadvantaged producers to create a sense of connection among the local community, especially in schools with high minority populations, by increasing culturally relevant crops sourced from local farms.

## Conclusion

The 'Roadmap to Farm to School Sustainability in Maryland' project represents a step toward enhancing F2S initiatives in the State. The findings highlight areas for improvement in procurement, pricing, and logistics, providing valuable insights for policymakers, LEAs, producers, and community stakeholders. Effective collaboration between these groups is essential to realizing the potential benefits of increased local food procurement in Maryland's schools. This report lays the foundation for a more sustainable and nutritious future for school meals in the State.

For additional information or a copy of the full report (which includes strategic approaches for implementing the recommendations), contact Kanika Campbell at [kanika.campbell1@maryland.gov](mailto:kanika.campbell1@maryland.gov) or Leslie Sessom-Parks at [leslie.sessomparks@maryland.gov](mailto:leslie.sessomparks@maryland.gov).

# Part 1 | Background and Context of Farm to School Sustainability in Maryland

## Introduction

This report establishes a framework for integrating local farm foods into school meals and sustaining Farm to School (F2S) initiatives in Maryland. The 'Roadmap to Farm to School Sustainability in Maryland' was developed in collaboration with key stakeholders, including Local Education Agencies (LEAs), local farmers/producers, community/non-profit stakeholders, the Maryland Department of Agriculture (MDA), the Maryland State Department of Education (MSDE), and government officials. This effort was facilitated by the Maryland State Department of Education (MSDE) Office of School and Community Nutrition Programs, and funded by a 2021 U.S. Department of Agriculture (USDA) grant.

The Roadmap report identifies the challenges faced by Maryland's F2S program, largely informed by the needs of stakeholders, and proposes steps to increase foods procured from small and medium-scale local agricultural producers in school lunch meals in the state of Maryland. It draws on findings from surveys, interviews, focus groups, and participatory observations involving the identified stakeholders.

The report offers several key points regarding the importance of stakeholder engagement. It emphasizes the value of involving diverse stakeholders in developing a sustainability plan, using qualitative data from interviews and focus groups to gather insights and expertise. Additionally, the report delves into the findings from local agricultural producers and LEA surveys, shedding light on logistical challenges, processing issues, pricing concerns, and participants' interest in F2S initiatives. Furthermore, the report outlines comprehensive recommendations and objectives across various areas, including partnerships, funding, and infrastructure. Lastly, it acknowledges the limitations in data gathering and stresses the importance of ongoing monitoring, evaluation, and adaptability to overcome challenges and ensure the success of the sustainability plan.

This report indicates that F2S initiatives in Maryland can promote healthy eating habits among students and the community, support local farmers (particularly those who have been historically disadvantaged), influence economic development in Maryland's regions, and foster environmental stewardship. Implementing the recommendations proposed in the roadmap will strengthen the Farm to School program, and contribute to a vibrant local food system.

## THE RECOMMENDATIONS FOR SUCCESSFUL ADAPTATION OUTLINED IN THIS REPORT INCLUDE:

**Recommendation 1:** Establish a formal, long-term, Maryland Farm to School working coalition group to set strategic statewide goals, benchmarks, and definitions to increase local foods in schools.

**Recommendation 2:** Ensure the Prioritization of Local Foods by Contracted Parties.

**Recommendation 3:** Establish and Strengthen Relationships Between Producers and Schools/Local Education Agencies (LEAs).

**Recommendation 4:** Identify and Secure Multifaceted Investment to Sustain Local Foods in School Meals.

**Recommendation 5:** Enhance Human Capacity Across all Facets of Maryland's Farm to School Program.

**Recommendation 6:** Invest in Food System Infrastructure.

**Recommendation 7:** Improve Local Food Procurement Processes and Guidelines.

**Recommendation 8:** Develop Equitable Support for Socially and Historically Disadvantaged Producers and Partners.

The Roadmap presents a path to strengthen Farm to School initiatives in Maryland. By addressing the outlined challenges and implementing the proposed plan, Maryland will make vast strides toward achieving its goal of increasing the utilization of local foods in school meals, bringing about benefits for students, local food producers, and the community.

## Keys Impact Areas of the Farm to School Program

The Farm to School initiatives aim to connect schools with local producers to provide fresh, locally sourced food for school meals while fostering education about agriculture, nutrition, and sustainability. This multifaceted approach has several significant benefits across various factors:

**Nutrition:** Including fresh fruits and vegetables in school meals increases the nutritional quality of school lunches. According to the USDA, students participating in Farm to School programs consume fresher and more nutritious fruits and vegetables, improving overall nutrition and better health outcomes (Joshi, 2008; NFSN, 2020).

**Education:** Farm to School initiatives provide valuable educational opportunities for students, such as engaging students in hands-on learning experiences related to farming, gardening, and nutrition. Students learn about where their food comes from, how it is grown, and the importance of sustainable agricultural practices. These educational experiences promote food literacy, and empower students to make healthier food choices independently (Bronbonnikov et al., 2021; NFSN, 2020; Sitaker et al., 2020).



**Economic Resilience:** Farm to School programs support local economies by creating demand for locally grown produce, which also boosts income for local farmers, strengthens the agricultural sector, and helps ensure the long-term economic viability of small-scale and family-owned farms. By reducing the dependence on distant food sources, these programs also enhance the resilience of local food systems, making communities more self-reliant during disruptions (Christensen et al., 2019; NFSN, 2020;).

**Environmental Sustainability:** Farm to School initiatives contribute to environmental sustainability by reducing the carbon footprint associated with food transportation. Locally sourced food requires less transportation energy, lowering greenhouse gas emissions. Additionally, some F2S programs incorporate sustainable farming practices, such as organic farming and reduced pesticide use, which can have positive environmental impacts (Izumi et al., 2010; Martinez et al., 2010; NFSN, 2020).

**Racial Justice:** Farm to School initiatives can play a role in addressing racial justice issues by promoting equitable access to fresh, healthy food in underserved communities. These programs often prioritize purchasing from and collaborating with farmers from diverse backgrounds and serving schools in low-income neighborhoods. By supporting historically and socially disadvantaged farmers and ensuring that all students have access to nutritious food, F2S reduces food disparities and fosters social equity (Allen & Guthman, 2006; NFSN, 2021; Ray et al., 2016).

## Historical Context of National Farm to School Programs

According to the USDA (2023), the National Farm to School Program in the United States is a significant initiative aimed at connecting schools with local farmers and producers to promote healthier eating habits among students, enhancing education about agriculture and nutrition, and strengthen local communities. The roots of this program can be traced back to the early 20th century when the federal government started assisting states with food programs to combat child malnutrition during the Great Depression. In 1946, President Harry Truman signed the Richard B. Russell National School Lunch Act, which laid the foundation for the National School Lunch Program (NSLP), a critical part of the Farm to School movement (Allen & Guthman, 2006).

The modern F2S movement gained momentum in the early 2000s, expanding beyond school gardens to include various activities such as taste tests, farm visits, and incorporating agricultural education into the curriculum (Long, 2019). This expansion was driven by a growing awareness of the importance of nutrition and the rising rates of childhood obesity in the United States. In 2010, the Healthy Hunger-Free Kids Act (HHFKA) authorized F2S programs, emphasizing the importance of integrating local foods into school meals to improve students' diets (Avuwadah & Kropp, 2022).

In 2012, the USDA launched the F2S Program to enhance student health, promote local-producer relationships, and support school initiatives (USDA, 2012). The program is currently facilitated through competitive grants, providing federal funding for training, operations, planning, school garden development, and partnership building. Besides federal support, numerous states have introduced policies and philanthropic funding to bolster F2S efforts (Prescott et al., 2020). During the launch of the program in 2012, Maryland was cited as a national example of F2S education programming. The then USDA Deputy Secretary, Kathleen Merrigan, highlighted Southern High School in Anne Arundel County, MD, as a champion of school gardens, an aspect of F2S.

## Maryland Farm to School Timeline

Coinciding with the growing interest in farm fresh products in school meals, F2S efforts in Maryland were legislated in 2008. The following provides a brief timeline of additional State efforts to advance F2S. The following timeline was adapted from the National Farm to School Network's State Farm to School Policy Handbook (2021).

**2004**

MDA hosted its first annual Buyer-Grower event which introduces farmers to buyers from grocery store chains, restaurants, food service companies, institutions, and school foodservice directors. The event has grown from 20 participants in 2004 to over 600 in 2022.

**2006**

H.B. 883 established a Price Preference for Locally Grown Foods. This bill requires the state Board of Works to adopt regulations that allow agencies to purchase local foods that cost up to 105 percent of the lowest responsible bid. State schools and facilities must use the five percent price preference to purchase local products whenever possible. This price preference gives local farmers a competitive advantage when bidding on school meal contracts, making it easier for schools to purchase local foods. CODIFIED AT MD. CODE, FIN. & PROC. § 14-407

**2008**

H.B. 696 /S.B. 158 established the Jane Lawton Farm to School Program. These bills establish the Jane Lawton Farm to School Program in the Maryland Department of Agriculture, in coordination with the Maryland Department of Education and the Board of Public Works. The program promotes the sale of Maryland-grown farm products to schools and encourages school meals and classroom programs. The bills direct the Department of Agriculture to develop a database of farmers interested in selling their products to schools and to provide technical assistance to farmers. These bills also established the Maryland Homegrown School Lunch Week (MHSLW) to promote local foods. CODIFIED AT MD. CODE, AGRIC. § 10-1601

As part of the promotions for MHSLW, the MDA distributes more than 1,000 posters with three design options, 104,000 stickers, 45,000 window clings to each of the 24 LEAs annually, and "This Farm Feeds Schools" stickers to producers who provide products to the schools during the MHSLW.

**2009**

MDA received its first USDA Specialty Crop Block Grants to implement F2S educational and promotional programs to increase student awareness and consumption of Maryland-grown fruits and vegetables, study the potential of Maryland frozen specialty crops, and promote partnerships involving local businesses, parents, and other interested citizens.

**2010**

MSDE and the University of Maryland Extension Supplemental Nutrition Assistance Program (SNAP-Ed) developed and implemented an educational and experiential curriculum for the USDA Team Nutrition grant, known as the “ReFresh” program. The nutrition curricula and toolkit were designed to encourage students to consume more fruits, vegetables, and whole grains. SNAP-Ed has also provided supplemental educational and promotional materials to support MHSLW and school garden initiatives.

**2011**

H.B. 751 established that school districts participating in the Jane Lawton Farm to School Program report the types and amounts of products they purchase from Maryland farms. It creates a local food database. The bill also establishes events to promote farm products to children through school meals and classroom programs. CODIFIED AT MD. CODE, AGRIC. § 10-1601

MDA receives its second USDA Specialty Crop Block Grant.

**2012**

MDA and MSDE host *Maryland Farm to School Workshop: Growing the Connections* for Maryland’s Eastern Shore. The purpose of the workshop was for Maryland producers to meet with the school food service directors from the Eastern Shore to explore opportunities to incorporate more local product in school meal programs.

MDA and MSDE collaborate to integrate vegetable gardens in “*Conserving and Enhancing the Natural Environment: A Guide to Planning, Design, Construction, and Maintenance on New & Existing School Site*” (commonly referred as the Green Book), to institutionalize the knowledge of school edible gardens into school facilities.

MDA conducts a workshop in collaboration with the Maryland Agricultural Education Foundation (MAEF), the Mid-Atlantic Farm-Based Educators Network and MSDE’s Division of Science Instruction regarding the new Next Generation Science Standards and Environmental Literacy Standards (along with Common Core and STEM) for alignment with farm-based activities including connections with Farm to School.

**2013**

The first USDA Farm to School Census was conducted in 2013. Each of Maryland’s 24 public LEAs participated in the Census in addition to several nonpublic private LEAs/schools.

**2015**

The second USDA Farm to School Census was conducted in which 22 public LEAs and 17 nonpublic private LEAs/schools participated.

