

Master of Public Health
Integrative Learning Experience Report

***ESTABLISHING A BASELINE OF LOCAL & REGIONAL
PRODUCE SOURCING EFFORTS AMONG NATIONAL
NUTRITION INCENTIVE PRACTITIONERS***

by

KOLIA M. SOUZA

MPH Candidate

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

Graduate Committee:

Dr. Mary McElroy
Dr. Elaine Johannes
Dr. Sandy Procter

Public Health Agency Site:

Nutrition Incentive Program National Training,
Technical Assistance, Evaluation and Information Center
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Site Preceptor:

Amy Lazarus Yaroach, Ph.D.

KANSAS STATE UNIVERSITY
Manhattan, Kansas

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Summary/Abstract

Obesity in the United States has risen consistently since the 1970s, surpassing a 40 percent national obesity rate and increasing risk for excess morbidity and mortality, depression, pregnancy complications, and a range of chronic diet-related disease. Poor dietary intake is a major contributor to obesity and chronic health conditions. While fruit and vegetable intake significantly reduce the risk for obesity and other chronic health conditions, approximately 90 percent of U.S. adults do not consume the daily recommended servings of fruits and vegetables. This research study sought to establish a baseline for local and regional sourcing of fruits and vegetables in grocery retail through the Gus Schumacher Nutrition Incentive Program, or GusNIP, a federal subsidy providing Supplemental Nutrition Assistance Program (SNAP) participants incentives at the point of purchase. A series of semi-structured interviews were conducted among nutrition incentive grantees and practitioners through the Nutrition Incentive Hub, the technical assistance arm of the Nutrition Incentive Program National Training, Technical Assistance, Evaluation and Information Center (NTAE). Interviewees were selected from the 2019-20 Nutrition Incentive Hub annual technical assistance survey, and nine topics were included in thematic content analysis of fruit and vegetable supply chain development in the context of GusNIP: [1] definition of local, [2] motivations for sourcing locally, [3] steps taken to establish the local and regional sourcing program, [4] how the local and regional sourcing program is currently administered, [5] metrics used for the local and regional sourcing program, [6] supports for local and regional sourcing, [7] barriers to local and regional sourcing, [8] current local and regional sourcing needs, and [9] future plans/next steps. Three overarching themes emerged – relationships and partnerships, local foods economic development, and program capacity building and scalability. Although practitioner gaps in supply chain knowledge and macro-level barriers to local food sourcing inhibit program viability, context-specific supports help mitigate these challenges, in particular strategic partnerships for local and regional food system development. Future research should seek to better understand the interdependent relationship between these drivers and inhibitors in order to provide tailored technical assistance and capacity building to nutrition incentive grantees and practitioners.

Subject Keywords: nutrition incentives, SNAP incentives, healthy food access, food supply chain, food system

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Chapter 1 - Literature Review

Obesity in the United States has risen consistently since the 1970s (Warren, Beck, & Delgado, 2020). For the first time, the U.S. has surpassed a 40 percent obesity rate, increasing risk for excess morbidity and mortality, depression, pregnancy complications, and a range of chronic diet-related disease (Carson, 2015; Myers et al., 2017; Sterling, 2018; Warren, Beck, & Delgado). Poor dietary intake is a major contributor to obesity and chronic health conditions (James, 2004; Sterling et al., 2018). However, increased fruit and vegetable intake significantly reduces the risk for obesity and other chronic health conditions.

Approximately 90 percent of U.S. adults do not consume the daily recommended servings of fruits and vegetables (Byker Shanks et al., 2022; Lee-Kwan et al., 2017). It is furthermore acknowledged that low-income and racial-ethnic minority populations experience systemic challenges that result in low fruit and vegetable intake, including access to affordable produce (Byker Shanks et al., 2022; Gearing et al., 2021; Hales et al., 2017; Hill-Briggs et al., 2021; Hoy et al., 2020). The USDA National Institute of Food and Agriculture (NIFA) provides federal funding to subsidize fruit and vegetable purchase through the Gus Schumacher Nutrition Incentive Program (GusNIP), a product of 2018 Farm Bill funding. Formerly established as the Food Insecurity and Nutrition Incentive (FINI) program by the 2014 Farm Bill, GusNIP provides Supplemental Nutrition Assistance Program (SNAP) participants incentives at the point of purchase (Byker Shanks et al., 2022; USDA NIFA, n.d.).

Since most consumers purchase their fruits and vegetables from grocery stores, nutrition incentive programs like GusNIP present an opportunity to create broad impacts by partnering with brick-and-mortar retailers, such as grocery stores. Grocery retailers interact with complex supply chains that determine how fruits and vegetables travel from the farm to store. The local food supply chain is a complex system of inputs, outputs, processes, and actors that determine how food moves from farm to fork. The supply chain is most recognizable in the outputs of growing, raising, and processing food for consumption. However, at every stage of the supply chain, there are processes taking place among several actors to convert inputs to outputs and make them broadly accessible, including transporting food products to aggregation sites and retail venues such as distribution centers and convenience stores as well as purchasing, preparing, and cooking food products for people to eat (Dankbar, 2021). Understanding what the food supply chain is and where there are opportunities to influence it can increase the chance for nutrition incentive program success. Table 1.1 illustrates some of the factors that influence where and how linkages are made across the agricultural food supply chain.

Table 1.1 Identifying agricultural supply chain inputs, processes, outputs, actors.
Adapted from C. Hawkes (2009). Identifying innovative interventions to promote healthy eating using consumption-oriented food supply chain analysis.

Stages		Inputs	Processes	Outputs	Actors
Agricultural production	Food safety/Chain of custody or traceability	Seed, fertilizers, amendments, water, pesticides, equipment, packing shed and/or storage, food safety audits/ certification	Growing, pest/weed management, irrigation, harvesting, post-harvest handling	Commodity and specialty crops	Farmers, agricultural laborers, cooperative extension, suppliers, equipment manufacturers
Processing/ packaging		Warehouse, equipment, technology, packing supplies	Cleaning, grading, storage, value-added, labeling, cold chain management	Market-ready products and lightly processed foods	Processors, packers, graders, millers, crushers, refiners, suppliers
Aggregation/ distribution		Transport vehicles, warehouse, equipment, technology (e.g., point of sale and inventory systems)	Refrigeration and cold-chain, storage, tracking, contracting	Food product, product orders and sales, logistics	Importers, exporters, brokers, wholesalers, transporters
Retail/purchase		Buildings, cold and dry storage, refrigeration, display units, technology (e.g., point of sale and inventory systems)	Inventory management, receiving, merchandising, marketing, sales tracking	Retail food sales	Individual consumers, grocery and corner stores, institutions, restaurants
Preparation/ consumption		Equipment, culinary tools, kitchens and cafeterias	Food product preparation, cooking, food service	Prepared or packaged meals, home cooked meals	Consumers, food service professionals, institutional staff, restaurants, food service companies
Waste recovery/ disposal		Landfill, pulper, incinerator, digester	Energy conversion, composting	Food waste, methane emissions, energy	Waste management, recycling and energy sector

Project Site

In fiscal year 2019, GusNIP awarded \$41 million including \$8.5 million or \$31.5 million total over four years toward the creation of the GusNIP Training, Technical Assistance, Evaluation and Information Center (NTAE). Gretchen Swanson Center for Nutrition serves as the lead evaluator for the NTAE, and Fair Food Network leads the Nutrition Incentive Hub, the training and technical assistance arm of the NTAE. The NTAE is comprised of a coalition of partners including the University of California San Francisco, Cincinnati Children's Hospital Medical Center, and an array of evaluators. The Nutrition Incentive Hub is comprised of coalition partners specializing in technical assistance services such as Farm Direct; Grocery Retail; Produce Prescription; Diversity, Equity, and Inclusion; Local Sourcing; Partnership Development; Corner Stores; and Nutrition Education. Partners include Farmers Market Coalition, Michigan Farmers Market Association, Ecology Center, National Grocers Association

Foundation (NGAF), DAISA Enterprises LLC, Michigan State University (MSU) Center for Regional Food Systems (CRFS), and The Food Trust. Figure 1.1 illustrates these GusNIP NTAE partnerships.



Figure 1.1 NTAE organizational structure

Preceptor Background

Amy Lazarus Yaroch, Ph.D. served as the preceptor for the Applied Practical Experience and is the NTAE Project Director. As Executive Director of the Gretchen Swanson Center for Nutrition, Dr. Yaroch specializes in dietary assessment, including development and validation of measures; obesity prevention design and implementation of interventions and evaluation, especially in youth; food insecurity and investigating the coexistence with obesity and related

factors; process and outcome evaluation in public health nutrition, including evaluation of technical assistance; and strategic planning to help private foundations establish metrics for their grantees. She received her Ph.D. with a specialization in Behavioral Sciences and Health Education (Community Preventive Health) from the Department of Nutrition and Health Sciences at Emory University. Dr. Yaroach also holds a Special Dean's Appointment as Adjunct Professor with the Department of Health Promotion, Social and Behavioral Health with the University of Nebraska Medical Center as well as an Adjunct Professor role with the Department of Nutrition and Health Sciences with the University of Nebraska-Lincoln.

