Food Hub Feasibility Study
For Northern New Jersey

Foodshed Alliance
P.O. Box 713
Blairstown, NJ 07825
FoodshedAlliance.org

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The Foodshed Alliance is a 501(c)(3), community-based nonprofit organization that works to strengthen sustainable farming, increase access to local, healthy food, and protect the environment for all members of our communities.

Working at the intersection of food, farming and the environment to foster a self-sustaining foodshed that supports farmers, nourishes people, respects the land, and strengthens New Jersey’s communities, the Foodshed Alliance has four major program areas: Grow New Farmers, Increase Local Food Distribution, and Improve Access to Healthy Local Food for All and Food/Farm Policy.

These program areas emerged out of the Foodshed Alliance’s publication of the Regional Foodshed Resiliency Plan¹ in 2015, which catalyzed conversation in New Jersey on how our local food system can be more socially responsible, environmentally sustainable, and economically beneficial.

Over the past three years, groups, businesses and individuals across New Jersey are beginning to see the significant opportunities to improve our communities’ economic, environmental and social health by working to transform the broader system by which food in their communities is produced, distributed and consumed, and food waste is managed. Working together with partners and stakeholders across New Jersey, the Foodshed Alliance works to catalyze initiatives to improve public health, reduce food-related inequities, circulate money in local economies, create new business opportunities and jobs, and reduce the environmental impacts of agriculture. Importantly, these programs will ultimately bolster food security and community resilience to prevent potential shocks to food systems stemming from an unpredictable climate, increased pest resistance, and declining or increasingly expensive supplies of energy.

By collaborating with a wide range of stakeholders, the Foodshed Alliance seeks to increase opportunities for more local food to make its way to consumers; to gain political support for much-needed food system policy changes; to create appropriate governance structures and appropriate venues for community feedback; and to find funding for this work.

Project Background
There has been interest for several years among Foodshed Alliance stakeholders in evaluating the concept of a “food hub” (aggregation/distribution facility) to see how it could benefit New Jersey’s farm economy. Foodshed Alliance has led and attended several meetings on the concept of food hubs over the last five years.
One of the major findings that came out of the Resiliency Plan was that small and mid-sized farmers who produce food (as opposed to those who grow commodity crops, nursery stock, Christmas trees, etc.) primarily sell directly to consumers through farm stands, CSAs and farmers’ markets. But selling to consumers only goes so far. Selling through an intermediary, such as an aggregator/distributor (aka food hub), can open up significant opportunities for farms and can encourage more local-food farming in our region, leading to a higher level of resilience overall for our communities.

A food hub that aggregates and distributes farm food could help strengthen the farm industry in New Jersey by giving farmers easy access to institutional buyers to fill the need for locally grown, fresh healthy food.

**How to Use This Report**

This study was conducted as a general assessment of a prospective food hub for northern New Jersey and should be considered a starting point for further evaluation. It was a creative challenge to consider all the components related to a food hub (customers, suppliers, location, services, etc.) without knowing who might take the lead of the project or what their business mission and goals might be. In other words, there were no starting assumptions. The approach for creating recommendations was therefore to weigh the relative advantages and challenges to each component. High-level recommendations have been made and are to be used as a framework for further research. Recommendations have been presented as a potential phased approach, with Phase I being near-term (e.g., the first year).

**Feasibility Study Funding**

Funding for this project was provided by the USDA Rural Business Development Grant and the Doris Duke Charitable Foundation.

**Project Team**

Barbara Taylor, Business Consultant, was the principal researcher and project manager for the feasibility study. She is experienced in strategic development, marketing, and program management and specializes in working with businesses and projects in start-up and early growth stages. Her skills include market research, business plan development, new concept development, and direction of integrated marketing campaigns. She has done significant work in the farming, food, and sustainability sectors. In addition to Foodshed Alliance, her clients have included Yard2Kitchen Organic Gardens, Grassroots Natural Market, Mountain Lakes Organic Co-op, Sustainable Morristown, and New Jersey VegFest. Barbara has an MBA from Seton Hall University.