**2016**

MDA was awarded a F2S grant, in partnership with MSDE, to produce the promotional campaign and materials for Harvest of the Month (HOM).

MDA distributes 90,000 Farmer Trading Cards to elementary students during MHSLW and throughout the year, which display a farmer and nutritional facts on one side, and a picture of the fruit or vegetable the farmer produces on the opposite side.

**2019**

The third USDA Farm to School Census was conducted.

**2020**

MSDE launched a F2S Work Group, composed of food service directors and stakeholders interested in growing and sustaining Maryland Farm to School. However, plans for the group were deferred indefinitely due to the COVID-19 public health emergency.

**2021**

The MSDE and MDA each receive funding from the USDA Patrick Leahy Farm to School Program to enhance access to local foods.

**2022**

House Bill 147, "Maryland Farms and Families Fund, Maryland Food, and Agricultural Resiliency Mechanism Grant Program, and Maryland Farm-to-School Meal" established the "Grant Pilot Program – Alterations and Establishment Maryland Farm to School Meal Grant Pilot Program and Fund" to incentivize the production, procurement, and provision of local foods in school meals by awarding grants to eligible LEAs that operate reimbursable federal nutrition programs. While the bill passed, no funding has been allocated to the fund as of the printed date of this publication.

MSDE received two additional USDA grants to expand local food procurement for school meals.

**2023**

The fourth Farm to School Census was conducted. Results are expected to be published in late 2024.

MDA introduces five new Farmer Trading Cards focusing on underserved farmers, specialty crops. (available in both English and Spanish).

MSDE releases "A Roadmap to Farm to School Sustainability in Maryland."

SNAP-Ed, in partnership with MSDE, releases a new F2S learning resource for elementary students called "*Exploring Maryland Food*."

## Operational Support for F2S in Maryland



The MSDE OSCNP administers child nutrition programs (CNPs) and plays a crucial role in guiding and assisting LEAs. This support encompasses various initiatives including funding to support LEAs. The OSCNP provides administrative oversight, training, and technical assistance for these programs, and develops educational and promotional materials to help LEAs promote and facilitate the purchase of local foods in school menus or taste tests.

The Maryland Department of Agriculture (MDA) co-sponsors F2S programming with the MSDE. As noted in the timeline, the MDA and MSDE have received various funding awards from the USDA to promote and expand F2S in Maryland. These include a 2021 Farm to School Turnkey Grant awarded to the MDA to conduct training for Maryland producers, including small to mid-size producers interested in selling locally grown food to Maryland schools. A 2021 F2S State Agency grant was awarded to MSDE to develop a strategic plan for F2S in Maryland, resulting in this report. The grant also funded the development of a F2S curriculum aligned with Next Generation Science Standards for elementary students in partnership with SNAP-Ed, with lessons ranging from food production to grocery bag.

MSDE has subsequently received and is currently implementing two additional grants.

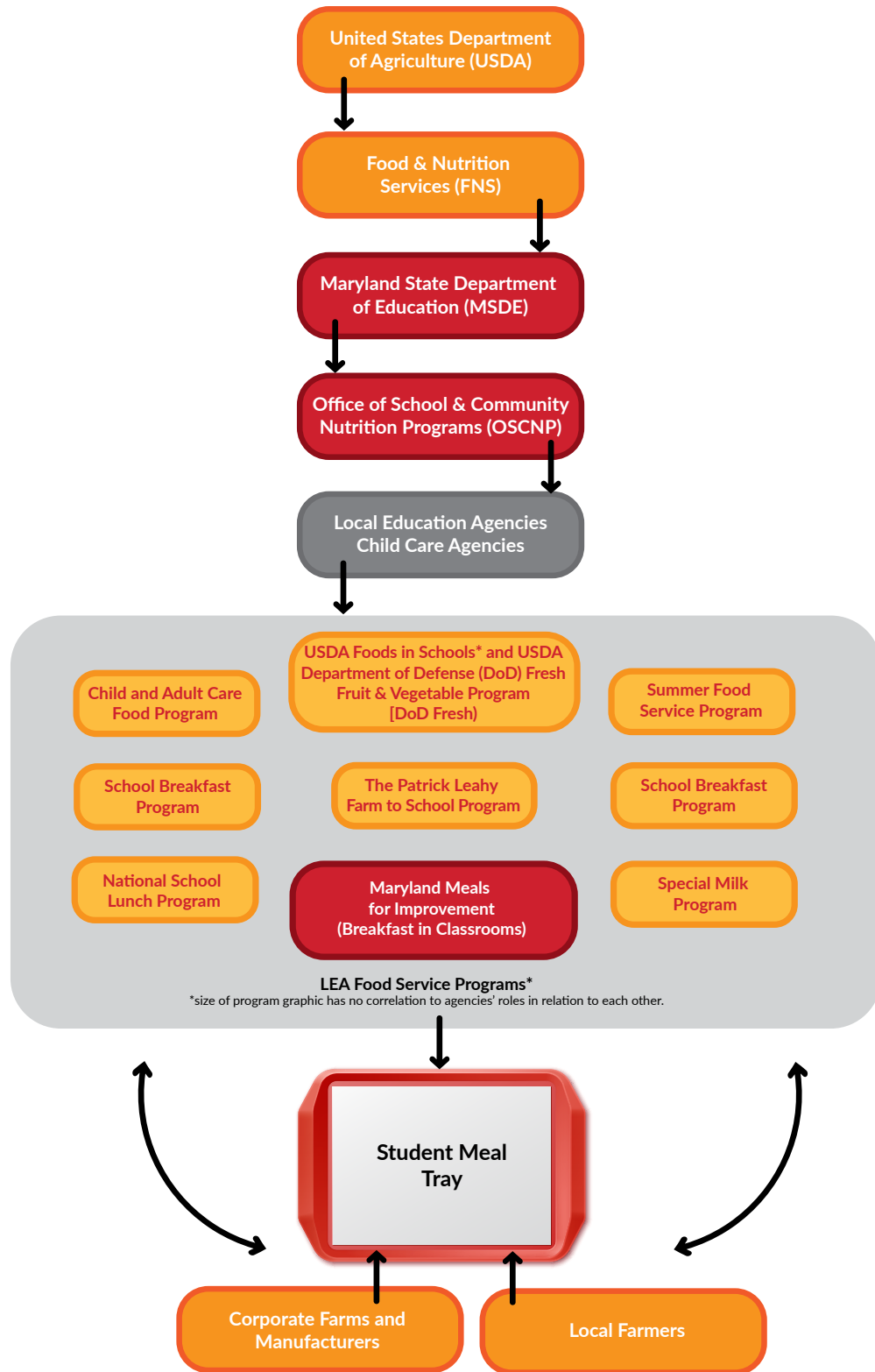
- **The Local Food for Schools (2022)** grant has a goal of expanding the procurement of local foods for school meals among small and socially disadvantaged producers. MSDE provided direct funding to LEAs to facilitate procurement, distribution, and/or storage of local foods for local producers. In addition, MSDE is planning a state procurement of produce for LEAs from local food hub aggregators. The aggregators would have responsibility for centralized sourcing, procurement, and distribution of unprocessed or minimally processed local food to LEAs for Maryland school meals. They also would prioritize sourcing products from small and socially disadvantaged producers.
- **The Formula Grant (2022)** has a twofold goal of building and increasing the capacity of Maryland's LEAs to procure and use local foods in school meals; and prioritizing improvements in supply chain resiliency by strengthening F2S infrastructure. In order to reach those goals, MSDE is planning a centralized electronic facilitation and logistics solution to serve as a hub for LEAs to request and order agricultural products from local producers. The online system will include a statewide database of local producers with detailed information on their capacities (e.g., crops, timelines, etc.). It will also systematize ordering, delivery, and manage requests for processing and storage.

Over the next few years and in collaboration with stakeholders across Maryland, substantial improvement in the sustainability of Farm to School in the State is expected with these initiatives.

**Figure 1** provides a visual representation of the program's place in the organizational hierarchy of child nutrition programs administered by MSDE and funded by the USDA and Maryland (Maryland Meals for Achievement).



Figure 1. Child Nutrition Programs Organizational Hierarchy





## Part 2 | The Environmental Scan

After receiving the F2S grant in 2021, MSDE began planning ‘A Roadmap to Farm to School Sustainability in Maryland’ with the goal to:

1. Assess Farm to School programming among LEAs and other stakeholders to bring awareness and contextualize current systemic and operational opportunities in the Maryland Farm to School program.
2. Create a Farm to School Roadmap to Sustainability that provides high-level considerations and recommendations to increase local foods in school meals.

If fully implemented by the identified stakeholders, the Roadmap will:

- a. Increase collaboration and community-building between LEAs and producers.
- b. Enhance operational capacity.
- c. Improve menu alignment to increase local food procurement.
- d. Inform policy support and funding utilization.

# Assessment Process

## METHODOLOGY

Assessment findings that informed the Roadmap included publicly available data and resources, surveys, one-to-one virtual interviews, and small focus groups with stakeholders. The stakeholders informing the report were LEAs, agricultural producers, local food academics, policy makers, advocates, SNAP-Ed, MDA and MSDE.

MSDE created the producer and LEA surveys to assess the feasibility of agricultural producers selling to schools, and the viability of LEAs to procure directly from producers. The surveys were administered in collaboration with MDA in early 2022 at a F2S training program. Forty-one producers answered the producer survey. There were thirty-three respondents<sup>1</sup> that answered the LEA survey (including public and non-public schools). The surveys included closed and open-ended questions, and participants accessed the survey via a Google survey link (see the Appendix for producer and LEA survey questions).

In addition, focus groups (N=4) and individual interviews (N=10) were conducted from November 2022 to April 2023. Focus groups were conducted with Maryland’s public LEAs and community stakeholders to determine the challenges and the winning strategies of implementing the Farm to School philosophy into cafeteria lines and the State of Maryland. One-on-one interviews were conducted with LEAs and individuals from nonprofit organizations, national farm to school representatives, government officials, and in/out-of-state champions of farm to school. Furthermore, data was gathered through participatory observation by attending F2S meetings held by MSDE and other stakeholders during the project period.

All participants involved in the survey, focus groups, and individual interviews were assured confidentiality. As a result, the findings are presented in a generalized format to maintain the participants’ privacy. A descriptive analysis of the survey answers resulted in several data points. The survey results were then interpreted, identifying patterns and trends, and drawing conclusions based on the goals of F2S. Moreover, the qualitative data from the focus groups, individual interviews, and open-ended survey questions were analyzed and synthesized using a thematic approach, which involves identifying key patterns or discussion points embedded within each interview/focus group transcript. These patterns were then assigned a ‘code’ or a name that best captures the issue identified (Locke et al., 2022). The outcome of ‘coding’ resulted in a more detailed index and manageable sets of qualitative data from which key takeaways were extracted regarding the Maryland F2S program.

**Table 1. Environmental Scan Participants - By Type**

<i>Participant Type</i>	<i>Target</i>	<i>Actual</i>
LEA	9	6
Producers	Open	14
Community Stakeholders	16	13

Lastly, a literature review of F2S was conducted to ascertain the history and best practices of the F2S movement. Information from the literature allowed for a deeper exploration of the background, progress, and challenges of F2S its inception. The literature review also guided the interview questions and prompts during individual interviews and focus groups.

<sup>1</sup> The number of participants does not equal the total number of LEAs in the state of Maryland. Representatives from the same LEA were allowed to respond to the survey. All responses were counted.