Brief Project Description

This exploratory project focused on Nutrition Incentive Hub Objective #3 to benchmark, standardize, and improve local and regional produce sourcing in brick-and-mortar, or grocery, retail. More specifically, local and regional sourcing efforts among nutrition incentive grantees and practitioners were identified to develop a baseline understanding of factors relevant to the grocery retail environment and supply chain. In collaboration with MSU CRFS and NGAF staff, a total of 37 interviews were conducted among nutrition incentive grantees and practitioners to identify themes, patterns, and gaps among local and regional sourcing programs to inform the development of a suite of training and publication deliverables in addition to Local and Regional Sourcing in Grocery community of practice topics.

Chapter 2 - Learning Objectives and Project Description

As the Food Systems Equity & Advocacy Specialist with Michigan State University (MSU) Center for Regional Food Systems (CRFS) and our Center's principal investigator for the Gus Schumacher Nutrition Incentive Program (GusNIP) subcontract, I provide technical assistance to nutrition incentive grantees and practitioners as well as develop relevant tools and resources (i.e., publications, webinars) and facilitate communities of practice through the Nutrition Incentive Hub. I also attend internal subcommittee meetings, co-leading the Diversity, Equity, and Inclusion subcommittee, and have assisted in planning for and moderating panels at the annual national convening.

Learning Objectives

The learning objectives for the Applied Practical Experience (APE) were to further cultivate applied research skills; develop evidence-based solutions; identify appropriate channels to deliver evidence-based solutions; and further cultivate technical reporting skills. Project activities included developing a grantee and practitioner semi-structured interview guide and interview protocol; conducting recorded grantee and practitioner interviews as well as drafting notes; developing a data analysis plan; analyzing data for emergent themes, including the development of a codebook; and interpreting data for reporting and resource development. Products include a written report for Nutrition Incentive Program National Training, Technical Assistance, Evaluation and Information Center (NTAE) and Nutrition Incentive Hub leadership and a framework for establishing local and regional sourcing programs that are currently in process; a partnership development tool in edit; a pilot webinar-based training series; and process updates delivered via the Local and Regional Sourcing in Grocery community of practice.

Project Description

This exploratory project focused on local and regional sourcing efforts among nutrition incentive grantees and practitioners to develop a baseline understanding of factors relevant to the grocery retail environment and supply chain. As the GusNIP principal investigator for MSU CRFS, I took on the lead project coordination role. In July 2020, Nutrition Incentive Hub leadership from the Fair Food Network, MSU CRFS local and regional sourcing project staff, and National Grocers Association Foundation (NGAF) staff met to clarify and discuss Nutrition Incentive Hub Objective #3 to benchmark, standardize, and improve local and regional produce

sourcing in brick-and-mortar retail. Fair Food Network also shared their goal to develop a roadmap to increase local and regional sourcing by five percent over four years among all participating grocers exceeding 10 percent of overall produce sourcing during the growing season. During this initial meeting, several challenges in local and regional sourcing in grocery were identified:

- Food retail distribution systems, which are also an issue in farmers markets
- How retailers account for local product in back-end processes
- Difficulty among grantees to track local produce properly
- Reporting burdens placed on grantees to track local procurement
- Developing local and regional food markets, which is also an issue in farmers markets
- Seasonality for local food growing, which affects product quality and introduces the need for effective marketing

Data Collection Methods

Between August and November of 2020, MSU CRFS project staff Noel Bielaczyc – Value Chain Specialist, Colleen Matts – Farm to Institution Director, and Chelsea Matzen – NGAF Project Director continued to meet monthly to develop a process that would systematically identify drivers and inhibitors for local sourcing in grocery retail among nutrition incentive grantees and practitioners. Additional challenges specific to Nutrition Incentive Hub Objective #3 were discussed during the August meeting, including understanding how “local” is defined and measured and the impact of standardization in local and regional sourcing given seasonality and geography. It was also acknowledged that although vendors may want to sell local, it is critical to identify useful metrics that do not increase the reporting burden. Following an exploratory protocol similar to that followed by the National Farm to Institution Metrics Collaborative, MSU CRFS and NGAF staff developed a plan to:

- Coordinate efforts across the Nutrition Incentive Hub to aggregate grantee data collected on local and regional sourcing.
- Develop a questionnaire to establish a baseline understanding of local and regional sourcing program administration among nutrition incentive grantees and practitioners including barriers and support in addition to organizational development goals.
- Determine a process for aggregating and analyzing interview data for patterns, trends, and gaps.

- Identify and contact grantees and practitioners to participate in semi-structured interviews based on select criteria.
- Share process updates and ground-truth data with nutrition incentive grantees and practitioners participating in the Local and Regional Sourcing in Grocery community of practice.

Process updates would also inform the development of a pilot webinar-based training series and corresponding tool. Upon completion of the interview and data analysis process, a report providing an overview of the state of local and regional sourcing in grocery among nutrition incentive grantees and practitioners would be published as a Nutrition Incentive Hub deliverable in addition to a framework for establishing a local sourcing program. Appendix 1 illustrates the project timeline.

In addition to collecting basic information such as interviewee name, role, time in role, and information about the organization, the 12-question interview guide was developed to inquire about the organization's definition of local, motivations for sourcing locally, steps taken to establish the local and regional sourcing program, how the local and regional sourcing program is currently administered as well as any metrics used, supports for and barriers to local and regional sourcing, organizational development goals and needs, current local and regional sourcing needs, as well as any other comments. Interviews were to be conducted virtually via Zoom, approximately 45- to 60-minutes in length and recorded; interviewees were read an interview protocol outlining the purpose of the interview, explaining that confidentiality would be maintained, and asking for permission before beginning the recording. Interviews were to be conducted by one interviewer and notes taken for each question by a silent interview partner, though this partner was allowed to ask for clarification or expound on interview questions as needed. The email invitation and interview protocol and guide are included as Appendix 2 and Appendix 3, respectively.

Interview Selection

To identify a pool of potential interviewees, Chelsea Matzen, Rachel Kelly – MSU CRFS Program Coordinator, and I utilized results of the Nutrition Incentive Hub annual technical assistance survey administered in October 2020 among 2019-20 nutrition incentive grantees and practitioners. Survey results were made available in January 2021 and interviewee selection began the same month. Selection criteria included brick-and-mortar local sourcing currently taking place or pending. A total of 34 organizations were identified as sourcing locally

in brick-and-mortar locations and four organizations were pending for a total of 38 potential interviewees.

Outreach to potential interviewees was prioritized by cross-referencing Technical Assistance Topics and Other Technical Assistance Topics with Retail Site Type and organizational context (survey items labeled as Narrative Blurb and Local Sourcing Explained) producing a primary and secondary set of interviewees. A total of 38 interviewees were contacted between January and April 2021 and a total of 37 interviews were conducted through May 2021. Of these interviews, three organizations' brick-and-mortar expansion were pending, two organizations administered produce prescription programs with a brick-and-mortar location, one was conducted with a co-op grocer, another was conducted in cooperation with a grocer partner, and yet another was conducted in cooperation with a food hub partner.

Data Analysis

The multi-step interview analysis process began in June 2021 and concluded January 2022. The three-person research project team each analyzed individual interview notes question-by-question for emergent themes and corresponding definitions developed, recording responses in separate Excel spreadsheets. Although transcripts were available for each interview, these were only used as a reference point for clarification due to lack of capacity among the interview team to analyze them. After completing each question and reviewing one another's analyses, the team met to discuss, come to a consensus about, and refine emergent themes and definitions. When there was not enough time to complete definitions during the meeting, a team member would refine the definitions between meetings and those definitions were reviewed and discussed at the following meeting. Once all themes and their respective definitions were refined, another set of team spreadsheets were created and interviews re-analyzed to refined codes. Upon completion, the team spreadsheets were combined into a single spreadsheet to come to a coding consensus:

- **High Agreement** where all three team members selected the code/theme
- **Moderate Agreement** where two of three team members selected the code/theme
- **No Agreement** where one of three team members selected the code/theme and, as such, the code is not included

As a final step in the data analysis process, a master coding spreadsheet was created indicating high and moderate agreement among the themes. Each theme was then tallied to offer a proxy for relevance within the category.

Chapter 3 - Results

The 37 local and regional sourcing interviews conducted among nutrition incentive grantees and practitioners produced nine topics for thematic content analysis in terms of fruit and vegetable supply chain development in the context of the Gus Schumacher Nutrition Incentive Program (GusNIP): [1] definition of local, [2] motivations for sourcing locally, [3] steps taken to establish the local and regional sourcing program, [4] how the local and regional sourcing program is currently administered, [5] metrics used for the local and regional sourcing program, [6] supports for local and regional sourcing, [7] barriers to local and regional sourcing, [8] current local and regional sourcing needs, and [9] future plans/next steps. The following outlines emergent themes for each topic area and thematic frequencies. For definitions of each theme, refer to Appendices 4 through 12.

Emergent Interview Themes and Frequency

Definition of Local

The question of defining local sought to identify themes and indicate whether definitions were flexible or inflexible and whether any mileage was indicated by the interviewee response. A total of six themes were produced. Table 3.1 below indicates the frequency of responses.

Table 3.1 Local sourcing definition themes and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Flexible	18	13.8%	8	44.4%
Mileage indicated	14	10.8%	5	35.7%
No definition	15	11.5%	8	53.3%
Point of origin	18	13.8%	5	27.8%
State only	18	13.8%	6	33.3%
State + Bordering states	22	16.9%	6	27.3%
Stakeholder influenced	17	13.1%	3	17.6%
Contextual	8	6.2%	3	37.5%
TOTAL RESPONSES	130	99.9%	44	-

Motivations for Sourcing Locally

The question of motivations for sourcing locally sought to identify themes relevant to the organizational decision to emphasize local sourcing in its program. A total of 13 themes were produced. Table 3.2 below indicates the frequency of responses.

