ABOUT THE PROJECT

This survey is being conducted to further inform the efforts of the Pioneer Valley Planning Commission’s Food Security Project. The intention of this assessment is to provide a knowledge platform to support the creation of a regional food security plan, and to subsequently strengthen food security at the household, municipal and regional scale in the Pioneer Valley. The interview data will be used to comprehensively assess the status of the current food system and to analyze existing partnerships and barriers. The expected outcomes include recommendations for new projects, enhanced collaboration opportunities, and strategies to reduce any identified concerns. This assessment will support and complement the Pioneer Valley Planning Commission’s regional food security initiative by determining the current status of the local/regional food system and the on-going efforts to promote local and regional food system policy change.

The goal of this research study is to produce a comprehensive assessment of the food-system in the Pioneer Valley. While you may not benefit directly from this research, your participation in the study will increase regional awareness of the efforts across the Pioneer Valley working to strengthen and support the regional food network, and will also further help to build collaboration across agencies and disciplines. At the conclusion of this study, the researchers may publish their findings. Your confidentiality will be protected and all information will be presented in summary format. You will not be identified in any publications or presentations.

The survey tool is organized by food system component, including: overall food system, food production, transformation (processing), distribution, acquisition, consumption, and waste. It is divided in this way in order to streamline the interview process by allowing the interviewer to pass over sections that are not relevant to a particular organization. The survey draws insight from across the field, encompassing questions related to land use, community development, economic development, transportation, environmental protection and social equity. For each food system component, the survey tool is further subdivided into two sections: information gathering (i.e., determining the assessments, data gathering, inventories and mapping that have been previously completed or the information that the organization would like to know) and programs and policy change (the various projects, programs or legislative action that the organization has enacted or would like to enact).
THE SURVEY

For each of the following survey segments, please address these core questions:

- Is this effort something that you are currently working on, have previously worked on or hope to undertake in the future?
- Who are your major partners in these efforts?
- What limitations, barriers or concerns did you encounter?
- What relevant data have you collected and/or would you like to collect or have access to?

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FOOD SYSTEM OVERVIEW

Information Gathering

1. Has your organization conducted a food-related community needs assessment?
   Examples of possible assessment information include: data collection on diet-related health outcomes, food availability (stores or farmers’ markets), food access (transportation), food assistance programs and/or food insecurity information.

2. Has your organization conducted an emergency food (and water) assessment?
   Including the household, community, neighborhood and/or regional scale.

3. Has your organization conducted a food-related economic impact assessment?
   Possible impact data include information on food imports and exports, food-related business information, food-related workforce development, etc.

4. Has your organization conducted an energy or environmental impact assessment?
   Examples of possible assessment information include: assessing the energy used in the production, distribution, and consumption of food; researching impacts of the food system on the natural environment, fisheries and wildlife habitats; etc.

Programs and Policy Change

5. Does your organization have a food security or food system master plan?
   Either a finalized or draft plan versions, either long-term or short-term plans, etc.

6. Is your organization involved with a food policy council or coalition?

7. Does your organization offer a local or regional food resource guide?

8. Does your organization have an emergency food (and water) preparedness plan?
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**FOOD PRODUCTION (GROWING AND RAISING FOOD)**

*Information Gathering*

1. Has your organization conducted a food production land inventory? Examples of relevant information include lists of community gardens, farms, fisheries, and the open-space potential sites for gardens or farms, etc.

2. Has your organization conducted a food-related land use impact assessment? Including gathering information on land use trends relating to farmland conversion to other uses, economic and environmental indicators, etc.

*Programs and Policy Change ~ Rural*

3. Is your organization involved in right-to-farm or farmland preservation efforts? Examples of these efforts include: promoting right-to-farm legislation, providing farmer protection against nuisance complaints, supporting agricultural preservation zoning and/or the transfer of development rights (preserving agricultural land from residential development), etc.

4. Is your organization involved in environmental protection efforts? Examples of these efforts include: environmental monitoring, land conservation, water quality protection, etc.

5. Is your organization involved in farm labor protection or services? Examples of these efforts include: housing support for farm workers (temporary, seasonal or permanent), health care support or services, and environmental hazard protections, etc.