## Assessment Findings

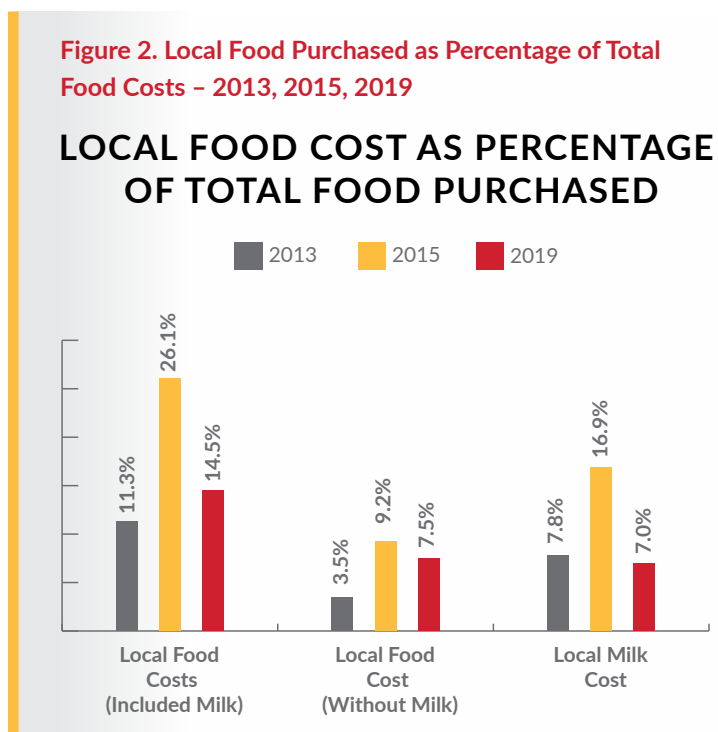
### REVIEW OF LITERATURE AND F2S CENSUS

Farm to School is an initiative aimed at utilizing federal funds to advance societal goals, such as enhancing student well-being and bolstering American agriculture (Joshi et al., 2008). The concept of “local” foods plays a pivotal role in the F2S program, but its interpretation can vary among stakeholders. In the 2008 Farm Bill, ‘locally or regionally produced agricultural food product’ is defined as food raised, produced, and distributed within 400 miles of the final product’s marketing location or within the same state (Bobronnikov et al., 2021). However, there is no standardized definition of ‘local’ applicable to all schools, or states. Instead, each state tailors its own definitions to align with its specific needs and objectives, one example being food grown or produced within the state where the school or county is located. These definitions may also encompass distance constraints, ranging from 25 to 500 miles and, in some cases, crossing state lines.

In Maryland, a statewide definition of “local” is absent, leading to varying interpretations among LEAs. Some LEAs consider mileage as the defining criterion for “local,” while others adopt the “within the state” definition. Despite the variance in their F2S definitions, LEAs remain committed to the procurement of “local” food and vegetables. However, additional factors influence whether LEAs source their food locally or opt for using USDA DoD Fresh, the USDA’s Department of Defense Fresh Fruit and Vegetable Program, which allows schools to use USDA Foods entitlement dollars to buy fresh produce.<sup>2</sup> Farm to School relies on school meal reimbursements and commercial supply chains to locally source food, benefiting nearby farms. In contrast, USDA Foods and USDA DoD Fresh products are procured from government supply chains, which may not consistently prioritize local food or nearby sourcing. Although DoD vendors are encouraged to purchase local products, Maryland’s geographic landscape introduces complexity, as “local” food could originate from adjacent states and from producers far removed from Maryland. Notably, a single distributor from New Jersey manages the USDA DoD Fresh Program in Maryland. The USDA DoD Fresh program defines local as any state that borders the state where the distributor is located. By definition then, produce from New York and Connecticut is local for Maryland.

In the 2015 USDA F2S Census, 22 public LEAs and 17 nonpublic private LEAs/schools participated, and all indicated that they incorporate local foods into school lunches and breakfasts. However, around 49% of these food items were procured through USDA DoD Fresh and USDA Foods, with only 15% directly purchased by LEAs from local producers or food hubs. Approximately 26.1% of their total food costs were allocated to local foods, with 16.9% of it allocated to the purchase of local milk (USDA-F2S Census, 2015) (see **Figure 2**).

**Figure 2. Local Food Purchased as Percentage of Total Food Costs – 2013, 2015, 2019**



<sup>2</sup> USDA DoD Fresh operates through a partnership between the USDA and the Defense Logistics Agency (DLA), as well as the state distributing agencies in each participating state. For additional information: <https://www.fns.usda.gov/usda-foods/usda-DoD-frDoD-fruit-and-vegetable-program>

Furthermore, the 2019 USDA F2S Census revealed that combined purchases through USDA DoD Fresh and USDA Foods accounted for 78% of local food acquisitions for school meals by LEAs, while approximately 29% of local foods were directly purchased from individual producers (USDA-F2S Census, 2019) (see **Figure 3**). Of the 50 reporting LEAs, 14.5% allocated their food costs to local foods, with an additional 7.0% designated for local milk. Additionally, the 2019 Census found that 28% of respondents lacked a set definition of “local,” while 18% maintained a definition within 200 miles.

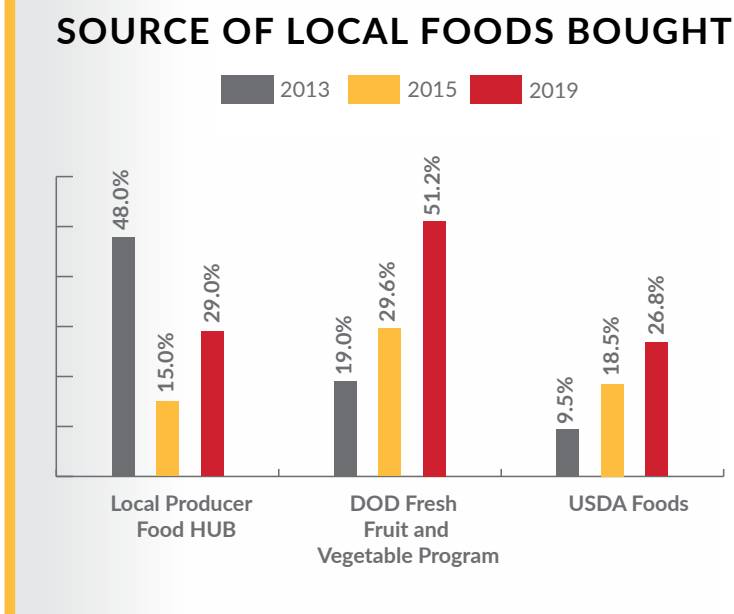
### PRODUCER SURVEY

A total of 41 participants identified as producers/local farmers. However, not all of the participants answered all survey questions. The sample demographics showed that of those who answered, 79% (N=30) identified as White, 56% (N=23) identified as women farmers, and 14% (N=5) identified as having veteran status. Most farms were classified as small, making less than \$350,000 in gross income (see **Figure 4**).

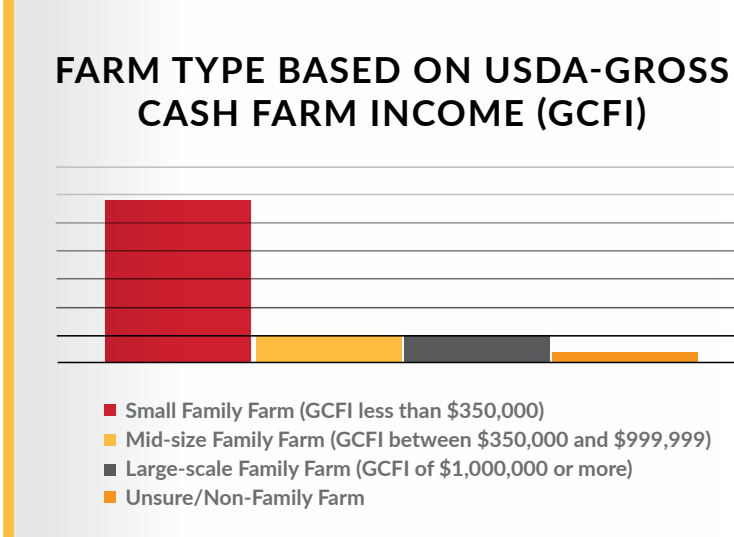
When producers were asked if they sold directly to schools as part of F2S in 2022, only 15% (N=6) answered yes. Of the six farmers, three sold to Frederick County Public Schools, the other four sold to Montgomery County Public Schools, Harford County Public Schools, and Prince George’s County Public Schools, respectively. Similarly, when asked how many of them sold directly to distributors as part of Farm to School, only 24% (N=10) answered yes. Nevertheless, interest in selling directly to schools and participating as a host farm for field trips as part of Farm to School was high, with 81% (N=33) and 80% (N=33) interest, respectively.

Furthermore, the survey asked producers what farm products they could sell to schools. Most farmers said they could supply schools with vegetables, fruits, and herbs. However, farmers also mentioned being able to supply items such as honey, milk, eggs, beef, pork, chicken, ice cream, butter, and yogurt. However, 85% (N=35) of them responded that they had limited capacity to distribute directly to schools, 5% (N=2) stated that they could deliver the products themselves to the schools, and 10 % (N=4) had a third-party distributor that could deliver to the schools.

**Figure 3. Key Sources of Local Food Purchased - 2013, 2015, 2019**



**Figure 4. USDA - GFCI Classification**





Another important issue in the sustainability of F2S is the processing of products; farmers noted that they had minimal capacity to process foods; most of the producers maintained that they would be able to provide raw/unprocessed food to the schools (see **Figure 5**).

### LEA SURVEY

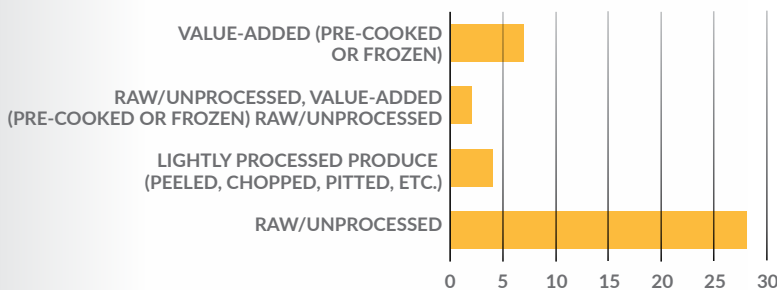
The LEA survey posed various questions ranging from which products (if any) purchased directly from local producers, to whether they had enough cold storage capacity to store local products. There were a total of N= 33 persons representing the state’s LEAs, which includes public and private agencies. Results showed that approximately 58% (N=19) of LEAs purchase local foods directly from producers. However, approximately 76% (N=25) reported buying local foods through their distributors instead of directly from farmers/ producers. Most (73%, N=24) of the LEAs also desired to buy from farmers using micro-purchasing procurement methods (e.g., often for limited use in special events or taste tests, rather than consistently in school breakfasts and lunches). Based on the survey results of both farmers and LEAs, their interests were aligned in the types of produce being grown and the types of produce to purchase. Seventy-three percent (N=24) of LEAs preferred to purchase ninety percent of the fruits and vegetables that farmers could sell.

Another finding of the survey was the LEAs’ inability to process much of the food purchased from local farmers. The responses varied, but the majority (73%, N=19) of LEAs had limited to no capacity to process food or were unsure of their county-wide capacity (see **Figure 6**).

The LEAs were also asked about their definition of “local” foods. Most LEAs believed “local” was defined in their county regarding a specific distance (see **Figure 7**). Moreover, most of the LEA respondents (N=14) defined the “local” distance to be between 200-300 miles from the county (N=8) followed by within 100 miles or less (N=5).