Table 3.2 Motivations for sourcing locally themes and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Political	4	3.8%	3	75%
Predetermined local sourcing requirement	2	1.9%	2	100%
Mission alignment	7	6.6%	4	57.1%
Cultural values	4	3.8%	1	25%
Growing practices	6	5.6%	1	16.7%
Favorable growing conditions	2	1.9%	1	50%
Develop producer market channels	23	21.7%	15	65.2%
Build the local economy	19	17.9%	15	78.9%
Support families	23	21.7%	11	47.8%
Change the food system	4	3.8%	3	75%
Build on existing program	5	4.7%	0	0%
Leverage social networks	2	1.9%	1	50%
Promote equity	5	4.7%	4	80%
TOTAL RESPONSES	106	100%	61	-

Steps Taken to Establish the Local Sourcing Program

The question of steps taken to establish a local sourcing program sought to identify key strategies for local and regional sourcing program development. A total of seven themes were produced. Table 3.3 below indicates the frequency of responses.

Table 3.3 Steps taken to establish local and regional sourcing program themes and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Mission alignment	7	9.7%	3	42.9%
Leverage supplier relationships	21	29.1%	17	81%
Leverage strong supply base	3	4.2%	2	66.7%
Leverage cross-sector relationships	11	15.3%	2	18.2%
Expand on existing programming	18	25%	12	66.7%
Develop and translate foundational understanding	1	1.4%	1	100%
Build consumer demand	6	8.3%	1	16.7%
Develop a pilot model	5	6.9%	2	40%
TOTAL RESPONSES	72	99.9%	40	-

Current Local and Regional Sourcing Program Administration

The question of current local and regional sourcing program administration sought to identify operational components of the local and regional sourcing program. A total of 10 themes were produced. Table 3.4 below indicates the frequency of responses.

Table 3.4 Current local and regional sourcing program administration themes and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Leverage supply chain relationships	11	25.6%	8	72.7%
Leverage cross-sector relationships	4	9.3%	0	0%
Establish a local supply baseline	5	11.6%	2	40%
Select retail stores to partner with	8	18.6%	5	62.5%
Assist in marketing local product	3	7%	1	33.3%

Expand existing programming	3	7%	1	33.3%
Include flexible local sourcing requirements	1	2.3%	1	100%
Increase farmer production capacity	3	7%	0	0%
Forecast local supply	1	2.3%	1	100%
Select suppliers to partner with	4	9.3%	1	25%
TOTAL RESPONSES	43	100%	20	-

Local and Regional Sourcing Program Metrics

The question of local and regional sourcing program metrics sought to identify types of local and regional sourcing data collected as well as tracking priorities, including determining local and regional reporting types. A total of four themes were produced for each category.

Table 3.5 below indicates the frequency of responses.

Table 3.5 Local and regional sourcing program metrics used and response frequency

	Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
	No identifiable metrics or tracking priorities	9	16.1%	5	55.6%
Tracking Priorities	Retailer commitment to % locally sourced	5	8.9%	2	40%
	Establish local sourcing baseline	4	7.1%	1	25%
	Data snapshots	4	7.1%	1	25%
	Flexible data collection priorities	6	10.7%	0	0%
Metrics	% locally sourced (Retailer-provided)	10	17.9%	5	50%
	Other local non-local sales data (Retailer-provided)	9	16.1%	4	44.4%
	Farmer participation (Retailer- and Practitioner-provided)	4	7.1%	0	0%
	List of local product availability (type/quantity)	5	8.9%	2	40%
	TOTAL RESPONSES	56	99.9%	20	-

Supports for Local and Regional Sourcing

The question of supports for local and regional sourcing sought to identify what factors supported local and regional sourcing in the program service area. A total of 17 themes were produced. Table 3.6 below indicates the frequency of responses.

Table 3.6 Supports for local and regional sourcing themes and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Consumer education	3	3.4%	2	66.7%
Working with small, independent retailers	2	2.3%	1	50%
Producer access to market channels	9	10.5%	4	44.4%
Reliable supply	4	4.7%	3	75%
Program evaluation	0	0%	0	0%
Existing programming	3	3.4%	2	66.7%
Reinforcing program design	6	7%	2	33.3%
Program marketing	8	9.3%	6	75%
Nutrition Incentive Hub technical assistance	2	2.3%	2	100%
Strategic relationships	16	18.6%	11	68.8%
Producer relationships	12	14%	9	75%
Networking and mentorship	4	4.7%	2	50%
Retailer technical assistance	4	4.7%	2	50%
Producer technical assistance	6	7%	4	66.7%
Diversified funding mix	4	4.7%	2	50%
Dedicated personnel	0	0%	0	0%
Market control	3	3.4%	2	66.7%
TOTAL RESPONSES	86	100.0%	54	-

Barriers to Local and Regional Sourcing

The question of supports for local and regional sourcing sought to identify what factors hindered local and regional sourcing in the program service area. A total of 12 themes were produced. Table 3.7 below indicates the frequency of responses.

Table 3.7 Barriers for local and regional sourcing themes and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Wholesale requirements for producers	13	9.8%	10	76.9%
Retail operations requirements	8	6.1%	3	37.5%
Lack of investment in supply chain development	15	11.4%	12	80%
Environment/Seasonality	20	15.2%	19	95%
Cost of local produce	16	12.1%	14	87.5%
Retailer attitudes	13	9.8%	4	30.8%
Market competition	11	8.3%	10	90.1%
Inventory tracking and reporting	11	8.3%	9	81.8%
Marketing local produce	2	1.5%	2	100%
Consumer perceptions and expectations	9	6.8%	7	77.8%
Lack of network connections	7	5.3%	4	57.1%
Uncertain program viability	7	5.3%	4	57.1%
TOTAL RESPONSES	132	99.9%	98	-

Current Local and Regional Sourcing Needs

The question of current local and regional sourcing needs sought to identify types of capacity and technical assistance needed among interviewees. A total of eight themes were produced. Table 3.8 below indicates the frequency of responses.

Table 3.8 Current local and regional sourcing needs and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Strategic relationship development	16	23.9%	7	43.8%
Increased local product availability	14	20.9%	5	35.7%
Access to best practices	15	22.3%	13	86.7%
Access to economic impact data	3	4.5%	2	66.7%
Retailer training	7	10.4%	1	14.3%
Producer training	2	3%	1	50%
Public education	7	10.4%	6	85.7%
Local business support	3	4.5%	2	66.7%
TOTAL RESPONSES	67	99.9%	37	-

Future Plans/Next Steps

The question of future plans/next steps sought to identify growth strategies among interviewees, both organizationally and programmatically. A total of 12 themes were produced. Table 3.9 below indicates the frequency of responses.

Table 3.9 Future plans/Next steps among organizations and response frequency

Theme	Overall Response Frequency	% Overall Response Frequency	Frequency of Strong Agreement	% Strong Category Agreement
Organizational development	6	6.1%	4	66.7%
Improving reporting	5	5%	5	100%
Advocating for funding	9	9.1%	8	88.9%
Investing in infrastructure	6	6.1%	5	83.3%

Partnership and coalition building	20	20.2%	13	65%
Firm expansion	14	14.1%	9	64.3%
Increase outreach and participation	13	13.1%	5	38.%%
Strengthening diversity, equity, and inclusion	5	5%	4	80%
Understanding grocery retail operations	5	5%	1	20%
Increasing local sourcing	9	9.1%	5	55.6%
Program re-application	1	1%	1	100%
Transforming food systems	6	6.1%	2	33.3%
TOTAL RESPONSES	99	99.9%	62	-

Chapter 4 - Discussion

The research study sought to develop a baseline understanding of factors relevant to the grocery retail environment and produce supply chain in order to develop evidence-based solutions to build nutrition incentive grantee and practitioner capacity to administer local and regional sourcing programs in grocery retail. Table 4.1 below provides an overview of the top three most frequently identified themes across the nine interview categories. There are several themes identified in the 20 to 30 percent response frequency range appearing in the motivations for sourcing locally, program establishment, program administration, local sourcing needs, and future plans/next steps categories. These themes reference relationships and partnerships, local foods economic development, and program capacity building and scalability.

Table 3.10 Snapshot of most frequently identified local and regional sourcing interview themes

	1st highest frequency	%	2nd highest frequency	%	3rd highest frequency	%
Definitions	State + Bordering states	16.9%	State only	13.8%	Point of origin	13.8%
Motivations	Develop producer market channels	21.7%	Support families	21.7%	Build the local economy	17.9%
Establishment	Leverage supplier relationships	29.1%	Expand on existing programming	25%	Leverage cross-sector relationships	15.3%
Administration	Leverage supply chain relationships	25.6%	Select retail stores to partner with	18.6%	Establish a local supply baseline	11.6%
Metrics/Tracking	% locally sourced (retailer-provided)	17.9%	Other local/non-local sales data	16.1%	No identifiable metrics	16.1%
Supports	Strategic relationships	18.6%	Producer access to market channels	10.5%	Program marketing	9.3%
Barriers	Environment/Seasonality	15.2%	Cost of local produce	12.1%	Lack of supply chain investment	11.4%
Needs	Strategic relationship development	23.9%	Access to best practices	22.3%	Increased local product availability	20.9%
Future plans/Next steps	Partnership and coalition building	20.2%	Firm expansion	14.1%	Increase outreach and participation	13.1%

There are three particularly relevant interpretations from the study in regard to factors driving or inhibiting local and regional sourcing programs: practitioner gaps in supply chain knowledge, macro-level barriers vs. contextualized supports, and partnership development for local and regional food systems.