6. Is your organization involved in farm visibility support/services? Examples of these efforts include: support for small farm financing, business planning, marketing, and local food production incentives.

*Programs and Policy Change ~ Urban*

7. Is your organization involved in supporting urban agriculture? Examples of these efforts include: advocacy for urban agriculture zoning, addressing urban agriculture standards (including signage, parking, walkways, fencing, composting, etc.), and permitting or regulations for the existence of urban farms.

8. Is your organization involved in supporting community gardens? Examples include addressing land access, water use, composting, etc.

9. Is your organization involved in promoting residential livestock ordinances? This legislation allows urban residents to raise livestock ranging from examples such as bees, chickens or ducks, to goats, etc.

10. Is your organization involved in local food production education or networking? Examples of these efforts include personal or community gardening education, landshares (connecting landowners with growers/ producers), etc.
Programs and Policy Change ~ Other

11. Is your organization involved in fishing advocacy or education?
   Examples of these efforts include support for either commercial fishing (efforts involving fishing licensure or regulations) and/or recreational fishing for food (including water quality protection information or advocacy), as well as efforts to address dam removal, fish ladders or hydropower, etc.

12. Does your organization address issues around hunting, trapping or other access to “natural” foods?
   Examples of these efforts include addressing issues regarding foraging on protected lands, regulations and policies to promote public health and safety, etc.

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Food Transformation (Processing Food)

Information Gathering

1. Does your organization have a food transformation/processing impact assessment?
   Examples of these efforts include small-scale food processing mapping, assessment of barriers to small-scale food processing, implications for local food distribution and farm-to-institution regulations, etc.

Programs and Policy Change

2. Is your organization involved in supporting the efforts of small-scale local food processors (including slaughterhouses, preparing produce for farm to school programs, etc.)?
   Examples of these efforts include addressing food safety requirements, reviewing regulatory barriers, community programs on food preservation, education on food processing implications, networking or connecting local food processing plants with local food producers, etc.

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Food Distribution (Moving and Allocating Food)

Information Gathering

1. Has your organization gathered information on the location of food assets?
   Examples of relevant information include the location of: grocery stores, community gardens, food assistance programs (governmental, religious, or other) and community food-partner organizations.

Programs and Policy Change

2. Is your organization involved in efforts to support the promotion of local food?
   Examples of these efforts include “Buy Local” campaigning, local food labeling, supporting direct farm distribution (via addressing setbacks, accessory use, signage, etc.) supporting regional production-distribution networks, etc.
3. Is your organization involved in efforts to support food-related economic development programs or incentives?
   Examples of these efforts include: food-related enterprise development, increased job creation or development, workforce development and training, etc.

4. Is your organization involved in efforts to support farm-to-institution programs or legislation?
   Examples of these efforts include addressing local food requirements or laws, connecting food producers with institutional food distributors, etc.

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**FOOD ACQUISITION (PURCHASING AND OBTAINING FOOD)**

**Information Gathering**

1. Does your organization have information about food retail locations and accessibility?
   Examples of this information include: mapping the locations of fast-food or food “marts”, mapping public transportation options to grocery stores or other food markets, mobile market feasibility studies, stakeholder assessments (to support healthy food retail business development), etc.

**Programs and Policy Change**

2. Is your organization involved in supporting incentives for healthy food retail?
   Examples of these incentives include: fast food zoning regulations (particularly around school areas), conditional use zoning (including healthy food requirements for new businesses), farmer’s market permitting or exemptions, “Feedability guides” connecting consumers with healthy food resources, fast food nutrition labeling or education, the banning or soda or trans-fats, or other state or municipal legislation.

3. Is your organization involved in efforts to support improving healthy food accessibility/affordability?
   Examples of these incentives include: improving accessibility/affordability of culturally appropriate food; supporting the acceptance of WIC or SNAP at farmer’s markets or other healthy food venues; addressing transportation opportunities or programs to improve access to healthy food retail; institutional purchasing requirements for recipients of local, regional, or state public funding; increasing healthy food availability to low-income and other food insecure places; etc.