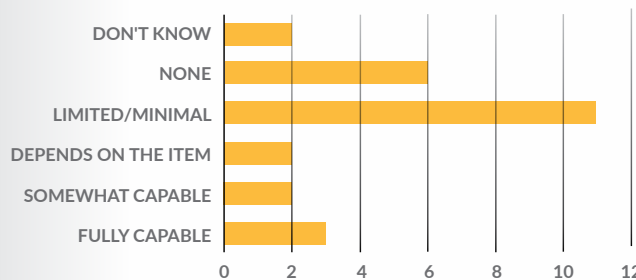
**Figure 5. Producer’s Ability to Process Products**

### PRODUCER’S ABILITY TO PROCESS PRODUCTS



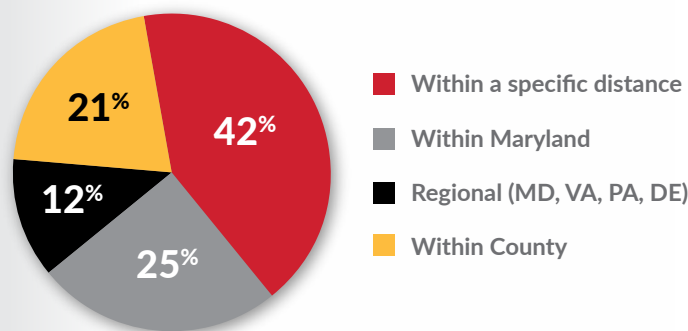
**Figure 6. LEAs’ Processing Capacity**

### LEA’S ABILITY TO PROCESS PRODUCTS



**Figure 7. LEAs “What is Local?”**

### LEA’S DEFINITION OF “LOCAL” (N=26)



The qualitative responses from the LEA survey provided some of the perceived challenges LEAs faced between 2015 and 2019 when purchasing from local producers.<sup>3</sup> One highly rated issue was logistics, defined as issues related to transportation or structural capacity encountered by the LEAs. The following quote is an example of an LEA's perception of logistical challenges that prevent them from buying from local farmers:

*"...local farms are not willing to distribute to school locations; we do not have the central storage or staff and equipment [such as trucks] to distribute or stockpile local items."<sup>4</sup>*

Within the logistics theme were codes related to inefficiency and operational challenges. These were issues related to the LEAs' inability to order quickly from producers and to get the product delivered.

*"...logistics and ordering process. Most local vendors, in my experience, take orders via e-mails or don't have websites set up to receive orders. Also, logistically, they cannot always support the deliveries needed to all locations requested without additional fees."*

Another general theme that emerged was inventory management, specifically the challenges related to securing adequate product volume from local producers. Other patterns related to inventory management were seasonality, labor shortage, and supply management.

*"...having local items ordered and planned on the menu then become not available due to weather conditions or other issues that cause items not to be available."  
 "...processing produce during the school year, lack of skilled labor and labor hours to break down the product, refrigeration storage is what we are working on now. We have freezer space. The farmers are growing when we are not in school."*

## INTERVIEW AND FOCUS GROUP FINDINGS

The primary groups of stakeholders considered were: LEAs, local producers, community stakeholders (e.g., F2S organizations, food-related non-profits, elected officials, local food advocates, National Farm to School representatives, agricultural educators, food hub partners), MDA, and MSDE. The following findings are organized by the three major groups interviewed: LEAs, producers, and community stakeholders.

<sup>3</sup> A separate question was specific to the pandemic issues.

<sup>4</sup> The definition of small, medium, and large are as follows: a small LEA has 1 to 20 total number of schools, a medium LEA will have between 21 to 49 schools and a large LEA will have 50 or more.

## 1. LEA Perspectives on Farm to School Sustainability

Several themes emerged based on the qualitative analysis of the LEAs' narratives and experiences. An important context to remember while reading the findings below is size variation. The variation in the size of the county, student body, and environmental location drastically affects the capacity of Maryland school counties to implement all aspects of Maryland's F2S program (e.g., school meals procurement, education, and school gardens). **Table 2** shows this size variation by outlining the number of schools in each county.

**Table 2. Number of Elementary and Secondary Schools by County in the State of Maryland<sup>5</sup>**

County Name	Elementary Schools	Middle Schools	High Schools	Other	Total
Allegany County	14	4	3	5	26
Anne Arundel County	81	19	13	13	126
Baltimore City	37	3	16	100	156
Baltimore County	108	26	21	23	178
Calvert County	12	6	4	3	25
Caroline County	5	2	2	1	10
Carroll County	22	8	7	7	44
Cecil County	17	6	5	1	29
Charles County	22	8	7	2	39
Dorchester County	6	2	2	3	13
Frederick County	39	13	10	7	69
Garrett County	7	2	2	1	12
Harford County	33	9	9	4	55
Howard County	42	20	12	3	77
Kent County	3	1	1	0	5
Montgomery County	135	40	25	9	209
Prince George's County	121	24	24	38	207
Queen Anne's County	8	3	2	1	14
St. Mary's County	18	4	3	7	32
Somerset County	4	1	0	4	9
Talbot County	5	1	1	1	8
Washington County	25	7	7	5	44
Wicomico County	16	3	3	3	25
Worcester County	6	1	3	4	14
<b>Total</b>	<b>786</b>	<b>213</b>	<b>182</b>	<b>246</b>	<b>1,427</b>

<sup>5</sup> Besides elementary, middle, and high schools, each county also maintains other educational buildings. These may include special needs facilities, vocational and technical institutes, accelerated learning centers, and combination schools for grades of more than one core group. Source: State Department of Education, Public School Enrollment by Race/Ethnicity & Gender & Number of Schools, Sept. 30, 2021 – updated April, 2022

### a) Staffing and Personnel Limitations

Labor<sup>6</sup> is one of the most pressing challenges to having more local foods in school meals. These include: a labor shortage in school food service, lack of staff skills for processing local foods, lack of funding for training staff during the summer months, challenge of managing competing priorities, etc. The following comments depict some of the labor challenges outlined by the LEAs:

“So [the] labor issue was always one of the concerns, so we look for them [producers] to provide us with fully processed items that we could use in the schools and also as a part of our procurement.”

“My next issue is I don’t have a person or refrigerated vehicle to distribute this food within the county. So, you know, the whole from the farm to the school really is fraught with a lot of obstacles in my case.”

While these labor issues are prevalent across all LEAs, some smaller-sized LEAs were able to find innovative ways to address or redistribute labor and lack of funding by realigning budgets that would allow the county to be more strategic about F2S, such as intentionally hiring personnel specific to that role.

“... I actually just hired this year, I put a Farm to School manager in place so we could do a little more than we’re already doing. So, and I always tell people, just think I only have [number] schools... so it’s a little easier for me. And then I have the farmers right there who are willing to deliver. So, I can’t compare us to others.”

### b) Need for “Local” Prioritization

LEAs have also sought to increase their F2S efforts by requiring local foods in their contractual agreements with distributors. However, given the reliance on USDA DoD Fresh for local produce, LEAs do not consistently receive produce from Maryland. The following quote explains this issue:

“...like let’s say one of the Keaney Produce \*\* [a former USDA DoD distributor for Maryland] got apples from Washington State, but they cut them and packaged them [in a nearby state]. Some people are counting that as a local package in a local business...”

### c) USDA DoD Fresh Competition

One of the challenges outlined throughout the interviews for both LEAs and community stakeholders was the unintentional competition between sourcing from the USDA DoD Fresh program and buying directly from local farmers. The challenge for all stakeholders then centers around how best to create a fair marketplace for LEAs to procure from local producers. For example, the following quotes illustrate this matter:

“... [we] had talked about the DoD funding, and I put \$85,000, just in my little county, into DoD so I can always have fresh produce. So, the state needs to figure out how to incentivize the school districts to want to buy that local frozen case that’s going to cost them more or compete with DoD.”

“...DoD program and you know, there are more chickens and apples in Maryland than there are people, but the apples we are getting from [the web-based ordering application used by the USDA DoD Fresh program] FFAVORS (Fresh Fruit and Vegetable Order Receipt System) are coming out of Washington State. You know, it just doesn’t make any sense.”

6 This issue was not only a challenge perceived by the LEAs, but also the community stakeholders and the producers.

*“... corn is a great example. You know, we grow hundreds and thousands of acres of corn in Maryland each year. But when the USDA is giving me money that I can spend with the USDA; and they're giving me truckloads of corn. I can't turn that down and say, 'no, I do not want it for free. I want to go out and spend \$30 a case for [...] whole kernel corn...”*

#### d) Logistical Challenges

LEAs need help finding farmers to fulfill large orders and transport the produce to school grounds. They also struggle with the fact that much of the growing season does not match with the regular school year, as highlighted in this quote:

*“So, but I think the big challenge is the growing season, too ... whatever's local around here, sometimes it just doesn't connect, or we can't get on that same schedule. So, I think for us, the challenge is providing for a larger school system and the amount of permits that we would need, and [...] connecting, [...] getting the produce...”*

#### e) Serving Size Challenge

LEAs also indicate that the size of the produce item affects their decision to purchase through a local producer. According to the USDA, the National School Lunch and School Breakfast Programs must follow the Dietary Guidelines for Americans. “This rule requires most schools to increase the availability of fruits, vegetables, whole grains, and fat free and low-fat fluid milk in school meals; reduce the levels of sodium, saturated fat and trans-fat in meals; and meet the nutrition needs of school children within their calorie requirements (USDA, 2012, p. 4088).” Consequently, LEAs must consider serving sizes when planning and selecting meal options. The following quote demonstrates this concern:

*“...size is also an issue, we have to make sure that the size of the fruit or whatever it is, matches with whatever component of what we need. [...] sometimes when you go local, it's like, it'll be a smaller apple or a smaller [...]. And we need a certain size. So that's another thing to think about. But we are considering [...] maybe using herbs, something that won't necessarily affect the component contribution of the meal pattern...”*





## 2. Producers' Perspectives on Farm to School Sustainability

The qualitative responses from the survey provided significant insight into the producer's obstacles and challenges to selling directly to school districts. In response to why they did not sell directly to LEAs, farmers provided these top reasons: 1) costs, 2) small scale/limited production capacity, and 3) procurement requirement restrictions/process.

### a) Cost/Price-Related challenges

Farmers expressed concerns about their products being too expensive for schools or needing help to meet the price expectations set by schools. They highlighted the financial constraints and affordability issues they face. The following quotes echoed this sentiment:

*"I have seen like a ton of bureaucratic hurdles to jump through for a sale that probably wouldn't work out due to price differences. I'm not sure if we can meet the prices that schools are looking for."*

*"I tried, but it did not work as I had to go through a wholesaler, and I couldn't afford the price they were asking."*

### b) Limited Production Capacity

Farmers acknowledge that their current production capacity would almost certainly need to increase to supply schools. They mention their concerns about not producing enough or being GAP certified, indicating their realization of the limitations they face in meeting the requirements of LEAs.

*"We are not GAP Certified.<sup>7</sup> We do not grow enough to provide to schools. We do not have the processing facility necessary to sell directly to schools."*

*"I do not think I produce enough for the moment. However, I have at least three acres of farmland available to cultivate."*

### c) Difficulty Navigating the Procurement Process

Farmers described the challenges they encounter in navigating the procurement process for sales to LEAs. While expressing an interest in selling directly to LEAs, they were frustrated by the complex and time-consuming procedures of doing so.

*"The RFP's that I've seen have seemed like a ton of bureaucratic hurdles."*

*"Paperwork is overwhelming; corporate food suppliers dominate school contracts and control the process."*

*"No easy or timely process is established, and also low demand from local schools."*

In addition to the three main challenges identified above, other viewpoints were important to the sustainability of Maryland's F2S. The farmers outlined the lack of LEA contact and the absence of requests or demand for their products. Producers also cited external factors that pose barriers to selling directly to schools, such as government-supplied products at little or no cost to schools, and the presence of dominant corporate food suppliers who control school contracts. Lastly, farmers mentioned their reliance/dependency on intermediaries, such as wholesalers or farm alliance/collaborative organizations, to handle the sales process. They indicated that these entities were responsible for managing the sales on their behalf, suggesting that collaboration with external parties for accessing school markets could be a good way to bridge the gap between LEAs and local farmers.