Key Interpretations

Practitioner Gaps in Supply Chain Knowledge

Local foods not only promote consumer health but also build the local economy, two key GusNIP goals. A recent study shows that the national economic contribution of healthy food incentives is \$1.6 to \$3.2 billion and that for every one dollar spent on nutrition incentives, the economic multiplier is 2.3 times as much (Thilmany et al., 2021). Local foods can also help shorten the supply chain. As project leads, most of the interviewing organizations' mission is focused on food security. Fewer organizations explicitly focus on developing the local foods economy. Supply chain processes and relationships are complex, and several interviewees expressed the challenge with understanding, developing, and negotiating supplier and vendor relationships to increase local and regional sourcing and to track it.

When beginning or expanding a local and regional sourcing program for grocery retail, retailer type and production scale or supply are critical factors for program success made more complex by wholesale and retail operations requirements. Interviews revealed that nutrition incentive grantees and practitioners often focus grocery retail projects to small, independent grocers due to their flexibility and direct control over their operations. However, these retailers face significant challenges in regard to minimum buying requirements, technology requirements, and tracking locally sourced produce. The conventional supply chain tends to favor large producers who can meet grocery retail (wholesale) standards for quality, conformity, and food safety. As the retailer grows in size and complexity, so too do these standards. Supply consistency is also critical for this market, and large-scale, local producers that meet the demand are usually limited in number.

Scaling up fruit and vegetable production to meet both consumer demand and wholesale standards can be a challenge for small- and mid-scale local producers (Clark & Inwood, 2016). Access to processing equipment and connections to intermediaries like aggregators and distributors are needed. Small- and mid-scale producers do have the opportunity to compete in wholesale markets by partnering with food hubs which shorten the supply chain and act as "brokers" by aggregating product from multiple farms, preparing product for wholesale, and negotiating contracts (Barham et al., 2012; Clark & Inwood, 2016). Mid-scale producers may be best positioned to scale-up since they are "small enough to be flexible and innovative to respond to highly differentiated markets and large enough to respond to larger supply chain actors' demands. Further, they are "likely to have the motivation and capacity to engage in these new scaling-up needs" (Clark & Inwood, 2016, p. 505). Developing tools and resources to

comprehensively bridge the knowledge gap in grocery retail operations, local produce traceability, and supplier negotiation can help nutrition incentive grantees and practitioners administer their programs more efficiently.

Macro-level Barriers vs. Contextualized Supports

While increasing organizational capacity to actively engage the local foods supply chain meaningfully contributes to local and regional sourcing program viability, a well-supported supply chain is critical to overall program sustainability. Interviews revealed a significant disparity between local and regional sourcing barriers and supports. Generally, barriers identified by nutrition incentive grantees and practitioners were systemic in nature: challenges in growing environment and seasonality, the cost of local produce to the retailer, and lack of investment in supply chain development. These three factors are reinforcing; for example, growing seasons can be extended with supply chain investment which, in turn, can increase production scale generating retail economies of scale thereby reducing produce costs. It is a matter of inputs, outputs, supply, and demand or market economics.

Supports, on the other hand, were often based in local and regional context. Note that thematic frequency in the barriers and supports categories were lower as compared to several other interview categories. That is due to the overall number of themes identified, a total of 17 support themes and 12 barrier themes were identified. The higher number of support themes is indicative of their contextual nature. The most frequently identified interview support themes were strategic relationships, producer access to market channels, and program marketing. Each of these themes are subject to sociopolitical contexts, local economies, and organizational competencies among other contextual factors. Understanding the “levels” at which program barriers and supports operate can contribute to the development of appropriate policy, system, and environmental strategies that build stronger local and regional food systems that support supply chain development.

Furthermore, there was ongoing discussion among the research team about tension between the GusNIP goals and nutrition incentive grantee capacity. Interviews illustrated the need for supply chain investment to support local and regional sourcing; however, GusNIP is not currently designed to develop local foods infrastructure. In addition to increasing the purchase and consumption of fruits and vegetables among participating households, reducing individual and household food insecurity, improving health outcomes of participating households, and decreasing associated healthcare use and costs, GusNIP also promotes local agricultural economic development through local and regional sourcing. Grantees shared that

serving the needs of these two audiences – program users and local producers – are oftentimes in contention. Creating markets for producers that produce fair wages and profits can increase the cost of fruits and vegetables, a concern for grocery retailers whose produce departments have thin profit margins. Bulk purchasing and minimum buying requirements reduce costs to retailers and distributors, respectively, and those savings are passed on to consumers. Unless local foods infrastructure is developed to generate economies of scale, it may not be the most cost-effective option for retailers – and, thus, consumers – to purchase from small and mid-scale producers.

There are other USDA grants such as the Local Foods Promotion Program and Local Agriculture Marketing Program that more directly build local food economies. However, this raises the question of equitable access within the GusNIP program, both from the perspective of those who have the capacity to apply to and administer the program (which may not be representative of the communities most in need) and which producer operations are to program scale. Interviewees also expressed tension between prioritizing food security and local economic development as well as political hurdles presented program match requirements and funder motivations.

Partnership Development for Local and Regional Food Systems

According to the Organisation for Economic Cooperation and Development (2020), “The biggest risk for food security is not with food availability but with consumers’ access to food...The significance of COVID-19 for food supply chains thus comes less from its impact on primary production or overall food demand than from its disruptive effects on the complex web of actors connecting farm to fork” (p. 7). At each stage of the supply chain, individuals are creating and managing systems that are influenced by practices and policies. Relationship development is key to influencing these systems, whether the strategy is a direct supply chain intervention as in the case of contract negotiation or an indirect supply chain intervention as in the case of public policy. Therefore, nutrition incentive practitioners may find the most opportunity to build a local and regional sourcing program for nutrition incentives by not only developing relationships between small- to mid-scale producers and independent grocery retailers and small retail chains but also by leveraging multisector relationships.

Strategic relationships were the most frequently cited support among interviewees, and relationships appeared as one of the top three most frequent citations across four of the nine themes. Local and regional food system development offers a unique opportunity to increase and sustain the impacts of nutrition incentive programming through the collaborative networks

that come together to integrate sustainable outcomes among each part of the food system from farm to fork (Feenstra & Campbell, 2014). Supply chain development, however, requires investment in infrastructure (i.e., equipment and materials, distribution and aggregation systems, workforce development). In response to food supply chain disruption brought on by COVID-19, the USDA Build Back Better Program seeks to strengthen the food system by bolstering critical supply chains, creating new market opportunities, tackling the climate crisis, helping communities that have been left behind, and supporting good-paying job throughout the supply chain (USDA, n.d.). This infrastructure program is ultimately implemented by national, state, and community-based partners and networks.

In Michigan, we refer to our partnerships as “collaborative infrastructure.” Our partner networks have collectively mobilized for robust food system development that has strengthened supply chains and, more recently, helped insulate communities from adverse food supply chain impacts of COVID-19. One example in which multisector partnerships strengthen supply chains is the Ten Cents a Meal for Michigan’s Kids and Farms program. Ten Cents a Meal is a state-funded program providing schools and early childhood education centers with match incentive funding up to 10 cents per meal to purchase and serve Michigan-grown fruits, vegetables, and legumes (Ten Cents, n.d.). The Michigan Farm to Institution Network, which seeks new approaches to institutional purchasing and expands markets for food grown, raised, and processed in Michigan, and the Michigan Local Food Council Network, a learning community of local food councils and statewide food and health networks and associations, educated and mobilized advocates and supporters to pass the legislation. Such partnerships are crucial since organizations often have specific areas of expertise that do not necessarily address all components of the food system – as in the case of many GusNIP grantees – and can complement one another to build local and regional food systems that support strong supply chain development. MSU CRFS staff have created The Local & Regional Food System Partnership Planning Tool (Souza & Scalera, 2021), which outlines seven key partnerships that contribute to local and regional food system development and may help nutrition incentive grantees and practitioners strategically develop collaborative infrastructure:

- **Supply chain partnerships** are the direct link to sourcing local foods. Examples include food hubs, distributors, producers, and processors.
- **Cross-sector partnerships** intersect with and complement one’s food system work, such as a public health institution that provides nutrition education at a farmers market.

- **Community partnerships** include service areas residents and stakeholders who may inform program design, implementation, and/or evaluation.
- **(Practitioner) Network Partnerships** include the peer organizations and networks one connects with to learn, better accomplish goals, meet other types of partners, etc.
- **Funding partnerships** include philanthropic organizations, sponsors, and donors who financially support one's food system work. These partners can be crucial advocates even when they are not providing direct funding.
- **Advocacy partnerships** provide a channel to inform direct action and participate when possible. Although not all organizations administering nutrition incentives are in a position to directly advocate or lobby for public policy changes, advocacy partners can still represent those interests.
- **Support & Technical assistance partnerships** actively provide expert training and guidance in one's food system work, such as a food safety or supply chain specialist.