Lisa Kelly, Communications and Development Director of the Foodshed Alliance, provided overall support for the project, particularly in outreach and communications, and authored the report. With the Foodshed Alliance since 2009, she was the lead researcher and author of the Regional Foodshed Resiliency Plan. She has worked as a communications consultant and fundraiser for a number of organizations, including Genesis Farm Learning Center, the Northeast Organic Farming Association of New Jersey, Hackensack Riverkeeper and the New Jersey Highlands Coalition. She was a founder of the Ridge and Valley Charter School, a public elementary school that “educates children for a hopeful and sustainable future.” She graduated with a B.A. from Seton Hall University.

Kendrya Close, Executive Director of the Foodshed Alliance, oversaw the research process as well as the analysis and recommendations. Her passion for local food and sustainable agriculture led her to her position at the Foodshed Alliance in 2008. Kendrya’s experience in the local food movement includes working to engage farmers in sustainable agriculture, educating the community about food issues and connecting what we eat to the land from which it comes. Kendrya has a bachelor’s degree in environmental biology from Ohio University and she worked as a plant pathologist and urban forester for the Davey Tree Company.

**Acknowledgements**

The authors would also like to express great appreciation to everyone who contributed to this report by providing information, offering insights, and verifying facts. A special thank you to our Advisory Team who reviewed the process, findings and recommendations: Chris Tuhy and Guy Botticelli, Happy Harvest Hydroponic Farms; Helen McLaughlin, Mini-Mac Farm; Al Esposito, Poplar Wood Farm; David Zelov, Kittatinny Mountain Farm; Jacob Hunt, Windy Brow Farm; Nicole Kavanaugh, New Jersey Farm Bureau; Courtney Foley, Riverine Ranch; and Dan and Laura Placentra.
**Executive Summary**

There has been interest for several years among farming and food stakeholders in evaluating the concept of a “food hub” (aggregation/distribution facility) to see if and how it could benefit New Jersey’s farm economy. In April 2017, the Foodshed Alliance received grant funding from the USDA Rural Development Block Grant for a food hub feasibility assessment.

This study is a general assessment of the potential for a food hub for northern New Jersey and should be considered a starting point for further evaluation. It considers the components related to a food hub such as customers, suppliers, location, services, etc. It weighs the relative advantages and challenges of each component.

Based on the findings of this study, the Foodshed Alliance has concluded that 1) a food hub that aggregates and distributes farm food could help strengthen the farm industry in New Jersey by giving farmers easy access to institutional buyers to fill the need for locally grown, fresh healthy food and 2) there is both need and opportunity in northern New Jersey for the establishment of a food hub.

Recommendations are presented as a potential three-phase approach, with Phase I being near-term (e.g., the first year). Whoever takes the lead on creating the food hub can use the findings and recommendations in this report as a starting point for further research and for moving forward in establishing a food hub in northern New Jersey.