4. Is your organization involved in providing food assistance or emergency food?
   Examples of these efforts include: providing information about emergency food programs or options, coordinating food assistance programs such as food pantries, soup kitchens, etc.
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**FOOD CONSUMPTION (EATING FOOD)**

*Information Gathering*

1. Has your organization conducted a *diet-related health outcome assessment*?

2. Has your organization collected information related to *food insecurity mapping and/or assessment*?
   
   Examples of this information include: collecting the number or location of food insecure households or families, food insecure communities or neighborhoods; gathering information regarding utilization of free or reduced school breakfast or lunch programs (as well as nutritional assessment of school food); etc.

*Programs and Policy Change*

3. Is your organization involved in *healthy food preparation education or training*?
   
   Examples of these efforts include community-cooking classes, healthy food purchasing education, menu-label literacy trainings, etc.

4. Is your organization involved in *school or youth-specific food nutrition programs*?
   
   Examples of these programs or projects include: school food nutrition or environmental education; addressing the nutritional value of school lunch and breakfast; school gardens or edible school-yards; after-school gardening or snack programs; youth-specific food preparation or cooking classes; restrictions on vending machines or junk food in schools; etc.

5. Is your organization involved in *addressing “unhealthy” food media/advertising*?
   
   Examples of these efforts include: addressing low nutrient and fast food marketing (billboards, etc.) particularly targeted to youth.

6. Is your organization involved in *promoting drinking water*?
   
   Examples of these efforts include involvement in drinking water education or campaigns (replacing soda or other sugary beverages with water), addressing drinking water quality and standards, etc.

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**FOOD WASTE (DISPOSAL OF FOOD AND FOOD BY-PRODUCTS)**

*Information Gathering*

1. Has your organization conducted a *food-waste impact assessment*?
   
   Examples of potential data collection include local or regional landfill impact assessment, pollution/runoff assessment, etc.

*Programs and Policy Change*

2. Is your organization involved in supporting *composting programs* or projects?
   
   Examples of these efforts include: household composting training or support; encouraging municipal composting facilities and composting pickup; encouraging the development of food waste to farm programs; etc.
3. Is your organization involved in supporting **food re-use connections or networking programs**?

   Examples of these efforts include: connecting food sources (restaurants, grocery stores, farmers, etc.) with emergency food distribution services to minimize disposal of eatable food, recycle/reuse food packaging programs, etc.

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**OTHER (SPACE FOR STORIES OR ANY OTHER ADDITIONAL INFORMATION)**

1. Is there **any other information** relevant to your organization’s efforts to improve food security and the food system of the Pioneer Valley?

   For example, is there information that you would like us to know and record that this survey might not have covered? What further efforts regarding information gathering, programs and/or policy change would be useful to you?

2. Do you have any additional feedback or comments on this research process or the PVPC regional food security initiative?

3. Is there anything else that you would like to share?

**THANK YOU FOR TAKING THE TIME TO SHARE YOUR INSIGHT AND EXPERIENCES.**

**YOUR EFFORTS AND ENERGY ARE GREATLY APPRECIATED.**
**Food System Assessment Results**

**Core Questions**

The core questions explored were:
- What does our food system look like?
- What do we want it to look like?
- What’s missing? (Or, how do we get there from here?)

**Overview**

To determine the overview of the Pioneer Valley food system as a whole, the responses to the questions were weighted by survey segment, providing each segment with a rating of low, medium or high (*Figure 1*). In general, the agencies working in the Pioneer Valley are engaged in all of the major efforts involved in strengthening our local/regional food system. In some sections, such as “Food Production ~ Urban” and “Food Distribution,” the degree of involvement was quite high. In others, such as “Food Production ~ Other” which looks at alternative food production (fishing or hunting), the degree of involvement is relatively low.

Yet, an impression based on averages can be deceiving. In many aspects the organizations interviewed scored extremely high on the responses to questions regarding rural food production programs and policies. There was one question relating to farm labor services and support, however, that few agencies addressed. The lack of involvement in farm labor resulted in a lower average score for the “Food Production ~ Rural” section as a whole. Thus, while an overview is an important component of the Pioneer Valley food system narrative, further explanation is required to provide a comprehensive analysis in each system section.