Limitations and Future Study

This research project was limited by several factors including the time and capacity, exclusion of historical data sets, and limited sample size. Although the Nutrition Incentive Program National Training, Technical Assistance, Evaluation and Information Center (NTAE) is comprised of evaluators and researchers, the project research team was comprised of two Nutrition Incentive Hub technical assistance providers and a support staff member. As technical assistance providers, our main priority is to be responsive to nutrition incentive grantee and practitioner requests for technical assistance. Our data collection and analysis processes were not rigorous but rather were designed to allow for immediate translation into practical resources. Therefore, our time and capacity to conduct rigorous research was limited by this factor. In recognition of our limitations, our team focused this exploratory research to 2019-20 nutrition incentive grantees and practitioners who responded to the annual technical assistance survey to leverage the most current data. There were fewer than 90 respondents from which the study population was derived. The inclusion of historical data sets, however, would have increased our sample population and enhanced conclusions drawn from data analysis.

Additionally, this data was collected during the COVID-19 pandemic. The shockwaves sent through the national food supply chain have been well documented in the news, exposing frailties and the impact on local communities. This worldwide event may have influenced the study, from interviewee availability and capacity to local and regional supply chain capacity. As such, it is recommended that follow-up interviews be conducted with interviewees and additional interviews conducted once supply chain disruption has stabilized.

While no definitive conclusions can be drawn from this research, the results suggest additional areas for future study. Several thematic categories – definition of local, motivations for sourcing locally, local and regional program establishment, local and regional sourcing metrics, current administration of the local and regional sourcing program, supports for local and regional sourcing, and barriers – solicit further exploration to better understand drivers and inhibitors for program success as well as identify any correlations between categories. With larger data sets, these drivers and inhibitors could be cross-referenced against organizational characteristics such as size, location, and program maturity. Insights into such interdependencies will help tailor technical assistance and capacity building efforts within GusNIP.

Opportunities to strengthen links between supply chain stages are also emerging as a result of the disruption brought on by the COVID-19 pandemic (Peterson et al., 2021). The USDA has recently partnered with Colorado State University and the University of Kentucky to explore the way in which communities mobilized their knowledge and resources through a Local and Regional Food Systems (LRFS) Recovery and Resilience project. The project seeks to “translate lessons learned from local food systems stakeholders during the COVID-19 pandemic and simultaneous social crisis into a specific, long-term collaborative strategy for fostering recovery, and equitable approaches to LRFS resilience” (USDA, 2022, p. 1). It includes the development of the LRFS Network of Networks, which fosters cross agency and sector learning, collaboration, and strategic action as well as peer mentorship for collecting, and assessment with Data and Metrics to develop an accessible data dashboard. Findings will be synthesized into a Resilience Playbook to support policymakers,

fundings, and LRFS leaders and publications, technical assistance, and outreach tools will be developed (USDA, 2022).

Specific strategies to strengthen the relationships that influence supply chain processes for creative problem-solving in times of both disruption and stability should remain a priority of the USDA and partner agencies and communities. Values-based supply chain, or VBSC, development is one such approach that prioritizes mutual benefit and reciprocity while preserving the values and identities of supply chain actors. Scaling-up fruit and vegetable production is a conventional strategy to improve market efficiency and reach, but local food movements also view scaling-up as an opportunity to go beyond economic benefits and increase social and environmental impacts (Clark & Inwood, 2016). In fact, it can be difficult to separate economic and social motivations from one another. By looking at the supply chain as merely a linear, economic engine, important actors and components that contribute to its viability may be overlooked (Buckley et al., 2013). Integrating the social component of the supply chain shifts the conventional model to a VBSC. As “long-term networks of partnering business enterprises working together to maximize value for the partners and end consumers” (Stevenson & Pirog, 2008, p. 120), values-based supply chain relationships are about commitment to other supply chain actors (Clark & Inwood, 2016). Actors develop a shared goal to increase one another’s economic viability and, in doing so, a commitment to partners’ welfare emerges, creating both value and values (Clark & Inwood, 2016; Peterson et al., 2021). To be successful at this, actors must also develop an understanding and appreciation of one another’s barriers and help remove them (Clark & Inwood, 2016). As such, it is a strategy by which nutrition incentive practitioners can leverage their partnership development skills to both strengthen supply chain linkages for nutrition incentive programs and local and regional food systems overall.

Furthermore, capacity building for program participation to build the grantee pipeline has been prioritized by the USDA and, by extension, the NTAEE. The recent establishment of the USDA Equity Committee and Subcommittee on Agriculture suggests a heightened interest in access to USDA programs to build the national supply chain. Understanding the drivers and inhibitors of local and regional sourcing could

provide critical insight that informs equitable development of USDA programming and access among priority communities that are not current grantees. By combining efforts of the LRFS Recovery and Resilience project, the USDA Equity Commission and the Subcommittee on Agriculture, the USDA has an opportunity to innovate and streamline efforts as well as integrate equity in the development of a stronger national food system that supports local communities.

Chapter 5 - Competencies

Student Attainment of MPH Foundational Competencies

Table 5.1 Summary of MPH Foundational Competencies

Number and Competency		Description
4	Interpret results of data analysis for public health research, policy or practice	Interviews were conducted and analyzed for emergent themes informing local & regional sourcing program development to increase fruit and vegetable availability.
13	Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	A Partnership Development for Higher Impact Nutrition Incentive Programs webinar-based training series and a partnership development tool were developed as a result of the research conducted in addition to informing community of practice topics.
18	Select communication strategies for different audiences and sectors	A suite of multi-media deliverables was created for multiple stakeholder audiences as a result of the research conducted.
21	Perform effectively on interprofessional teams	In addition to acting as a partner within the Nutrition Incentive Hub, collaborative data collection, analysis, resource development, and reporting was conducted with a core Nutrition Incentive Hub partner.
22	Apply systems thinking tools to a public health issue	Emergent themes identified through the research conducted resulted in multiple evidence-based tools and resources to increase nutrition incentive grantee and practitioner capacity to develop local & regional sourcing programs to increase fruit and vegetable availability.

Competency 4: As a partner within the Nutrition Incentive Hub, my organization's skills and expertise are called upon to develop evidence-based solutions in support of GusNIP goals and grantee and practitioner capacity building. As a technical assistance provider, it is my responsibility to translate any research conducted into resources and tools as need arises. This can be seemingly in contrast to research conducted to develop evidence-based solutions. It is

an involved process that takes considerable time and capacity to complete. This project pushed me to strike a balance between research and practical application, translating emergent findings from stakeholder interviews into a community of practice topics, a webinar-based training series, and a corresponding tool. The research indicated partnerships were being leveraged to establish local and regional sourcing programs and, in creating these resources, I incorporated aspects of local and regional food systems development to support the development of a strong supply chain that increases fruit and vegetable availability.

Competency 13: The *Partnership Development for Higher Impact Nutrition Incentive Programs* webinar-based training series was created to help nutrition incentive grantees and practitioners identify local food system stakeholders to help build stronger supply chains. The series featured three webinars:

- *Considerations for Incorporating Stakeholder Values into Nutrition Incentive Program Local & Regional Sourcing Efforts* explored how partner values inform local and regional sourcing strategies and translate to the nutrition incentive program context. The webinar shared lessons being learned in a national initiative to compile farm-to-institution values and standards then continued with an overview of a GusNIP grantee efforts to provide training support to local and regional farmers as well as challenges of program implementation in grocery retail. The webinar wrapped up with a retail grocery industry perspective on the value of local produce plus tips for working with grocery retailers.
- *Building Local & Regional Food Systems Partnerships for Nutrition Incentive Programs* discussed the role of diverse partnerships in the development of a healthy, thriving local or regional food system that supports nutrition incentive programming. Acknowledging that how well a program can source local and regional product is dependent on a multitude of factors that together create a local or regional food system. The relationships among actors within this system were highlighted through the evolution of Michigan's collaborative infrastructure, providing practical strategies to help nutrition incentive grantees and practitioners play a key role in creating supportive, collaborative infrastructure.
- *Developing Value Chain Partnerships for Nutrition Incentive Programs* focused on local and regional production, processing, and wholesale and retail distribution, hosting a panel of supply chain actors to discuss their regional food system development efforts. Three programs – a GusNIP grantee, a food hub, and a regional food system development initiative

providing farmer training and market development – that developed robust partnerships and strategies to support local and regional sourcing efforts across these stages were highlighted.

Competency 18: The suite of deliverables created for this project were tailored according to purpose of each communication channel being utilized. The Local and Regional Sourcing in Grocery community of practice serves as a learning space for grantees and practitioners to network, obtain new information, and share resources. Emerging interview results were shared in this space to stimulate discussion and gather feedback on grantee and practitioner experience as well as inform the development of additional resources. The webinar-based training series was created for information dissemination among a broad audience. The partnership development tool was designed to provide grantees and practitioners with downloadable worksheets for use among organizational stakeholders, including those not affiliated with the Nutrition Incentive Hub.

Competency 21: In addition to nutrition incentive grantees and practitioners, I regularly interface with a coalition of national stakeholders as a Nutrition Incentive Hub partner. We all regularly attend internal subcommittee meetings and collaborate across projects and in technical assistance provision. My facilitation of the Diversity, Equity, and Inclusion in Nutrition Incentives community of practice has allowed me to develop relationships with stakeholders outside of Nutrition Incentive Hub, including the CDC Division of Nutrition, Physical Activity, and Obesity (DNPAO); Harvard Center for Health Law and Policy Innovation; and Rockefeller Foundation. These partnerships have led to collaborations on national reports and a request to participate on national advisory council. I have also collaborated with several organizations to develop and conduct presentations and trainings including Veggie Van Toolkit based at the University of Buffalo, New York State SNAP-Ed, MSU Extension, and Mid-America Regional Council.