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<th>Findings</th>
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<td><strong>Suppliers:</strong> There is significant interest from farmers. 77% of farmers surveyed were interested in expanding their markets to achieve more stable sources of income and increased sales volume.</td>
<td>Begin with a trial with 5 to 10 “anchor” farms within a 15-mile radius of each other that are “wholesale ready,” and selected based on experience, specialties and quality of product.</td>
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<td><strong>Institutional Buyers:</strong> There is demand for locally grown products produced by farmers in northwest New Jersey. More than 70% of survey respondents said that they were “very” or “extremely” interested in a new source of local food in northern New Jersey.</td>
<td>Begin with 5 to 10 “anchor” institutional buyers that are within 20 miles of each other as well as farmers.</td>
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<td><strong>Services:</strong> There are more than 300 food hubs in the United States offering a combination of the following services: product aggregation, storage, “light” processing, processing for preservation, branding, marketing, sales, distribution, technical training, business training, and use of a commercial kitchen.</td>
<td>Begin with a simple aggregation and distribution model connecting the anchor buyers and suppliers, prudently adding services as demand and resources allow.</td>
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<td><strong>Products:</strong> Of surveyed farmers, more than 50% produce meat/poultry/livestock, nearly 43% grow vegetables, 30% produce eggs, over 22% grow fruit, 20% produce grains, and 11% produce dairy products. Among surveyed buyers, there is demand for every product category as well as conventional, organic and imperfect. Availability of year-round product is critical.</td>
<td>Begin with 5 to 10 products in the following categories; meat, produce and eggs.</td>
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<tr>
<td><strong>Value-added products:</strong> Value-added production—changing the physical state of the product, such as making strawberries into jam—yields higher returns and fills the gap for year-round products. Many value-added products can use imperfects, using product farms may not be moving currently.</td>
<td>Production of a value-added product is not recommended for Phase I, as processing requires significant investment (product development, equipment, staff, etc.) However, it should be prudently added as resources allow, because of the benefits of year-round products and using imperfects.</td>
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<td><strong>Location and Infrastructure:</strong> There is a wide range of food hub models: virtual/online marketplaces, bricks and mortar facilities, multiple locations (sub-hubs), mobile and pop-up locations.</td>
<td>To minimize costs during launch, it is recommended to start without a facility unless an opportunity presents itself that is reasonable in price and centrally located.</td>
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<td><strong>Revenue Models:</strong> Choices include fee for service, price per unit and percent of sale. Sales price to buyers should typically not exceed 10% over “non-local” products.</td>
<td>Allow farmers to set a price for the product and add a margin sufficient to cover food hub operations.</td>
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<td><strong>Financing:</strong> There are a number of financing options available based on whether the enterprise is a non-profit, for-profit or cooperative venture. Sources of financing include equity financing, grants, loans, and crowd-funding.</td>
<td>A public-private partnership could be the best option to move the food hub forward and strengthen New Jersey’s agricultural foundation.</td>
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<td><strong>Leadership:</strong> Research indicated the food hub’s leader/general manager should have an entrepreneurial attitude, related business success, a broad base of food-hub related skills, and the vision and passion to drive the project forward.</td>
<td>Start with a small team of two people with the possible addition of a volunteer. This team will perform multiple functions (i.e., aggregating product from area farmers, distributing product to buyers, and marketing and sales) and will responsible for learning and fine-tuning the optimal strategies, tactics, and procedures.</td>
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The work plan for this study consisted of primary research, secondary research, and analysis over the course of 15 months.

**Primary Research**
The project included research of existing small and emerging farms and related agribusinesses. Research methods included mailed and online surveys, and one-on-one and group interviews with farm operators in Warren, Sussex, Morris and Hunterdon counties.

The project also included research on the procurement practices and needs of institutions throughout northern New Jersey (counties of Warren, Sussex, Morris, Hunterdon, Passaic, Bergen, Essex and Hudson).

**Primary Research Included:**
- Initial meeting with farmers and stakeholders (20 participants)
- Online and mailed farmer survey to assess feedback on food hub concepts (Foodshed Alliance thanks the New Jersey Farm Bureau for assisting in outreach for the survey.) There were 124 completed surveys.
- Phone interviews with 40+ institutional buyers, value-added producers, and food system professionals to gather high-level feedback on food hub concepts.
- Online institutional buyer survey to assess feedback on food hub concepts (32 completed surveys). The survey was distributed to retail and institutional buyers throughout New Jersey.
- The Foodshed Alliance engaged with several associations and groups to help reach a wider variety of retail and institutional buyers, including the New Jersey Restaurant & Hospitality Association, Greater NJ Society for Healthcare Foodservice Administrators, and Rutgers Food Innovation Center.
- Group discussion with buyers (9 participants)
- Group discussion with farmers (25 participants)

**Secondary research**
Market and trends data was collected throughout the project from the USDA, the National Good Food Network (NGFN), the Wallace Center/Winrock International, universities and many other sources doing research on food hubs, food systems, and demand for local food.

**Analysis**
All research was analyzed to identify trends and opportunities related to various aspects of a food hub. Relative strengths and weaknesses of the different elements were identified.

The Project Team met with the Advisory Team to review and discuss analysis and recommendations.

**Recommendations**
High-level recommendations have been made and are to be used as a framework for further research. Recommendations have been presented as a potential phased approach, with Phase I being near-term (e.g., the first year).