*Figure 1: Weighted Food System Overview*
ASSETS AND RESOURCES
The organizations engaged in supporting the local/regional food system of the Pioneer Valley provide a wealth of assets and resources that strengthen the food system at each component. A sampling of these assets is outlined below.

Local Food Production
Over 90% of the organizations interviewed were involved in local food production education or networking (Figure 2, shown in the light and dark greens). This is not overly surprising, as this aspect is part of how these organizations were identified. However, the depth of agency participation in local food production education and networking provides an important and solid platform upon which to sustain and promote the entire local/regional food system of the Pioneer Valley.

Local Food Distribution
Similarly, 90% of organizations interviewed were involved in promoting local food distribution; including efforts such as "buy local" campaigning, local food labeling, supporting direct farm retail and strengthening our regional production and distribution networks. (Figure 3, shown in the light and dark greens)
Healthy Food Accessibility and Affordability
75% of organizations interviewed are actively involved in improving healthy food accessibility and affordability (Figure 4 below, shown in the light and dark greens). These efforts include improving access to culturally appropriate foods, supporting WIC or SNAP coupons at Farmers Markets, addressing transportation barriers, and promoting local farm to institution purchasing legislation.

Healthy Food Consumption and Preparation Education
Similarly, 70% of organizations interviewed provide or support healthy food preparation and consumption education (Figure 5 below, shown in the light and dark greens). These efforts include providing community-cooking classes, offering healthy food purchasing education, and conducting menu literacy trainings. In addition, 9.5% of organizations interviewed plan or want to be involved in these efforts in the future (Figure 5, shown in tan), demonstrating a clear opportunity for continued growth and development within this local food system sector.
Figure 4: Involved in Supporting Healthy Food Accessibility and Affordability

Figure 5: Provide Education on Healthy Food Preparation and Education
OPPORTUNITIES FOR IMPROVEMENT
The data analysis finds two distinct areas with medium rates of involvement but a high indication of intention or desire for future engagement. These two areas, with medium to low rates of involvement but high rates of interest, represent the key opportunities for improvement and targeted development support.

Local Food Processing and Transformation
The first is related to small-scale local food processing or transformation. While half of the organizations interviewed are currently involved in these efforts (*Figure 6 below, shown in light and dark green*), a third of organizations interviewed planned or wanted to get more involved in this area (*Figure 6, shown in tan*). Of all the questions included in the food system survey, this question had the largest response in the “not currently involved, but want to get involved for the future” category.

These results indicate an important opportunity to further research the infrastructure needed to improve local food processing abilities. While some of that research is currently taking place, there needs to be a determined conduit of information to provide the research results to the organizations and agencies engaged on the ground, particularly those that would like to get involved in these efforts but may not know how to best do so. These results further demonstrate the need to provide increased education and networking to support the agencies that are interested in becoming more involved, either by helping them to address food safety requirements and the ways that these regulatory barriers impact small-scale food processing; improving programs on food preservation; or helping to further connect local food processing efforts with local food producers.

*Figure 6: Supporting Small Scale Local Food Processing and Transformation Efforts*
Food Waste Composting
The second major opportunity for improvement falls in the arena of food waste. Many of the organizations interviewed had not previously considered food waste as integral within the food system. Of the organizations interviewed, 50% reported active involvement in this program and/or policy efforts (Figure 7 below, shown in light and dark green), and an additional 14% are not currently involved but would like to be involved in the future (Figure 7, shown in tan). The organizations that are not currently involved in these efforts, but plan and want to become involved, represent the core populations to target with increased educational regarding potential program and advocacy opportunities.

In addition, almost 10% of organizations interviewed “had not previously considered this option, but will consider it for the future,” (Figure 7, shown in purple). This piece of information demonstrates the value of the continued replication of the interconnected food system message, indicating an added knowledge-gain from the conduction of the food system survey assessment itself. The high rate of organizations that are considering or planning to engage in food waste composting in the future signifies a clear opportunity to engage in activities such as improving household or business composting facilities and trainings, as well as advocating for regional or municipal composting facilities and pickup.