Competency 22: This research project was designed to identify drivers and inhibitors of local and regional sourcing programs in an effort to understand system dynamics across different environmental, social, and economic grantee and practitioner contexts. Through this research, my research teammates and I identified patterns in local sourcing program establishment, several macro-level barriers (e.g., federal program constraints, technology access, produce traceability systems, seasonality, etc.), and geographic and political supports. The in-progress framework for establishing local and regional sourcing programs – further supported by the community of practice, webinar-based training series, and partnership planning tool – serves as the simplified expression of a system archetype that builds grantee

and practitioner understanding of supply chain development and skills/competencies to develop critical supply chain relationships.

Table 5.2 MPH Foundational Competencies and Course Taught In

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		
Public Health and Health Care Systems					
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings		x			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			
Communication					

22 Public Health Foundational Competencies Course Mapping		MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
18. Select communication strategies for different audiences and sectors		DMP 815, FNDH 880 or KIN 796				
19. Communicate audience-appropriate public health content, both in writing and through oral presentation		DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content			x			x
Interprofessional Practice						
21. Perform effectively on interprofessional teams			x			x
Systems Thinking						
22. Apply systems thinking tools to a public health issue				x	x	

Student Attainment of MPH Emphasis Area Competencies

Table 5.3 Summary of MPH Emphasis Area Competencies

MPH Emphasis Area: Public Health Physical Activity (PHPA)		
Number and Competency		Description
1	Population health	Investigate the impact of physical activity on population health and disease outcomes.
2	Social, behavioral and environmental influences	Investigate social, behavioral and environmental factors that contribute to participation in physical activity.
3	Theory application	Examine and select social and behavioral theories and frameworks for physical activity programs in community settings.
4	Developing and evaluating physical activities interventions	Develop and evaluate physical activity interventions in diverse community settings.
5	Support evidence-based practice	Create evidence-based strategies to promote physical activity and communicate them to community stakeholders.

PHPA Competency 1: Population health factors and strategies for physical activity were discussed across the MPH program emphasis area, including but not limited to environmental health, disease prevention, policy, and equity (e.g., access to physical activity opportunities, socioeconomic status). Given my work in program development and policy, KIN 610, KIN 612, and KIN 805 were especially salient in translating public health concepts to tangible interventions. The practical planning steps and theoretical foundations presented through Program Planning and Evaluation (KIN 610) and Physical Activity and Human Behavior (KIN 805), respectively, created a foundation for the development of evidence-based interventions

that apply to my work in food systems. Since obesity and chronic disease prevention are also inherent to my work in food and nutrition insecurity, the Policy, Built Environment and Physical Activity course (KIN 612) complements my co-facilitation of the Michigan Local Food Council Network. Several of our members represent local community-based organizations and state agencies that address the social determinants of health, including obesity factors and HEAL (healthy eating, active living).

PHPA Competency 2: Food insecurity and physical inactivity alike are oftentimes the result of systemic barriers that obstruct equitable access to health opportunities. Social, behavioral, and environmental influences are embedded within structural inequities, and these concepts were explored in the Social and Behavioral Bases of Public Health (KIN 818) and Policy, Built Environment and Physical Activity (KIN 612) courses. In KIN 818, we explored how race and class contributed to health inequities and debated public health topics. In KIN 612, we systematically assessed environmental attributes with tools such as the Active Neighborhood Checklist and Neighborhood Environment Walkability Score. These course experiences applied to my APE investigating the drivers and inhibitors of local and regional sourcing programs in GusNIP, and the project research findings suggested that there are systemic factors that influence local and regional sourcing program viability.

PHPA Competency 3: The theoretical foundations of program development serve as the framework for evidence-based intervention and evaluation. KIN 805 introduced several theoretical frameworks for behavior change that can be applied to food security initiatives and physical activity interventions, including Self Determination Theory, Social Cognitive Theory, and the Social Ecological Model (SEM). I often apply the SEM to network capacity building trainings I conduct on food justice and racial equity advocacy. Additionally, KIN 805 emphasized needs assessments. This is a key component of my own program development and corresponding grant applications. Funders oftentimes solicit “promising practices” if not evidence-based strategies in request for proposals. One of our first steps in proposing a programmatic initiative is needs assessment. An element of needs assessment was also included in the interviews conducted for the APE to inform development of relevant tools and resources.

PHPA Competency 4: Program evaluation is a key component of the grant-based work I have been involved in while working for academic outreach centers. As PI/co-PI on a number of projects, I consider evaluation measures when developing objectives and logic models and am always looking for evaluation frameworks and instruments. KIN 610 introduced several tools to assess the built environment and such features as walkability, safety, and access. Through

this course, I applied issue context from my work with GusNIP to identify a priority population and develop an intervention strategy and evaluation plan. Although I did not go so far as to implement this program, I was able to translate ideas from the course resources into my review of Nutrition Incentive Hub survey items.

PHPA Competency 5: Although my work primarily focuses on food access, I collaborate with statewide food and health networks and associations as well as national organizations whose work addresses chronic disease prevention. Among these partners are local health departments, Michigan Department of Health and Human Services, Michigan Fitness Foundation, and CDC DNPAO. The policy, systems, and environmental (PSE) intervention strategies I was exposed to through the MPH Public Health Physical Activity program align to these public health officials' and other stakeholders' emphasis on the social determinants of health. One PSE strategy employed by these partners is healthy eating, active living or HEAL. Throughout my time in the MPH program, I led and co-led partner presentations on PSE strategies to improve community health through evidence-based HEAL interventions. Evidence-based strategies are critical to these partners' grant applications for public health interventions. In tailoring presentations to the contexts in which these partners work, I was able to pull from my experience in Administration of Health Care Organizations (MPH 720). During this course, I was exposed to a multitude of healthcare organizational formats through student-led, recorded interviews that explored organizational and institutional policies, practices, and procedures. These are critical considerations for program implementation and, thus, the professional trainings I conducted.

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Appendix 1. Project timeline

Disseminate	Analysis - Interpreting	Analysis - Recoding	Analysis – Code Refining	Analysis – Initial Coding	Interviews	Project Development	
							JUL 2020
							AUG 2020
							SEP 2020
							OCT 2020
							NOV 2020
							DEC 2020
							JAN 2021
							FEB 2021
							MAR 2021
							APR 2021
							MAY 2021
							JUN 2021
							JUL 2021
							AUG 2021
							SEP 2021
							OCT 2021
							NOV 2021
							DEC 2021
							JAN 2022
							FEB 2022
							MAR 2022
							APR 2022

Appendix 2. Email invitation

E-mail: Invitation

SUBJECT: GusNIP/FINI Local Sourcing Interview Request

Dear [interviewee],

My name is [interviewer] and I'm the [role] with [organization]. I'm reaching out to schedule a **research interview** about your **brick-and-mortar local sourcing efforts** with the appropriate contact for your GusNIP or FINI grant program.

The [MSU Center for Regional Food Systems](#) and the [NGAF Technical Assistance Center](#) have been tasked by the [Nutrition Incentive Hub](#) with benchmarking the local and regional sourcing of GusNIP projects to establish common definitions and measurements that can lead to measurable increases in local sourcing across the program. We plan to interview all grantees that have indicated they are currently involved in some kind of local sourcing effort to accomplish this goal.

Through these interviews, we hope to gain insight into your organization's reason for sourcing locally, your local sourcing process and any metrics used, and how we might assist your organization's local sourcing journey. Interviews will be **scheduled for 60 minutes but we anticipate they will take about 45 minutes**, and we are seeking **permission to record these meetings**. Recordings would not be shared and only used to clarify notes post-interview.

Please let us know if [organization] would be willing to participate in this interview and whether you are the best contact. If you recommend another person within your organization to interview, we would appreciate your help making the connection with that person.

Thank you for your consideration and we look forward to learning more about your project.

Kolia Souza, MSU Center for Regional Food Systems
Chelsea Matzen, NGAF Technical Assistance Center

Appendix 3. Interview protocol and guide

Interview: Introduction

Thank you for taking the time to interview with us today. I'm Kolia Souza, Food System Equity & Advocacy Specialist for Michigan State University Center for Regional Food Systems and I'll be conducting the interview. Joining me today is [colleague], who will be taking notes (*allow for introduction*). For review, today's interview is focused on local and regional sourcing strategies within brick-and-mortar retail. Our purpose is to gain insight into your organization's reason for sourcing locally, your local sourcing process and any metrics used as well as how we might offer any assistance. This interview will be recorded. The recordings will not be shared and only accessible for the purpose of clarifying notes and analysis among a small group of MSU Center for Regional Food Systems and National Grocers Association Foundation staff involved in the process. Do we have your permission to record? (*If yes, start recording*).