<sup>7</sup> Per the USDA, Good Agricultural Practices (GAP) audits are voluntary audits that verify that fruits and vegetables are produced, packed, handled, and stored to minimize risks of microbial food safety hazards. For more information visit <https://www.ams.usda.gov/services/auditing/gap-ghp>. GAP is only required in four counties in Maryland (Baltimore County, Montgomery County, Prince George's County, and Washington County).



### 3. Community Stakeholders' Perspectives on Farm to School Sustainability

Interviews with community stakeholders provided various perspectives that added to the strategic direction toward sustainability for Maryland F2S.

#### a) Price as a Barrier

Community stakeholders highlighted price as a significant challenge in F2S initiatives. They expressed the need for a balanced and mutually beneficial pricing structure between farmers and schools. Farmers are cautious about selling below fair market value, considering the work and resources involved in food production. Additionally, they mentioned the limitations of school budgets and the use of government funds as reasons for not being able to purchase directly from local farmers.

*“Price shouldn't be a barrier, but we haven't gotten to the point of a trusted relationship.”*  
*“Every time I bring up buying locally, they [LEA] say ‘we need to use up our DoD funds.’”*  
*“It's sensitive to ask a farmer to sell way under fair market value.”*

## b) Lack of Commitment and Planning

Community members who worked closely with farmers expressed the need for more commitment and planning from LEAs. They mentioned an absence of a trusted relationship between the LEAs and farmers. However, these relationships could be improved with clear agreements, volume commitments, and consistent purchases. Some producers feel discouraged by the schools' inability to plan and execute procurement arrangements, hindering farmers' willingness to invest in scaling up production.

*“We haven't got enough of a commitment to actually do the planning and planting.”*  
*“There's always a reason why they're not able to buy from the farmer directly.”*

## c) Processing Challenges

Community members who have worked with both LEAs and producers highlighted that farmers face processing challenges in meeting schools' specific requirements. A majority of schools need pre-cut and packaged produce, and some farmers lack the resources or labor to provide the processed products that schools prefer. This misalignment in processing capabilities presents a hurdle in meeting the schools' expectations and expanding the partnership between the two. These sentiments are echoed in the quotes below:

*“The school doesn't have the staffing to cut broccoli off the stock.”*  
*“...it is important to have the food in the way that the school is used to receiving it.”*

## d) Staffing and Personnel Limitations

Community members also identified school staffing and personnel limitations as challenging. They note that school kitchen staff have restricted working hours and lack the time and expertise to handle whole food, unprocessed items. This limitation affects the schools' ability to prepare and utilize fresh produce, adding complexity to F2S initiatives.

## e) Limited Production and Logistics Capacities

Community stakeholders discussed the need to assist farmers with their constraints related to limited production capacities and the logistics of supplying to schools. They mentioned challenges in meeting the demand, coordination with food distributors or aggregators and the need for supportive agents who can work closely with farmers to provide training, guidance, and assistance in coordinating with schools.

*“Farmers need someone to be there to help them get to the next point.”*  
*“...we need boots on the ground, working alongside farmers.”*  
*“We need to coordinate with a food distributor for the other 30 schools.”*

### f) Challenges of Procurement and Regulations

Community stakeholders reiterated the complexities of the procurement processes and regulations as barriers in F2S initiatives. They mentioned the requirement for competitive procurements and working with thin profit margins as the main challenges. Community advocates stressed the need for producers to better understand the existing State procurement system (eMMA).

### g) Challenges with Alternative Grant Mechanisms

In cases where grants are available for local producers to enhance their capacity for F2S activities via increased farm infrastructure, produce aggregation, and other related activities, significant barriers are still present that limit access. The quote below illustrates a small nonprofit's experience of trying to navigate a State-based grant funding mechanism on behalf and in support of historically underserved food producers:

*“Even with the MARBIDCO grant, which is supposed to assist with aggregation activities, there are several additional hurdles – from needing a 20% funding match, to needing to go through the Certified Local Enterprise process for a minimum of 4 farmers (which requires having a Nutrient Management Plan in place), to needing to have a purchasing contract or commitment letter stating intention to purchase some amount of product, and more. It’s a chicken-and-egg situation; without the funding, capacity can’t be established to enable institutional market participation, but applying for the funding requires one to already have significant capacity in place to ‘prove’ that the institutional buyer is already committed.”*

### h) Challenges with School Gardens Implementation

National and state F2S efforts also include the use of school gardens, food tasting, and cooking classes for students. Complexities arise, however, of navigating the administrative processes across multiple local, county and state agencies to comply with the separate and disjointed regulations. The ideal of on-site school gardens is generally and widely agreed to be a wonderful addition to any school as outdoor classrooms for students to grow, taste and cook fresh, local foods. However, the initial hurdles, such as adequate funding, consistent human labor for maintenance and educational programming, and administrative processes were found to be a deterrent to bringing school gardens to fruition.

*“The schools want the gardens, and they have the land for it. The staff and funds needed to install, maintain, and provide instruction is limited. Many teachers don’t have the capacity for added responsibility. Funding to contract with a third-party organization has to be planned, requested, and voted into the school budget 18 months in advance. NCRS [the Natural Resources Conservation Service], state extension offices and other government entities have funding for raised beds, irrigation, and tunnels, but has a year-long process. Homes on the condition to implement a garden nutrient management plan and requires a signed agreement between the third-party and the County. Approval from the County can be a lengthy process, and in some cases requires additional approvals from the County Superintendent and School Board. Those approvals can incur costs such as blueprints, licensed contractors, and permits in some cases. Grant support from foundations, endowments and other donation sources is critical, and while available, requires more administrative work ... and some luck.”*





## Sustainability of Maryland F2S



The sustainable integration of local foods into school meal programs in Maryland presents a multifaceted challenge; one that requires a comprehensive approach encompassing legislation, improved production, and distribution capacities, processing infrastructure, planning and collaboration. Building alliances becomes essential, as it can offer valuable insights and expertise, facilitating partnerships for menu alignment, aggregation, procurement, etc. Furthermore, recognizing the unique challenges of this complex food system highlights the need for creative approaches to ensure the participation of all the essential parties involved: students, parents, producers, distributors, academia, non-profit organizations, and government agencies.

This Roadmap was developed to address the vision and goals for F2S sustainability in Maryland. It reflects and considers the multiple collaborators that must come together to achieve and reap the benefits of F2S programming (e.g., increased access to fresh, nutritious local foods, agricultural educational, eco-friendly food systems, economic development, and racial justice).

## Recommendations and Strategic Approaches



### Recommendation 1: Establish a Formal, Long-Term, Working Coalition to Set Strategic Statewide Goals, Benchmarks, and Definitions to Increase Local Foods in Schools

A long-term coalition is needed to set strategic statewide goals, benchmarks, champion policy reform initiatives within the state and set definitions to increase local foods in schools. Currently, MSDE has strong partnerships with the MDA, SNAP-Ed, and members from other state-wide organizations who are committed to increasing local foods in school meals across the state. Nevertheless, F2S best practices in California, Vermont, Maine, and Colorado, call for a wider multi-agency coalition composed of state leaders and local food advocates to include those in education, agriculture, environment, health, food banks/ food hubs, community organizations, and government leaders. Within the structure of the coalition group, these stakeholders or advocates can individually leverage their own financial and organizational resources to establish policy changes in Maryland's F2S. Additional opportunity may exist in a partnership or within the Maryland Department of Emergency Management's Food System Resiliency Council (FSRC), established by Maryland [H.B. 831/S.B. 723](#), the Maryland Food System Resiliency Council (FSRC), an appointed, multiagency body charged with meeting regularly, to engaging experts in food resiliency across Maryland.

Moreover, based on the size of the coalition, members could adopt the [Action Circles Model of Organizing](#). For example, the members of a F2S coalition in Vermont appreciated the Model's democratic and nonhierarchical decision-making that it infused in the working group (NFSN-Vermont, 2023). The coalition could also adopt the National Farm to School Network's [Racial and Social Equity Assessment Tool for Farm to School Programs and Policy](#) (2019). The tool "supports decision making processes which maximize opportunities for advancing racial and social equity." This work could be led by either by MDA, MSDE, or both, as these agencies have been leading Maryland's F2S grant-based initiatives since the program's inception in 2008.

In addition to subject matter expertise, coalition membership should be inclusive and representative of the racial, ethnic, and socioeconomic diversity of the community to promote equity in F2S programs (Harvard School of Public Health, 2021). Continuous recruitment efforts will also bring fresh perspectives and ideas to the coalition.



## CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

### Coalition Membership Structure

The organization of the coalition may vary, but the following are structural suggestions:

1. **Create Issue-Specific Work Groups:** Create long-term working groups focused on specific aspects of Farm to School initiatives, such as sourcing local food, equitable pricing, nutrition education, policy advocacy, and fundraising.
2. **Consider LEA Work Groups by Size and Region:** Working groups organized by geographical regions will create information-sharing strategies to assist in the F2S efforts across regions.
3. **Create Task Forces:** Establish subcommittees or task forces, to address immediate needs and specific projects, such as developing an official definition of “local” as it relates to the distance between farm and LEAs, to help producers navigate the current procurement, and other farm to school challenges.

### Set an Agenda to Establish and Navigate Farm to School Priorities

The coalition would set up its own agenda, goals, and calendar milestones for increasing local food access to children in Maryland schools. The agenda-setting process would consider the current F2S initiatives in Maryland and consider this report as evidence of the challenges that must be addressed and prioritized. To effectively address the programmatic challenges and priorities the coalition would strategically pursue three key objectives: legislation, advocacy for policy reform, and a widely adapted definition of “local.”

1. **Legislation:** One of the coalition’s main objectives would be to garner strong stakeholder support for legislation, which would codify funding for F2S in Maryland, including funds that target small-scale local producers. This action would establish statewide mechanisms for the long-term sustainability of Farm to School programming. The data from the current environmental scan indicated strong support for F2S in Maryland. Individuals acknowledged the multi-prong benefits of the program, such as nutrition, education, economic resilience, environmental stability, and racial justice. Recent legislative F2S wins across the nation suggest that F2S advocacy should concentrate on efforts that advocate for universal meals, a trend resulting from the end of pandemic-era USDA waivers. A step in this direction is currently being led by the *Healthy School Meals for All in Maryland* coalition, which is urging the Maryland General Assembly to consider bills that would help to end child hunger in the State.
2. **Advocacy for State-level Policy Reform:** The coalition will need to combine the strengths of the various stakeholders to build momentum and influence the policymaking process. Engaging in advocacy efforts, such as meeting with legislators, attending public hearings, and communicating the coalition’s message through various channels, are useful strategies to challenge current policy practices that inhibit F2S activities.
3. **Defining Local:** A critical task for the coalition is to establish a clear definition of “local” as it pertains to food procurement for Maryland’s F2S programs. Data from the environmental scan resulted in varying definitions of local, ranging from 50 miles – 300 miles. A well-defined and widely accepted local sourcing definition will provide consistency and transparency in the implementation of F2S initiatives. While the 2008 Farm Bill directed the Secretary of Agriculture to encourage schools to use a “geographic preference” when procuring local products, another aspect to consider would be “regional variation.” Regional variation recognizes regional factors within the state. Coastal areas, for example, have different access to local seafood than rural areas, whereas rural areas may have more agricultural resources than urban areas. Therefore, the coalition could consider region-specific definitions within the overarching state definition.



## Recommendation 2: Ensure the Prioritization of Local Foods by Contracted Parties

Leverage volume and buying power to engage with large-scale food service providers, distributors, food service management companies, etc. to exhaust opportunities for incorporating local foods into school meals (particularly for those LEAs that use food service management companies). Ensuring, not only encouraging, distributors, food service providers, and other contracted parties to provide local foods for school meals. While the goal is not to make bids too restrictive (ever-changing nutrition mandates are challenge enough for many distributors) the inclusion of local foods in orders can be achieved through a combination of strategies, clear expectations, and auditing. Maryland stakeholders can look to the Frederick County Farm to School Action Plan (2018-2019) for guidance.

### CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

#### Include Local Sourcing Requirements in Contracts and Penalties for Non-Compliance

A number of LEAs include local sourcing definitions in their contracts with distributors. This should be a standard practice for LEAs in the state of Maryland. Therefore, a consistent definition of local (e.g., miles within the county, the state, or the distributors' facility) must be clear to distributors to ensure adherence. In addition to prioritizing local sourcing in contracts with distributors, food service providers, and contractors, LEAs can set achievable annual percentage increases for locally produced food. It is crucial to base these targets on local agricultural capacity and seasonality to avoid unrealistic expectations that could lead to frustration and non-compliance.

Furthermore, establish a current baseline of third-party's local procurement efforts to subsequently establish an anticipated yearly incremental increase. The expectation is that these contracted vendors diligently source from local producers until all options are maximized for each LEA. Evidence of exhaustive efforts should be required.

Lastly, LEAs can consider penalties or consequences for failing to meet local sourcing requirements, serving as a deterrent against non-compliance.

#### Use Established Conferences or Convenings by State Government Agencies to Build and Strengthen Vendor Relationships

Either the LEAs or state agencies can assist contracted parties in connecting with local farmers and producers. This can include providing a list of local suppliers, facilitating introductions, or hosting networking events. Strong relationships between distributors, local suppliers, and farmers will ensure a consistent and reliable source of local produce. Contracted parties may be willing to source locally if they have reliable suppliers.



### **Recommendation 3: Establish and Strengthen Relationships Between Producers and Schools/Local Education Agencies (LEAs)**

Establishing and strengthening relationships between local food producers and LEAs is crucial for the success of F2S programs. Fostering connections with local producers creates a pathway for schools to access fresh, healthy, and sustainable local food sources for school meals, benefiting students' nutrition. Simultaneously, a commitment to local producers supports the local agricultural economy by providing farmers with a steady market and ensuring the vitality of the community's food producers. Additionally, direct engagement with local farms and producers offers students opportunities to learn about the origins of their food, fostering food literacy, and instilling a sense of environmental responsibility. Establishing and strengthening relationships between producers and LEAs is mutually beneficial for all parties (with the understanding that more funding is needed to increase LEA staff dedicated to this role).

## CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

### Demystify Procurement Processes and Avenues

Survey results and producer interviews indicated a strong interest in selling to schools. However, respondents expressed concerns about their readiness to navigate the procurement process effectively. Stronger, and more intentional relationships can significantly aid producers in their readiness to navigate the procurement process. Regular, topic-focused training, technical assistance, and convenings should be scheduled by the MDA and MSDE for producers, LEAs, and distributors. The procurement process will be demystified by clarifying aspects like documentation, quality standards, and delivery schedules. This support reduces the learning curve for producers, instilling confidence that LEAs are committed to sourcing from local producers, ultimately fostering stable, long-term contracts. Producers gain insights into adapting their offerings to align with school meal requirements and seasonal variations, further motivating them to invest in the necessary infrastructure and capacity for fulfilling school contracts effectively.

### Facilitate Educational Experiences that Extend Beyond the Classroom

A strong partnership between LEAs and producers offers numerous educational advantages for students. These include opportunities for farm field trips, farmer visits to classrooms, and collaborations with agricultural educators. Such initiatives not only increase the demand for local food products and support the local food economy but also foster students' heightened sense of environmental stewardship as they learn about sustainable farming practices and the importance of responsible agriculture. In short, these experiences promote responsible consumption and environmental awareness. Additionally, deeper ties between LEAs and producers indirectly expose students to potential mentorships and career paths for students through valuable hands-on experiences.

### Expand Maryland Farm to School Beyond the Cafeteria

A mutually beneficial relationship between LEAs and producers deepens the commitment to F2S through exploration beyond the cafeteria. Establishing and maintaining gardens on school grounds allows students to actively engage in planting, tending, and harvesting crops, and tasting the produce. This hands-on involvement strengthens their connection to the food they consume and transforms outdoor classrooms into unique educational settings, bridging the gap between theory and practice. These activities extend the reach of Farm to School, reinforcing its core values, and inspiring students to actively experience sustainable food practices. A special opportunity exists for schools that choose to explore summer programming such as extended school year (ESY), campus, or those that offer year-long services to the community (as summer is when locally grown produce is most plentiful and in-season in Maryland).

### Public Producer Databases

Collaborative efforts are essential for building and maintaining public producer databases in Maryland. These databases are beneficial for both producers and LEAs. Currently, there are agricultural databases that assist buyers, including LEAs, in finding producers who have opted into these systems. For example, MDA has established Maryland's Best and Certified Local Farm databases to connect consumer markets with local farmers and their products. However, these databases do not provide a way for producers to express their interest in participating in the F2S program, or to self-identify as historically disadvantaged producers.

The pooling of financial and human resources is vital for sustained database development and management. Prioritizing user-friendly interfaces, data accuracy, filtering capabilities, and security measures enhances their utility for stakeholders.





## Recommendation 4: Identify and Secure Multifaceted Investment to Sustain Local Foods in School Meals

The current financial model for local food purchasing leaves little, if any, margin for investments in activities that will build capacity for increasing local foods in schools. While the USDA awards F2S grants, they are awarded through a separate fund that LEAs have the option of applying for and are not guaranteed year after year. Therefore, the USDA F2S grants cannot be regarded as a sustainable funding source over the long term unless they become codified so that all LEAs have the same, guaranteed access. Multifaceted and substantive investment is needed to ensure Maryland F2S sustainability. Investment can be through state, federal, and foundation grant funding, legislative appropriations, and public/private partnerships. Developing a strategic fundraising plan to resource local/regional distribution and aggregation efforts with the explicit goal of selling to institutional markets like LEAs will be essential to funding sustainability.

## CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

### Conduct an Inventory of Current Funding Mechanisms

The Maryland Department of Agriculture, the Maryland Department of Education, or the newly formed Coalition could be tasked with conducting an inventory of available funding mechanisms to support local farmers and various aspects of the local food system (e.g., aggregation, cold storage, season extension, etc.). Funding from philanthropic organizations or businesses could provide seed investment to facilitate small-scale pilot projects between LEAs and producers. Evaluation of resulting projects can provide evidence to replicate successful programs in other Maryland counties or other states, increasing demand and access to additional funding. Moreover, providing a database of existing grant-funded initiatives and projects can help align efforts and maximize resources between potential collaborators.

The *Grantsmanship Center* has available databases by state that could assist in this effort. Example funding sources include but are not limited to: the Certified Local Farm and Fish Enterprise Food Aggregation Grant Fund Program (Maryland Agricultural and Resource-Based Industry Development Corporation [MARBIDCO]), the Local Food Promotion Program (LFPP), and the Regional Food System Partnerships Program (RFSP) (which are part of USDA's Local Agriculture Market Program (LAMP)), Community Food Projects Competitive Grants Program (USDA), the Growing Justice Fund (foundation), the Keeping It Cool (for Montgomery and Prince George's Counties), Maryland Food and Agricultural Resiliency Mechanism Grant Program (MFARM), and others. The USDA Food and Nutrition Service offers F2S grants for which LEAs are eligible. Technical assistance provided by MSDE to complete the application and, if successful, comply with subsequent reporting requirements, which are both often expensive and resource intensive, could prove helpful to LEAs interested in utilizing this funding strategy.

### Establish an Incubator or Multifaceted Farm to School Grant Program

A farm to school grant funding mechanism would be managed by MSDE and MDA to fund new and expanded projects throughout the State. Grants would be awarded on a "funds-available" basis and cover multiple tracks for the various F2S stakeholder groups. The agency could weigh the grant scoring mechanism to prioritize the most vulnerable applicants. For example, more points could be awarded to priority schools with students from socially and economically disadvantaged areas. California has a similar funding mechanism (California Department of Food and Agriculture, 2022).

### Create Public Awareness Campaigns to Strengthen Support and Funding

Allocate resources for public awareness campaigns that promote the benefits of F2S programs within the community and among potential funders, including advocating for equitable pricing for locally grown foods. This allocation of resources will help the State twofold by strengthening the local economy while also supplying more local food to schools. These awareness campaigns would be in addition to the Harvest of the Month campaigns (which are primarily geared to school audiences). Campaigns would feature engaging content, have a strong social media and online presence, partner with local media, and extend to public events. The campaign would leverage testimonials and success stories, and would also engage students, parental associations, agricultural associations, farmers, school administrators, businesses, and local community leaders. It is recommended to have roles and a team dedicated to the management of these campaigns year-round, working collaboratively with LEAs, and being responsible for overseeing the campaign's planning and execution.





## Recommendation 5: Enhance Human Capacity Across all Facets of Maryland's Farm to School Program

LEAs have conveyed their challenges, citing constrained resources, which are exacerbated by the high volume and time-sensitive demands of their responsibilities throughout the school year. Increasing the presence of local foods in schools hinges on strengthening the workforce and enhancing capacity across every facet of the F2S process. Expanding careers within the food system linked to F2S initiatives is pivotal for fostering program growth, sustainability, workforce development, and economic growth within local and regional communities.

Farm to School programs stand to serve as catalysts for creating new job opportunities and income sources, potentially to address social inequities experienced by socially or historically disadvantaged groups, including reentering citizens, veterans, and individuals with varying physical abilities. By boosting capacity in food system careers, we ensure a larger, well-prepared workforce ready to meet the long-term demands of F2S programs.

### CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

#### Hire Dedicated Farm to School Personnel

An essential strategy for advancing F2S is increasing the allocation of dedicated staff positions and resources for statewide F2S activities. Funding for F2S administrators across the State is crucial for the long-term growth and sustainability of the program.

While Maryland currently has positions within the MDA and MSDE responsible for managing the F2S program, the program is not the sole focus of those positions. Having an administrator in each county would demonstrate a strong commitment to enhancing local foods in schools. While the allocation of resources to hire full-time staff for each county may not be feasible for immediate implementation, funding for one or more full-time positions under a dedicated department would significantly bolster F2S initiatives.

#### Build Capacity in Food Systems Employment and Careers

By investing in career pathways, staffing, and capacity-building in diverse areas across the Maryland F2S landscape, local economies benefit from increased employment and workforce diversity, including within LEAs and school procurement. Funding and providing training and resources makes expansion feasible. For example, Caroline County's LEA extended employment for cafeteria workers beyond the school year by hiring them during the summer and enhancing their kitchen skills by training them to process raw vegetables and fruit to subsequently freeze and store for use during the school year.

A diverse workforce enriches the food system, therefore, special considerations for underrepresented groups, reentering citizens, veterans, and differently-abled individuals should be intentional to ensure access to these career pathways. Identifying and investing in career paths with growth opportunities ensures a skilled and committed workforce to meet the long-term demands of F2S programs.



## Recommendation 6: Invest in Food System Infrastructure

A robust food system infrastructure is critical to increasing local foods in schools. Facilities and equipment needs span the areas of aggregation, transportation, storage, processing, and packaging. These infrastructure needs are especially influenced by the seasonality of Maryland agriculture, where certain foods are better aligned with the school year calendar. Additionally, only three percent of Maryland farmland is utilized for table crops, presenting a challenge in production capacity. The majority of table crops produced locally are ready to be harvested in the months between July and August when schools are closed for most students. Investment in hydroponics and funding support for season-extending facilities, cold storage, and processing are practical ways to ensure local foods when schools are in session.

### PROCESSING

Raw, whole, and unprocessed foods presents the lowest barrier to entry for local producers into the F2S market, however, not all school kitchens in Maryland are equipped to even minimally process (cut into the desired shape/size in preparation to cook/serve) and prepare such foods without significant investments in infrastructure for greater processing capacities. This includes kitchen and processing equipment and training for school kitchen staff. For example, most schools in public LEAs do not have “full scratch” cooking facilities. Instead, most are designed and equipped to heat and serve meals as quickly and efficiently as possible within a short time frame. To increase capacity for local foods, either LEAs or producers would need to invest in the equipment and human capital to process food and related training for safety and preparation.