![Figure 7: Involved in Supporting Food Waste Composting Programs or Projects](image)
GAPS & BARRIERS
Often the most informative narrative can be found in an exploration of what isn’t there, or what is missing. There are several crucial components necessary to form a robust and viable local/regional food system that are currently absent from the efforts of organizations engaged in improving the food system of the Pioneer Valley. These missing components are outlined in further detail below.

Data
Each section of the assessment survey was designed to include one component about program and policy and another on data or “information gathering.” Roughly one-third of the total survey questions relate to organizational data needs, the responses of which are aggregated and listed in Figure 8 below. Strikingly, the majority of organizations interviewed reported that for the majority of data-related questions they do not have and do not want the data listed (Figure 8, shown in red).

The lack of interest in both data collection and data receipt has meaningful implications on the capacity of the region to collect information needed to inform new or current programs, or even to apply for further food-system-related funding. A cross-tabulation of these results indicates that across the assessment it is the same several organizations that either have or want specific data, those that are particularly data savvy, with the remainder demonstrating a barrier in either not having the resources to collect data, or not having the training to know how to use it.

Figure 8: Information and Data Collection Summary
In addition, the data analysis demonstrates that for one data-related question, regarding a Community Needs Assessment, the majority of organizations interviewed did either have or want this data (created a combined “have and want” total of 70% shown in the combination of the green and yellow bars in the first column above). While it is reassuring that organizations are aware of, and interested in, community needs assessment information; the responses in this question represent a further disconnect in the food system data web. While 43% of organizations interviewed have, or have access to, this information; 29% of organizations working on similar projects within the same region do not have, but want, this same information. Granted, it is possible that some of this information is collected in specific communities and may not be useful or relevant to organizations focused in different locations, however, it is also quite probable that organizations are not aware that this information has been collected or how to access it.

**Farm Labor Support of Services**

Returning to an examination of specific programs and policies, the assessment question that lowered the overall Pioneer Valley rural food production overview relates to farm labor support and services. Two-thirds of the organizations interviewed are not involved, and do not want to be involved, in issues of farm labor protection or services (Figure 9, shown in red). The Pioneer Valley has a substantial migrant farm worker population that face significant health, housing and environmental hazard concerns. While there may be organizations in this region that do address these issues, the agencies interviewed did not seek to address these issues, nor did they partner with agencies that are doing so. Providing adequate farm worker support and services is an extremely important component of a local/regional food system, notably absent from the Pioneer Valley framework.

![Figure 9: Provide Farm Labor Support or Services](image)

*Figure 9: Provide Farm Labor Support or Services*
Emergency Food
While specific organizations in the region are doing incredible work to promote food assistance and to provide emergency food in this region, over 50% of organizations interviewed are not involved and do not plan to be involved with food assistance or emergency food (Figure 10, shown in red). In general, organizations interviewed were very clear that they felt that the concept of emergency food fell outside of their organizational scope. Yet, at the same time the emergency food-focused organizations clearly articulated the need to have greater inclusion in the regional food system network, and to not be functioning separately, or outside of the system. The implications of this information is to create a paradigm shift, where emergency food is not conceived of as outside of the food system, but as an integral piece of the system whole.

![Figure 10: Provide Food Assistance or Emergency Food](image)

Healthy Food Media
Additional absences in the food system structure are efforts to address the “unhealthy” food system. Pioneer Valley residents, particularly youth, are surrounded every day with advertisements supporting a food mentality that is completely disconnected from an awareness about where food comes from, what it’s made out of, and how it impacts health. If an emphasis is not placed on education about how our current global food system impacts the environment and human health, the important message of local food promotion and education is going to be overshadowed.
Alternate Food Production
Finally, in the majority of contexts, food production is contextualized as products grown, on purpose, in soil. When considering alternate forms of food production, such as fishing, hunting, trapping or foraging for food, most organizations interviewed found these concepts outside of the organizational scope. It is important, when considering the interconnected network of the food system as a whole, to broaden the concept of food production to include these forms of food production.