Interview: Questions

1. Would you please introduce yourself by name, organization, and your role within your organization?
2. How long have been with the organization and/or in this role?
3. Could you tell us about your organization?
4. [If not already answered] What steps did your organization take to get started with local sourcing?
5. [If not already answered] Why did your organization decide to source locally? What was/were the motivating factor(s)?
6. Can you describe your local sourcing process now, including any metrics you use?
7. How does your organization define "local"?
8. What supports are in place that promote local and regional sourcing?
9. What are barriers or challenges to sourcing locally?
10. What is the "next step" for your organization?
11. What does your organization need in terms of local sourcing or overall development?
12. We're now at the end of the interview. Is there anything else you want us to know?

Closing

Thank you for being a part of this process. We'll provide some insight into next steps. These interviews will tentatively continue through the end of March to beginning of April. Our team will then look for themes and patterns across the interviews to understand how local sourcing programs among retailers have developed, including identifying drivers for program success. We'll be sharing our findings in intervals through the Nutrition Incentive Hub local and regional sourcing community or practice and collecting feedback. We'll also use these findings to develop tools and resources and invite guest speakers to discuss emerging topics of interest. MSU Center for Regional Food Systems staff is also offering one-on-one consultation for local and regional sourcing, so please don't hesitate to email me if you are interested. By the end of this whole process, we plan to disseminate the findings widely via a short paper or webinar. Are there any questions we can answer for you before we wrap up?

Appendix 4. Definition of local

Code	Definition	Example(s) + Notes
Flexible?	Is the definition flexible to accommodate program needs?	Definition of local changes with store location
Mileage?	Is mileage indicated in the definition?	
No standard definition	The organization does not have a universal definition for local. The definition may still be in development and/or the rationale behind the definition may be ambiguous.	Local sourcing goal is achieved through dedication from org or stores.
Location-specific	The definition for local is attached to a specific point of origin.	A food hub, cluster of counties within a state or across multiple states
State only	The definition for local is limited to within the state.	Florida-grown
State + bordering	The definition for local includes within the state in addition to bordering states and/or a certain mileage from within the state, which may include border states.	
Stakeholder influence	The definition for local is influenced by a state or tribal governing body, institutional partner, or purchasing program.	School or wholesaler/retailer defined. Defined by Fair Food Network or a Buy Local campaign
Contextual influence	The definition for local is influenced by organizational values, environmental conditions and/or seasonality, or production practices.	Defined by principles of sustainable agriculture

Appendix 5. Motivations for sourcing locally

Code	Definition	Example(s)
Political	Interests among local, state, and/or federal political actors influence program and partnership dynamics.	Little "p" vs. big "P" policy, contextual considerations (e.g., urban vs. rural)
Predetermined local sourcing requirement	The local sourcing requirement put forth by Fair Food Network drives the local sourcing program.	
Mission alignment	Local sourcing is tied to the defined values and purpose of the organization.	
Cultural values	Local sourcing is driven by social and historical factors that define community values.	Sacredness of and caring for the land, recognition of the cultural significance of local foods and teaching children to appreciate cultural foodways, helping indigenous populations and combating the history of colonization
Growing Practices	Local sourcing aligns with farming practices and traditions that may not be captured in conventional agriculture.	Appreciation for produce that is native to the local area
Favorable growing conditions	The regional climate, terrain, and access to other natural resources encourage year-round specialty crop production.	
Develop producer market channels	Local sourcing is a mechanism to create opportunities for farmers to more easily sell their products, allowing them to increase production capacity and potential profits to sustain their livelihood.	Institutional purchasing, reducing market competition through diversity, expansion to new sales venues
Build the local economy	Revenues from local sourcing promotes local development/growth.	Demonstrating the agility of local producers to meet consumer needs, keeping profit from local purchases circulating throughout the local community (e.g., local business investment, employee wages)
Support families	Nutrition incentives increase access to healthy foods and contribute to SNAP participant health.	Reducing food insecurity, reducing diet-related disease, exposing participants to new food environments and choices

Code	Definition	Example(s)
Change the food system	Local sourcing becomes a strategy to challenge conventional food system processes and practices.	Changing supply chain practices (e.g., purchasing lower grade local produce at a discount to reduce consumer cost), shortening the supply chain, reducing reliance on transport
Build on existing program	An existing program within the organization supported local sourcing and may produce additional benefits.	Existing programs may include a pilot program, buying club, institutional purchasing, ties to farm or food hub operations. Additional benefits may include creation of new org positions or expansion into new venues.
Leverage social networks	Local sourcing is a means to foster relationships among and between supply chain stakeholders and cross-sector stakeholders as well as stimulate community involvement, investment, and healthy competition.	
Promote equity	Local sourcing is a mechanism that promotes self-sufficiency, dignity, and sustainability as well as to overcome cultural barriers to market access.	Cultural barriers to market access include language and communication styles

Appendix 6. Steps taken to establish the local and regional sourcing program

Code	Definition	Example(s) + Factors
Mission alignment	Local sourcing is and/or has always been an integral part of the organization's work.	
Leverage supplier relationships	The organization worked with farmers or had pre-existing relationships with food hubs, mobile markets, corner stores, etc. to facilitate partnerships with retailers.	Leveraging multiple wholesalers to supply stores
Leverage strong supply base	The region is conducive to specialty crop production.	Favorable growing conditions, production is incentivized
Leverage cross-sector relationships	The organization shared partnerships and/or mutual interests with food system stakeholders outside of the conventional supply chain and leveraged this to the benefit of local sourcing program.	Community partners who connect farm/agriculture businesses with buyers and retailers. May also include coalition-building, funding food access initiatives (e.g., mobile market) through state-sponsored support.
Expand on existing programming	The organization grew or adapted another one of their programs that involved local sourcing.	Healthy corner store, WIC, farm to institution
Develop and translate foundational understanding	The organization gathered and implemented best practices or from other organizations already implementing a local sourcing program or replicated their model.	Fair Food Network's Double Up program
Build consumer demand	The organization focused on and responded to consumer needs over economic drivers.	Educating consumers about local food to increase demand, addressing stigma around SNAP use
Develop a pilot model	The organization utilized strategies with low barriers to entry to get started with local sourcing.	Advisory committee sets program requirements based on best practices; work with smaller, independent retailers

Appendix 7. Current local and regional sourcing program administration

Code	Definition	Example(s) + Notes
Leverage supply chain relationships	Actions taken through existing organizational partnerships along the food retail supply chain that produce direct impact.	Assisting/educating farmers, connecting stores with farmers or food hubs keeping in mind compatibility (e.g., connecting similar size vendors to stores so need is properly met)
Leverage cross-sector relationships	Actions taken through organizational partnerships outside of the conventional food retail supply chain that indirectly impact the food supply chain.	Local/state policy advocacy, working with other organizations that wish to foster local food system development
Establish a local supply baseline	The organization seeks to understand current local sourcing practices among participating retailers before suggesting changes or improvements.	
Select retail stores to partner with	The organization develops a strategy or criteria for retailer participation in the local sourcing program.	Determining retailer scale to work with, considering whom the retailer is set up to work with (e.g., wholesalers who work with smaller distributors) and/or whether the retailer is already sourcing locally (e.g., co-ops whose mission is aligned), whether the retailer is located in a high-need area, etc.
Assist in marketing local product	The organization provides technical assistance with in-store promotion.	Signage identifying and/or educating consumers on local product
Expand existing programming	The organization grew or adapted another one of their programs that involved local sourcing.	Translated existing processes/infrastructure to support expansion into GusNIP (e.g., start with WIC and transition to PPR, pilot program, corner stores).
Flexible local sourcing requirements	The organization adjusts the local sourcing requirement to accommodate the retailer.	The local sourcing process or requirements are different among stores with the same grantee allowing for context-specific sourcing requirements.
Increase farmer production capacity	The organization works to increase local supply once relationships/partnerships are developed with suppliers.	
Forecast local supply	The organization is able to leverage experience with the local sourcing program model to predict and communicate consumer retail demand to suppliers.	The retailer may also become more experienced and adept with the local sourcing program model.
Select suppliers to partner with	The organization develops a strategy or criteria for farmer participation in the local sourcing program, sometimes in partnership with the retailer.	Strategies may include gaining an understanding or developing a list of available suppliers in an area to connect stores to

Appendix 8. Local and regional sourcing program metrics

Metric	Description
% locally sourced (Retailer-provided)	The proportion of local produce purchased by the retailer.
Local and non-local sales data (Retailer-provided)	Local produce purchases by weight/unit/etc. Data may be analyzed by each individual data point or comparatively.
Farmer participation (Retailer- and Practitioner-provided)	Defined by number of farmers providing local produce and/or impacts on farmers.
List of product availability (type/quantity)	May be identified via a supplier product and/or pricing list
Tracking Priorities	Description
Retailer commitment to % local	Commitment may be verbal or contractual and may also indicate a percentage increase expected over time.
Establish a baseline	
Data snapshots	Local sourcing data (e.g., sales dollars, sales percent) collected quarterly or annually to track trends.
Flexible data collection	Data collection type is determined on a case-by-case basis.
No identifiable metrics or tracking priorities	

Appendix 9. Supports for local and regional sourcing

Code	Definition	Example(s)
Consumer education	Consumers are educated about local foods, including the importance of buying local, and may become a part of the retailer's outreach and promotional strategy.	Understanding what foods are grown in their region and when they are available; the benefits of short supply chains (e.g., fresher produce, reduce food miles), supporting local farmers and stimulating local economy. May also include teaching consumers how to prepare local produce (e.g., via live or recorded cooking demos, workshops) or hosting farm/store events promoting local food to customers. Retailers may target youth through school tours or make donations to garden projects.
Working with small, independent retailers	Local sourcing is made easier by working with small and/or independently owned retail stores because they have more autonomy over their operations.	
Producer access to market channels	Mechanisms or other infrastructure are in place that enable farmers to easily access sales venues.	Co-ops, food hubs, community supported agriculture (CSA), Good Food Purchasing Program
Program evaluation	Regular assessment of the local sourcing process to inform farmers and retailers about challenges and opportunities.	Knowing what produce has the highest consumer demand, sharing resources to increase local sourcing among stores
Existing programming	There are programs or initiatives already in place that support local purchasing, whether internal or external to the organization.	<u>For farmers:</u> Farmer training, farm-to-institution opportunities, the ability to leverage farmers markets to enter the grocery retail sector. <u>For consumers:</u> healthy eating resources that may encourage increased consumption of local produce (e.g., school gardens, produce recovery programs, mobile markets, etc.)
Reinforcing program design	Program features/mechanisms demonstrate a commitment to local.	Nutrition incentive redemption only applying to local produce, vendors commit to supporting local products and/or it is an organizational value, a strong farmers market culture exists
Reliable supply	The region has favorable growing conditions and there is an abundance and/or diversity of local specialty crops available for purchase through multiple venues.	