Phased recommendations for each component (e.g., customers, services) are included in “Recommendations” section, and a summary grid for all components is included in the “Summary of Phased Approach” section.
Regional food hubs are defined less by a particular business or legal structure, and more by how their functions and outcomes affect producers and the wider communities they serve. The USDA Regional Food Hub Resource Guide lists defining characteristics of a regional food hub as:

- Carries out or coordinates the aggregation, distribution, and marketing of primarily locally/regionally produced foods from multiple producers to multiple markets.

- Considers producers as valued business partners instead of interchangeable suppliers and is committed to buying from small to mid-sized local producers whenever possible.

- Works closely with producers, particularly small-scale operations, to ensure they can meet buyer requirements by either providing technical assistance or finding partners that can provide this technical assistance.

- Uses product differentiation strategies to ensure that producers get a good price for their products. Examples of product differentiation strategies include identity preservation (knowing who produced it and where it comes from), group branding, specialty product attributes (such as heirloom or unusual varieties), and sustainable production practices (such as certified organic, minimum pesticides, or “naturally” grown or raised).

- Aims to be financially viable while also having positive economic, social, and environmental impacts within their communities, as demonstrated by carrying out certain production, community, or environmental services and activities.

A food hub’s primary function is to provide local producers with access to new markets and services. Selling through a food hub can supplement revenue for the small to mid-sized farmers by aggregating their product for sale through wholesale channels that those farmers otherwise might not be able to access independently. Food hubs exist to strengthen regional food systems.

A food hub also serves to increase access to healthy food for consumers within its region, and can be a source of employment, as well as community economic development.

A commonly accepted definition is that food hubs are businesses or organizations that actively manage the aggregation, distribution and marketing of source-

What is a Food Hub?
identified food products, primarily from local and regional producers, to strengthen their ability to satisfy wholesale, retail and institutional demand.

**Characteristics of Food Hubs**
Food hubs have existed in some form for more than 40 years but their popularity has increased dramatically within the last decade as consumer demand, restaurants, retail and institutional buyers increasingly wanted to offer food that is healthy, locally produced, and sustainably grown. The market for locally sourced food nationally was $12 billion in 2014 and could reach $20 billion by 2019.²

In addition, food hub survival rates are quite good compared to other new business establishments. A USDA report³ released in November 2017 showed there are currently about 360 active food hubs in the U.S.—and that the five-year survival rate for hubs since 2005 is 88 percent, which is significantly higher than the survival rate for all types of new businesses, at 53 percent.³

Food hubs are not without their challenges however. Aggregation and distribution of highly perishable food is very complicated, and low margins are required to be competitive, making it a challenge to provide farmers with adequate profit margin, and food hub workers with a fair wage. There may also be limited supply and demand for local product. No two food hubs are exactly the same and, for the purposes of this feasibility study, the research team did not start with a specific model in mind. There is often more success when teams allow the form and structure of an enterprise to emerge from the data regarding what producers and buyers need and what services and infrastructure already exist in an area.

The following characteristics of food hubs, along with benchmark data, were drawn from the 2015 “National Food Hub Survey” Report⁴ and the 2013 “Food Hub Financial Benchmarking Study”⁵

**Products may include:**
- Produce (fruits, vegetables)
- Meats/proteins
- Grains
- Milk and dairy products
- Eggs
- Specialty goods and/or value-added products

**Facilities and operations may include:**
- Large warehouse facilities
- Virtual/online marketplaces
- Multiple locations; sub-hubs
- Pop-up locations
- Technical assistance only
Customers may include:
- Wholesale (Grocery stores, supermarket chains, schools, senior-care, hospitals, restaurants, correctional facilities, etc.)
- Direct to consumer
- Hybrid

Services may include:
- Aggregation: aggregate different products from multiple farms to one or more centralized location
- Storage: Product storage/cold storage/warehousing
- “Light” Processing: cooling, washing, cutting, sorting, packing and labeling
- Value-added Production: preservation of food (freezing, canning, dehydration) or creation of value-added products (e.g., tomato sauce)
- Access to a shared use commercial kitchen
- Sales and Distribution services: Selling and transport to customers
- Technical training: GAP training/assistance with certification/food safety training; production and post-harvest handling training
- Business training in marketing, sales, insurance, labor and taxes.
Classification types may include:
- Operational structure: For-profit or non-profit
- Ownership options: Cooperative, publicly or privately owned businesses (sole proprietorship, partnership, corporation), or public/private partnerships

Key Findings — 2015 National Food Hub Survey
The Wallace Center at Winrock International has been instrumental in aggregating national level data on the characteristics and impact of food hubs, conducting surveys in both 2013 and 2015.