Small-scale producers and lower-resourced schools have additional challenges. They typically rely on intermediaries or labor-intensive technical support offered through universities, extension offices, and similar non-profit options for processing support. Third-party technical support is often not sustainable given the time it takes to establish and maintain relationships with producers and fluctuations in the workforce that can be expected in any industry. The creation or adaptation of an electronic and semi-automated system is a more sustainable, wide-reaching approach that also offers self-help tools.

*In essence, creating a well-rounded statewide plan to manage local foods from seed to lunch tray in accordance with food safety guidelines, will make it more feasible for local small-scale farmers, fishers, and producers to plan for, process, and supply foods for school meals year-round.*

## CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

### Address School Infrastructure Challenges

Ensuring that we have proper facilities for food processing, packaging, labeling, and storage is a crucial challenge for our food systems. Addressing these issues is vital for bringing more local foods into school meals and complying with the Food Safety Modernization Act. Helpful steps to achieve this goal would be to:

1. Conducting an inventory of the current availability of processing/packaging/storage capacity of all LEAs will allow for strategic investments in these areas and contribute to Maryland's F2S sustainability efforts.
2. Buying mobile cold storage units and transportation for schools could be a way to address the lack of refrigeration and storage infrastructure at schools.
3. Establish regional processing facilities and contracts.

### Address Producer Infrastructure Challenges

Farmers require season-extending structures, such as row covers, greenhouses, and high tunnels, to grow crops beyond the normal outdoor growing season in Maryland. Small-scale to medium-sized producers also need large farm equipment to tend to large production sites to maximize crop yield and meet the volume demands of LEAs. Supporting these endeavors financially through grants or agricultural budget realignment would enhance the participation of small-scale farmers, especially those considered socially disadvantaged farmers.

### Establish New, Employ Existing Aggregation Systems

Increased utilization of aggregation systems within Maryland, such as food hubs, will involve assessing each region/LEA's readiness for small-scale sourcing. The USDA defines a *regional food hub* as a business or organization that actively manages the aggregation, processing, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand. Utilizing self-assessment tools like the "*Connected Markets: Just BIPOC Sourcing Foodservice Self-Assessment Tool*" can help to determine preparedness for utilizing hubs and for piloting aggregation initiatives.

Food hubs can offer local farmers suitable markets and decrease the overall production and financial risk while also supporting the specific cultural, socioeconomic, and environmental requirements of their respective regions (Gray et al., 2016). The utilization of food hubs can also provide LEAs with consistent availability of inventory, and a single point of purchase and also facilitate access to fulfillment, cold chain, and other logistical solutions. Examples of food hubs in Maryland include, *Garret Growers Cooperative* in Mt. Lake Park and *Chesapeake Farm to Table* in Sparks Glencoe, located in Baltimore County.

### Adopt an Electronic Database System

Implement an electronic data system that includes automated aggregation and a comprehensive statewide database of agricultural producers. This database will serve as a resource for facilitating aggregation efforts among multiple stakeholders, ultimately informing crop planning, and ensuring a more efficient and coordinated approach to local food procurement. This tool has the potential to streamline the growing and ordering process of local foods for schools, providing a user-friendly platform for producers to identify procurement needs, and for schools and LEAs to easily place orders while also enabling delivery coordination.



## Recommendation 7: Improve Local Food Procurement Process and Guidelines

Survey findings from both producers and LEAs illuminate the challenges of procuring and supplying local foods for student consumption. Notably, small-scale producers and their advocates express concerns about the complexity of eMaryland Marketplace Advantage (eMMA) and associated bidding procedures.

### CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

#### Simplify Local Food Procurement for Producers

Simplified procurement procedures are essential in facilitating the purchase of local foods. This involves minimizing paperwork and administrative obstacles by creating a user-friendly portal where producers can easily submit bids and proposals. Moreover, transparency is key. Providing clear guidelines, including timelines, eligibility criteria, and evaluation standards in lay terms, empowers producers with a comprehensive understanding of procurement expectations.

#### Procurement Training for Producers

Equipping producers with the necessary knowledge and skills is crucial. Training programs, workshops, webinars, and online tools can assist producers in effectively navigating the procurement system. Ongoing technical assistance, including dedicated support staff and hotlines, ensures that producers receive guidance when facing challenges. This technical support is particularly important in addressing the misconception among producers regarding GAP (Good Agricultural Practices) certification requirements, which may appear as barriers to entry for some agricultural producers interested in selling to schools. It is important to note that holding GAP certification is not always a requirement for selling to LEAs, as this depends on the total contracted amount and county guidelines. Interested producers can explore the availability of *free GAP training and free Certified Farmers' training for nutrition management in the State*.

## Menu Planning to Maximize the Use of Local Foods

*Menu planning* plays a pivotal role in informing the procurement process for both LEAs and local food producers. A well-designed menu that incorporates local foods strategically can simplify procurement planning. By collaborating closely with producers, LEAs can plan menus with seasonal availability and locality top of mind, reducing the complexity of sourcing local ingredients. In turn, farmers could use these menus for crop planning. Frederick County Public Schools (FCPS) demonstrated this practice by convening a team, which included the Farm to School Planning and Leadership Team, several local producers, and the FCPS Food and Nutrition Services Procurement Coordinator to determine specific fruit and vegetable options to source locally (FCPS, 2020). Furthermore, menu planning allows LEAs to explore the diversity of local products, customize offerings, and buy food to match local tastes and cultural preferences. For example, Caroline County's LEA utilizes blue catfish, which is an invasive species, and, therefore, a sustainable food source, especially in Maryland which has easy access to the Chesapeake Bay, the largest estuary in the U.S. A fish cake recipe is being developed by a local manufacturer. The fish, high in protein and healthy Omega-3 fatty acids, is a notable example of the multiple benefits of local foods, contributing to the health of students, the environment, and the local economy through increased production of value-add food items.

Maryland's Department of Agriculture produced a "*What is in Season?*" user-friendly graphical tool that can assist LEAs in planning or modifying school meal menus to maximize the use of seasonal foods. By integrating these principles into menu planning, schools can maximize the use of local foods and improve the overall procurement experience for all parties involved.

## Incentivizing the LEAs

Sourcing from multiple smaller-scale producers is a time-intensive process. To encourage LEAs and support their efforts, valuable incentives and rewards must be considered, and there are instances where the incentives should be tailored to the specific needs and circumstances of each LEA. Financial resources offered to LEAs to assist their meeting specific local food procurement targets and reducing or alleviating the additional costs associated with purchasing from smaller-scale local producers may encourage LEAs to procure more local foods. Offering longer-term contracts to local producers can provide stability and assurance, making sourcing easier for LEAs. Developing resources and tools to aid LEAs in sourcing from multiple local producers through aggregation may further encourage LEAs.

Recognition should also play a role in incentivizing local food procurement, with public acknowledgment going to LEAs excelling in local procurement efforts through awards, certifications, or publicity.

## Create Beneficial Pricing Guidelines for Both Local Producers and LEAs

Ensure that pricing guidelines provide fair compensation to local producers. Consider factors such as production methods, sustainability practices, and the quality of products when determining fair prices. Regularly review and adjust pricing guidelines to account for changes in production costs, market conditions, and other relevant factors. This ongoing evaluation ensures that pricing agreements remain fair and competitive.

By implementing these strategies, the procurement process becomes more producer-friendly and enticing, increasing the likelihood that producers will participate in providing local foods to schools. This benefits both producers and schools by fostering local economic development and providing healthier food options for students.



## Recommendation 8: Develop Equitable Support for Historically Disadvantaged Producers and Partners

Given historic, generational disinvestment and discriminatory policies, historically disadvantaged producers face far more barriers and challenges to accessing and participating in the F2S market. From limited land to limited capital, they may not have the ability to produce, aggregate, and distribute at the volume required by mid-to-large LEAs. They also may face barriers in navigating procurement systems and may not be able to compete with the pricing of larger suppliers (e.g., USDA DoD Fresh, large-acre farms). Engaging Black and Brown small-scale producers will require additional support and prioritization.

### CONSIDERATIONS FOR RECOMMENDATION IMPLEMENTATION

#### Assess Readiness and Develop a Strategy for Implementing Small-Scale Sourcing Pilot Activities

Each LEA will have unique considerations, assets, and challenges related to engaging historically disadvantaged small-scale producers, so it is important to begin with an assessment to inform strategic planning and implementation around pilot small-scale sourcing activities. In each region/LEA, assess readiness for small-scale sourcing pilot activities using a self-assessment tool such as the *Connected Markets: Just BIPOC Sourcing Foodservice Self-Assessment Tool*. LEAs may need to scale back their goals when sourcing from historically disadvantaged producers. For example, instead of trying to source the entirety of an LEA's mealtime produce needs from small-scale, historically disadvantaged producers, LEAs may consider sourcing herbs from an aggregating group of farmers. Another potential approach to take may be to maximize sourcing from small-scale, historically disadvantaged producers through micro-purchasing, or through other mechanisms like purchasing of local food for tastings/demonstrations as part of classroom lessons.

#### Improve Producer Readiness to Sell to LEAs

Strategies to increase locally sourced foods in schools will likely include building partnerships with historically disadvantaged non-profit or local organizations that regularly provide support to small-scale, historically disadvantaged food producers. MSDE and MDA can support this process by actively seeking historically disadvantaged producers and partners through press releases, calls for proposals, marketing, and community-engagement activities (e.g., farm visits and recruiting at farmer markets). Creating and promoting simplified grant-funded opportunities that improve producers' readiness to sell to LEAs or schools through micro-purchasing is another viable approach.

#### Advocate and Support Initiatives to Address Structural Barriers

Beyond short-term temporary solutions, a confluence of structural barriers must be addressed in order for historically disadvantaged producers to be able to participate fully in F2S activities. Below are several initiatives and strategic approaches that Maryland's F2S stakeholders might consider to improve equity, particularly as the next Farm Bill is considered and implemented.

##### a) Financial Support Programs

Financial support programs are essential for ensuring equitable access to the agricultural sector. Specifically, Maryland can establish grant programs tailored to historically disadvantaged producers. These grants can serve as vital financial support for infrastructure enhancements, equipment acquisition, and sustainable farming practices. Additionally, low-interest loans with flexible repayment terms can stimulate the expansion and development of farming operations led by disadvantaged producers, reducing financial barriers. Furthermore, the development of more inclusive crop insurance policies, tailored to the unique challenges faced by these producers, can help reduce financial risks.



## **b) Technical Assistance and Training**

For technical assistance and training, Maryland can prioritize creating accessible and culturally sensitive education and training programs, workshops, and seminars. These initiatives would equip disadvantaged producers with the knowledge and skills necessary to thrive in modern agriculture. Facilitating mentorship programs that pair experienced farmers with novice disadvantaged farmers would help navigate challenges and foster sustainable practices. Supporting the adoption of modern farming technologies through subsidies or training can also enhance productivity and competitiveness.

## **c) Market Access and Promotion**

To improve market access and promotion, Maryland can consider offering market access grants to disadvantaged producers to attend trade shows, farmers' markets, and agricultural events, enabling them to promote their products and build valuable networks. Encouraging the formation of cooperatives would allow disadvantaged producers to pool resources and collectively market their products. Providing support for branding and marketing, including label design, product packaging, and online presence, would assist disadvantaged producers in reaching a wider customer base.

## **d) Infrastructure Investment**

Infrastructure investment is crucial. Maryland can invest in rural infrastructure by improving roads, bridges, and utilities, making it easier for disadvantaged producers to transport their products and access essential services. Developing food hubs or aggregation centers that provide storage, processing, and distribution facilities for small-scale producers can reduce logistical challenges.

## **e) Equity in Land Access**

To address equity in land access, Maryland can allocate land grants or affordable lease options for disadvantaged producers, facilitating the expansion of their farming operations and the creation of a more sustainable livelihood. Establishing land trusts that secure agricultural land for disadvantaged producers and protect it from speculative development is another valuable approach.