In addition, fishing is a particularly important topic to this region because of the proximity of the Connecticut River. Local fish can provide a valuable source of protein, particularly because it is both plentiful and also free. However, the Connecticut River contains fish that are contaminated by E. coli and Mercury. In this way, the act of fishing transitions from a food system asset as a form of free protein, into a public health hazard. Clearly, addressing environmental advocacy and public health education regarding fish is an important component of strengthening the Pioneer Valley regional food system. Yet, the majority of organizations are not involved in either fishing advocacy or education. (Figure 12 below, shown in red)
Figure 12: Involved in Fishing Advocacy or Education
FOOD SYSTEM ASSESSMENT RECOMMENDATIONS

RECOMMENDATIONS
Based on the data analysis, four overarching recommendations were developed to enhance and promote the regional food system of the Pioneer Valley. The four recommendations are listed below.

1. To provide technical assistance and training on data collection and data use
2. To increase outreach and education about this interconnected food system model and its implications
3. To further address specific program and policy gaps and opportunities
4. To strengthen the connectivity across the system

Data Collection and Utilization
Three core recommendations were developed to enhance data collection and utilization. The first is to provide training and education on data collection and use, either in the format of classes, manuals, or on-line tutorials. Second, offering technical assistance for data-related technological needs, so that if the barrier stems from technical rather than educational issues, these can also be addressed. Finally, with the intention of addressing the importance of improving data and knowledge flow, is the creation of an Electronic Data Hub. The Electronic Data Hub could provide a platform to house current data, as well as a space for organizations to list the information that they have and also would like to have. In this way, the Electronic Data Hub could serve as a valuable and highly accessible food-system data library for the Pioneer Valley region.

Regional Food System Model
The development of and education about a clear and consistent regional food system model is essential to enhance programmatic and policy efforts on a systematic scale. There are several components to the development of a consistent regional model that need to be further addressed. First, it’s crucial to develop a common language in the food system sphere. For example, currently the phrase “food security” has a multitude of different meanings. For some, food security implies that a household has enough to eat, for others that a region can grow enough food to feed itself, food security can also bring up notions of biotechnology and terrorism. Several organizations interviewed prefer to use the language of food resiliency, because to them resiliency implies a more community-developed and active relationship with food. Regardless of which words are chosen, and how they are defined, it is essential to create a common language so that agencies working across the field are able to communicate and understand one another.

Following the development of a common language is the opportunity to increase education and media outreach outlining the complexity and importance of the local/regional food system and its implications. In addition to outreach and education is the creation of a certified regional food system master plan, with clearly
stated timelines, goals and objectives. The master plan can contain a set of municipal guidelines about food, so that when an area or municipality is redoing their zoning, or considering institutional food purchasing, for example, they can look to these guidelines for suggestions and best practices to follow.

**Targeted Opportunities**
The next umbrella category addresses regional gaps and potential opportunities for improvement or support. First, addressing small-scale food processing: including a review of regulatory barriers, strengthening networks, advocating for legislation to support small-scale slaughter houses, community kitchens and food preservation programs. Second, incorporating food waste into the food system by supporting municipal and household food composting. Third, integrating emergency food more deeply into our food system, and strengthening our distribution networks. And fourth, including alternative food production, such as fishing, hunting, trapping and foraging for food, as an integrated component of food production.

**Interconnected System**
Finally, it is crucial to promote the programs and policies that cut across the food system by addressing multiple food-system aspects, because these programs help to strengthen the idea of a truly interconnected system, or regional web.

An excellent example of a program that supports the integrated system is the farm-to-institution or farm-to-school program, as these programs take on a number of different issues at once. Farm to school programs guarantee high volume seasonal purchasing from local food producers, which supports local farms and farmers. They rely on, and therefore strengthen, the regional food processing and distribution capacities. These programs provide nutritious meals to youth. Further, farm-to-school programs are most viable in schools with high numbers of students accepting free or reduced lunch, because these schools are guaranteed government funding for meals, in this fashion farm-to-school programming additionally addresses socio-economic inequities around food and food justice. Farm-to-school programs have the potential to do large-scale composting of food waste, supporting the concept of a closed-loop system. Finally, providing young people with local food exposes them at an early age to the value and varieties of local foods, in a format that they can take with them, as consumers, for the remainder of their lives.