Code	Definition	Example(s)
Program marketing	Promotional strategies encourage local sourcing.	In-store signage, shelving displays, value-added products, sharing farmer stories about a product, highlighting a farm-of-the month
Nutrition Incentive Hub technical assistance	The Nutrition Incentive Hub and/or one of its partners supports local sourcing efforts.	
Strategic relationships	Organization-to-organization relationships that facilitate local sourcing by raising awareness, fostering and brokering other multisectoral relationships, and sharing resources.	With governmental bodies (Dept. of Agriculture, school districts); retail (wholesale, restaurants, wider business community); non-profit (food banks, universities, farmers market associations); producers; BIPOC-led orgs; food policy councils; etc. Examples of resources include producer directory or local foods guide managed by a state organization.
Producer relationships	The organization has connections with local farmers and can introduce them to stakeholders along the supply chain to support local sourcing.	
Networking & mentorship	Affinity groups form co-learning spaces to share in mentorship opportunities and/or receive support from field experts.	Affinity groups include retailer-to-retailer, producer-to-producer, wholesaler-to-wholesaler. Field experts include GAP auditors who may, for example, help design plans for farmers selling local.
Retailer technical assistance	Retail stores leads and employees receive program training and/or demonstrations to promote local food sales.	Training to administer the incentive, marketing and promotion, shelving and product placement
Producer technical assistance	Farmers are offered training opportunities, including startup for beginning farmers and scale-up for others.	GAP certification, marketing, production (e.g., high tunnel implementation)
Diversified funding mix	The organization receives additional sources of revenue that support local sourcing and/or expand market reach.	Grant support (e.g., market research, local promotion through USDA Regional Food Systems, FMPP or USDA REAP for retailers), match funding leveraged to contract technical assistance services
Dedicated personnel	There are either personnel or contractors hired to help the retailer source local product.	
Market control	The ability of buyers or sellers to exert influence over the price or quantity of a the local good, service, or commodity exchanged.	Introducing competitive pricing, upfront loans, supporting land ownership

Appendix 10. Barriers to local and regional sourcing

Code	Definition	Example(s)
Wholesale requirements for producers	Retail market requirements may be prohibitive and create barriers to entry for smaller and/or less resourced producers.	Crop insurance cost; lack of knowledge for crop cultivation (e.g., specialty crop production methods) or produce grading; capacity to scale-up (e.g., staff, equipment for cleaning, grading, and/or refrigeration of locally grown foods to prepare for market) or absorb disruption (e.g., public health emergencies, climate change).
Retail operations requirements	Technological requirements, regulations, and business practices place restrictions on retailers to work with local producers.	POS system compatibility, food safety and GAP certification regulations, corporate rules, minimum buying requirements, minimum transaction fees. place restrictions on retailers and their ability to work with local producers. Retailer insurance to protect against liability) may be cost prohibitive. The more suppliers a store has to work with, the more complicated the system is to maintain. Stores may have difficulty using technology to access available markets.
Lack of investment in supply chain development	There is a lack of infrastructure to prepare and/or transport produce for market sale.	Limited or no transportation, aggregation/grading facilities
Environment/Seasonality	The climate is not conducive to year-round production and/or the natural environment may not be conducive to specialty crop production, which includes pollution of natural resources.	Mountainous terrain, polluted rivers, contaminated soil
Cost of local produce	Local foods procurement is or is perceived to be cost prohibitive or unaffordable by either the retailer or consumer. For retailers, local produce may not account for a significant percentage of profits and investment presents a risk to their bottom line.	NOTE: Operations differ by store size making it difficult to know when a model will work within a store; hard to require stores to work with less resourced producers especially when they can volume order when not local; compatibility (e.g., ordering compatibility)
Retailer Attitudes	Retailers may not perceive benefits to sourcing local produce and/or that it is challenging to work with smaller scale producers.	Perception that it is unfair to offer benefits to some consumers and not others

Code	Definition	Example(s)
Market competition	The region may not have a robust market for local produce and present challenges such as lack of sales data, competition, and/or perceived trade-offs in choosing market channels.	Market influences may include tourist economy, strong (subsidized) commodity crop market or row cropping, lack of market diversity
Inventory tracking/reporting	Complex supply chain processes that change according to local and regional context result in a lack of universal tracking methods, creating inconsistencies in reporting, invoicing, and reimbursement, increasing retailer workload. Nutrition incentive administration may also be inconsistent, presenting similar problems.	Nutrition incentive: Utilizing another funding source to broaden the customer redemption base
Marketing local produce	Diverse consumer preferences make in-store local foods promotions challenging.	Conveying the value of local product, knowing what kind of marketing resonates
Consumer perceptions/expectations	Consumers' real or perceived lack of knowledge about local foods, their availability, where to purchase them, and how to store, prepare, and preserve them are a barrier to local foods purchasing.	
Lack of network connections	A lack of individuals, networks, or organizations to connect farmers to market opportunities, a lack of specialty crop farmers in the region and/or a lack of collaboration along the supply chain are barriers to local sourcing.	
Uncertain program viability	The organization's capacity to administer the nutrition incentive program, especially when the program is one of many an organization coordinates, is a challenge to program participation. Additionally, the match requirement necessitates alignment with funders' goals presenting another challenge.	
Equity	Cultural bias against low-income and/or indigenous shoppers may affect program participation.	Language-to-tech barriers with indigenous communities.

Appendix 11. Current local and regional sourcing needs

Code	Definition	Example(s)
Strategic relationship development	Developing effective partnerships and connections to facilitate local sourcing as well as networking with other states and organizations.	May include providing resources (e.g., wholesale contact list, local product database) to help make connections and identify product availability as well as developing relationships between and among producers, retailers, wholesalers.
Increased local product availability	Developing strategies to make local products more widely available.	Expanding the selection of local products (e.g., meat and dairy, frozen), sourcing from partners who cannot scale up, sourcing from longer distances, season extension
Access to best practices	Sharing resources, materials, training opportunities, etc. within the grantee community to get started with or expand local sourcing and to improve the success of the programs.	
Farmer training	Providing resources and assistance to producers to facilitate wholesale sales.	Gap certification, introducing to grading processes
Retailer training	Providing resources and assistance to retailers to successfully source local product.	Tech support, promotional tips, customer engagement
Access to economic impact data	Sharing aggregated data that illustrates how local sourcing contributes to the local economy.	
Public education	Helping community members understand the value of local sourcing and how incentive programs impact the community	
Local business support	Making it easier for local businesses to support local sourcing.	Business tax breaks or policies

Appendix 12. Future plans/Next steps

Code	Definition	Example(s)
Organizational development	The organization is focused on general internal organization improvements to increase capacity.	Strategic planning, cross departmental collaboration, hiring, emergency planning
Improving reporting	The organization develops or improves a system to accurately track/report local produce sales.	Process to standardize reporting and/or increase frequency of reporting
Advocating for funding	The organization seeks private and/or state funding to support the incentive program or other organization needs.	
Investing in infrastructure	The organization purchases organizational or program assets to support development.	Technology, refrigeration, lighting, land, buildings
Partnerships & Coalition building	The organization forms new or strengthening existing relationships with partners to increase capacity to administer programming or pursue opportunities collaboratively.	
Firm expansion	The organization seeks to add new retail locations - including new areas - and retail types.	Establishing on-farm markets, entering into rural or urban markets
Outreach & participation	The organization raises awareness of and participation in incentive programs through marketing and education on how to use the program.	
Strengthening diversity, equity, and inclusion	The organization takes actions to encourage diversification in program participation and/or among farmers supplying local product.	
Understanding grocery retail operations	The organization educates on typical retail operations to set expectations and baseline local sourcing at the retail level.	
Increasing local sourcing	The organization develops the food value chain and expands the amount and diversity of produce available in store.	Establishing or fostering relationships with farmers/aggregators, pushing stores to source more, expanding eligible produce (e.g., adding frozen fruit and vegetables)
Program re-application	The organization is a current grantee and plans to re-apply to continue the project.	
Transforming food systems	The organization leverages the program to address larger issues within the food system.	Introducing consumers to new food experiences to change habits, increasing system resiliency, seeking to be a part of the "bigger conversation"