## **f) Environmental Sustainability**

Promoting environmental sustainability is essential. Maryland can encourage and support disadvantaged producers in adopting sustainable farming practices, not only to improve their long-term viability but also to contribute to environmental conservation.

## **g) Data Collection and Monitoring**

Data collection and monitoring are critical for measuring progress. Maryland can ensure accurate data collection to monitor the progress and challenges faced by socially and historically disadvantaged producers. Implementing periodic assessments can help evaluate the effectiveness of programs and policies aimed at supporting these producers.

## **h) Legislation and Policy Reform**

Finally, legislation and policy reform are vital for ensuring equity. Maryland can enforce and strengthen anti-discrimination policies to ensure the fair treatment of disadvantaged producers in the agricultural sector.

These comprehensive initiatives and strategic approaches collectively address structural barriers and work towards achieving equity in F2S the state.



## Limitations of the Roadmap to Farm to School Sustainability in Maryland

Through the assessment of Maryland's F2S program and the development of a sustainability plan, several key limitations are transparent. Constraints that may directly or indirectly impact the proposed recommendations and the outcomes of implementation:

**Stakeholder Participation:** Not all stakeholders could participate in interviews or focus groups due to various constraints, potentially compromising the comprehensiveness of the plan's insights. Additionally, limited resources hindered the ability to compensate agricultural producers for their time and participation in interviews or focus groups, which may have affected the representation of their perspectives, particularly during convenings that coincided with the growing season.

**Ongoing Adaptation:** Ensuring the plan's effectiveness and impact will necessitate continuous monitoring, evaluation, and adaptation to align with evolving needs, emerging trends, and contextual realities. This ongoing effort is essential to ensure that the program remains responsive and effective over the five to ten-year implementation period and beyond.

By recognizing and proactively addressing these limitations, Maryland's F2S program can better prepare for potential challenges and work toward sustainable, long-term success in promoting healthy eating habits, supporting local farmers, and advancing environmental stewardship.

## Conclusion

In conclusion, *A Roadmap to Farm to School Sustainability in Maryland* was developed through a collaborative effort involving key stakeholders in Maryland. The primary groups of stakeholders, including Local Education Agencies (LEAs), local farmers/producers, community/non-profit stakeholders, the Maryland Department of Agriculture (MDA), the Maryland State Department of Education (MSDE), and government officials, provided valuable input and expertise throughout the 18-month project period.

The research and assessment findings, which involved surveys, focus groups, interviews, and participatory observation, shed light on the current state of Farm to School (F2S) in Maryland and identified challenges and opportunities for sustainability. The surveys conducted with producers and LEAs revealed valuable insights into their capacity to participate in F2S initiatives, their interest in selling and purchasing locally sourced products, and the challenges they face in terms of logistics and processing.

The proposed Roadmap provides a comprehensive framework for addressing identified challenges and advancing the integration of local foods into school meals within the Maryland program. This framework outlines recommendations, key objectives, and strategies to promote sustainability. They take into account factors such as the seasonal nature of farming and fishing, barriers faced by small-scale producers, and the necessity of enhancing processing, packaging, and storage capabilities for local foods. Additionally, they address challenges like defining “local,” acquiring and allocating resources, and recognizing the unique circumstances of each LEA.

The Roadmap’s impact on F2S sustainability in Maryland will hinge on the injection of resources, ongoing adaptation, continuous monitoring, and consistent progress evaluation. By implementing this Roadmap, stakeholders can collectively strengthen Maryland F2S, resulting in increased local food utilization in school meals. This, in turn, will contribute to a more resilient and vibrant local food system, benefiting students, farmers, and the entire community. Prioritizing F2S can expand educational opportunities, bolster regional economic resilience, promote environmental stewardship, and address racial and social inequities.

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# Appendices

## Appendix A: Producer Survey

### Maryland Producer Survey

1. Are you Black, Indigenous, and/or people of color (BIPOC) farming?
  - a) No
  - b) Yes
  - c) Prefer not to answer
2. Are you a woman-owned farming enterprise?
  - a) Yes
  - b) No
  - c) Prefer not to answer
3. Are you a veteran-owned farming enterprise?
  - a) No
  - b) Yes
  - c) Prefer not to answer
4. What is your public business website? Include exact URL.
5. Do you have a method for online sales?
  - a) Yes
  - b) No
6. What is the name of online sales method?
7. What is the URL for your online sales?
8. What farm type is your business according to USDA guidelines based on gross cash farm income (GCFI)
  - a) Small Family Farm (GCFI less than \$350,000)
  - b) Large-scale Family Farm (GCFI of \$1,000,000 or more)
  - c) Mid-size Family Farm (GCFI between \$350,000 and \$999,999)
  - d) Unsure/Non-Family Farm (Any farm where the producers and persons related to the producer do not own a majority of the business)
  - e) Unsure
9. What products do you produce?
10. Do you sell directly to a distributor?
  - a) Yes
  - b) No
11. Which distributor(s) do you sell directly to?
12. Why do you not sell directly to a distributor?
  - a) Unsure of how to
  - b) Not an opportunity yet
  - c) Prefer consumer direct sales
  - d) Open-ended
13. Do you sell directly to schools?
  - a) Yes
  - b) No

14. Which schools do you sell to?
15. Why do you not sell directly to schools?
16. Are you interested in selling directly to schools?
  - a) Yes
  - b) No
17. Why are you not interested in selling to schools?
18. Who do you currently sell your products directly to? Check all that apply.
  - a) Restaurants
  - b) Bars
  - c) Distributors
  - d) Farm stand
  - e) Grocers
  - f) Other farmers/producers
  - g) Directly to public
  - h) Other hospitality establishment
19. What food safety certifications/programs does your farm have? Check all that apply.
  - a) USDA Inspection (Beef, Pork, Lamb, Goat, Poultry)
  - b) MDA GAP Certification
  - c) Organic Certification
  - d) Maryland Egg Quality Assurance
  - e) USDA Harmonized GAP Plus (GFSI)
  - f) USDA GAP/GHP Certification
  - g) Other
  - h) None
20. To which extent are you able to process your products? Check all that apply.
  - a) Raw/unprocessed
  - b) Raw/unprocessed, Lightly processed produce (peeled, chopped, pitted, etc.)
  - c) Raw/unprocessed, Value-added (Pre-cooked or frozen)
  - d) Value-added (Pre-cooked or frozen)
21. To which extent are you able to distribute to schools?
  - a) Third-party distributor
  - b) Ability to deliver to multiple schools
  - c) Cannot distribute
22. Are you interested in partnering with schools to provide farm tours (students come to you) or farmer school visits (you go to school)?
  - a) Yes
  - b) no
23. Tell us anything else you think we should know.

## Appendix B: LEA Survey

## Maryland LEA Survey

1. What percentage of your total food costs are spent on purchasing local foods?
2. Do you purchase local foods directly from producers?
  - a) Yes
  - b) No
3. What producers do you purchase directly from?
4. What local food items do you purchase directly through a producer?
  - a) Produce (Fruits, Vegetables)
  - b) Baked goods (Muffins, Donuts)
  - c) Protein Foods (Meat, Poultry, Eggs)
  - d) Dairy (Milk, Cheese)
  - e) Bottled beverages
  - f) Grains (Bread, Rolls)
5. What Food Safety programs do you require from local producers (please check all that apply):
  - a) MDA GAP Certification
  - b) USDA Inspection (Beef, Pork, Lamb, Goat, Poultry)
  - c) USDA GAP/GHP Certification
  - d) None
6. Why do you not purchase directly from producers?
7. Do you buy local produce through a distributor?
  - a) Yes
  - b) No
8. What is the name(s) of your distributor(s)?
9. What local foods do you purchase through a distributor?
10. Are you interested in micro purchases directly from local producers for discrete events (i.e., taste testing, Homegrown School Lunch Week [HSLW])?
  - a) Yes
  - b) No
11. I prefer to buy local produce through (check all that apply):
  - a) Directly from farmers
  - b) USDA DoD Fresh
  - c) Distributors
  - d) We cannot purchase for all schools without exceeding procurement thresholds
  - e) Not sure about the farms - maybe
  - f) Grocery Stores
  - g) Our food comes pre-packaged
  - h) Farm Co-ops
12. What are the procurement thresholds in your county for formal/large procurements?
13. What are the procurement thresholds in your county for informal/small procurements?
14. What are the procurement thresholds in your county for micro-purchasing?

15. What items might you be interested in buying from local producers?
  - a) Fruits & Veggies
  - b) Meat/Fish
  - c) Baked goods
  - d) Anything/Products in season
  - e) Juices
  - f) Milk
  - g) Unknown
  - h) Nothing
16. For items listed above, what is the minimum volume you need of this item in order to purchase consistently from a local producer? Be sure to consider purchases for niche programs (e.g., salad bars). Please list volume and frequency (e.g., ten cases per week).
17. Each school system has its own distribution system. How do you receive local food products served in school meals?
  - a) Distribution
  - b) Central warehouse
  - c) Hub and spoke model
  - d) Delivered to each school
  - e) All of the above based on warehouse capacity
18. Do you have enough cold storage for local products?
  - a) Yes
  - b) No
  - c) Open-ended
19. What types of local products are you able to purchase? (check all that apply):
  - a) Raw/unprocessed
  - b) Lightly processed produce (chopped, pitted, etc.)
  - c) Value added (pre-cooked/frozen)
  - d) Processed meats
20. Describe your LEA's maximum ability to process local products. Keep in mind labor and equipment limitations.
  - a) Fully capable
  - b) Somewhat capable
  - c) Depends on the item
  - d) Limited/minimal
  - e) None
  - f) Do not know
21. How do you define "local" in your purchasing?
  - a) Within a specific distance
  - b) Within Maryland
  - c) Regional (MD, VA, PA, DE)
  - d) Within County
22. Enter the distance (in miles) in which you define as "local" in your purchasing.
  - a) 100 miles
  - b) Within 200 miles
  - c) Within 300 miles
  - d) Open-ended
  - e) Do not Know
23. What is your greatest challenge in adding local foods to your menu? Answer this question keeping in mind the years 2015-2019 local purchasing practices at your LEA.
24. What is the greatest challenge in purchasing local foods during the pandemic?
  - a) Cost
  - b) Availability of transportation and staffing
  - c) Limited supply of items
  - d) Open-ended
  - e) Unknown
25. Tell us anything else you think we should know regarding local foods purchasing for school meals.

**Appendix C: Focus Group/Interview Questions****Focus Group and Interview Questions**

1. What is your role and expertise in the procurement of food for schools?
2. Prior to your current role, did you have prior knowledge/experience with Farm to School (F2S) or fresh farm foods in schools?
3. In your opinion, what are some of the positive aspects of F2S?  
(think from your personal perspective and systematically)
4. In your opinion, what are the challenges facing F2S?
5. Follow-up prompts
6. If you had the power of a magic wand and could make any wish come true related to Farm to School (F2S) initiatives, what would your wish(es) be?
7. Is there someone else you think we should speak to?



## Appendix D: Acronym Glossary

## Acronym Glossary

<b>ACRONYM</b>	<b>NAME</b>
CNP	Child Nutrition Programs
F2S	Farm to School Program F2S
FNS	Food and Nutrition Service
GAP	Good Agricultural Practices
LEA	Local Education Agency
LFPP	Local Food Promotion Program
MARBIDCO	Maryland Agricultural and Resource-Based Industry Development Corporation
MDA	Maryland Department of Agriculture
MSDE	The Maryland State Department of Education
NCRS	Natural Resources Conservation Service
NSLP	National School Lunch Program
OSCNP	Office of School and Community Nutrition Programs
RFSP	Regional Food System Partnerships Program
SNAP-Ed	Supplemental Nutrition Assistance Program Education
USDA	US Department of Agriculture





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