- The 2015 survey findings indicate that as new food hubs continue to open for business, more established food hubs continue to operate and thrive.
- By 2015, 75% of food hubs completing the survey were breaking even or better, indicating that a food hub model can be financially successful across a variety of legal structures and geographic or customer markets. More details are available at 2015 National Food Hub Survey.
Findings and Analysis
NJ Economic & Business Climate

New Jersey is densely populated with some large employers and a relatively supportive environment for food businesses.

On an overall state level, New Jersey has a population of just over 9 million people, according to the U.S. Census Bureau\(^7\) (7/1/17 estimate).

Choose New Jersey\(^8\) states:
- Unemployment Rate: 4.4% (May 2018)
- Labor Force: 4.5 million
- State GDP: $575 billion (2016, current dollars)

Food and agriculture is New Jersey's third largest industry, behind pharmaceuticals and tourism (NJ Department of Agriculture). According to Choose New Jersey, the state has a growing $126 billion food industry and agriculture sector and is home to more than 50,000 food manufacturing companies, R&D facilities, distribution centers, retailers, and farms employing more than 440,000 people.

Among the largest food companies are Campbell Soup Company, which has called Camden home since 1869; Goya Foods, the largest Hispanic food company in the U.S., and Arizona Beverages which has had its manufacturing and distribution facility in Woodbridge since 1992. Wakefern Food Corporation, the nation’s largest retailer-owned supermarket cooperative, is headquartered in NJ.

In food retailing, according to the New Jersey Food Council\(^9\), New Jersey has 6,032 stores (including grocers, convenience stores, specialty food retailers and wholesalers) that generate $10.5 billion in sales. For restaurants, New Jersey has 18,337 eating and drinking place locations (as of 2016) that generate $16.3 billion in sales, according to the National Restaurant Association\(^10\).

In 2012, the latest data available from the U.S. Department of Agriculture\(^11\), the agriculture sector contributed cash receipts totaling about $1 billion.

According to the New Jersey Department of Labor\(^12\),

### Top Employers in New Jersey

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<th>NJ</th>
<th>Hunterdon</th>
<th>Morris</th>
<th>Sussex</th>
<th>Warren</th>
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<td>Labor force*</td>
<td>4.6 million</td>
<td>63,500</td>
<td>254,500</td>
<td>73,600</td>
<td>56,100</td>
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<tr>
<td>Population**</td>
<td>9,005,644</td>
<td>125,059</td>
<td>499,693</td>
<td>141,682</td>
<td>106,798</td>
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<td>Top employers***</td>
<td>RWJBarnabas Health</td>
<td>Rutgers University</td>
<td>Foster Wheeler</td>
<td>Hunterdon Healthcare</td>
<td>Picatinny Arsenal Atlantic Health System</td>
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*New Jersey Department of Labor and Workforce Development (May 2017)

**US Census (2017 estimates)

***Source: Choose New Jersey
northern New Jersey’s farms not surprisingly are in less populated counties (Sussex, Warren, Hunterdon and Morris), but they are within close proximity (an hour’s drive) to some of the most populated.

New Jersey is strategically located in the heart of the Northeast corridor, providing easy access to New York City and Philadelphia. More than 20 million consumers who collectively have nearly $800 billion in disposable income live within a two-hour drive of northern New Jersey.

New Jersey’s food industry has access to a wide variety of educational resources, including Rutgers University’s Department of Agricultural, Food and Resource Economics, and the Agriculture Business Technology program at Rowan College at Burlington County.

Rutgers University also has a 46,000-square-foot Agricultural Experiment Station in New Brunswick and a Food Innovation Center (FIC) in Bridgeton. In addition, The Cumberland County Improvement Authority (CCIA) was recently awarded $2.5 million grant to build a Food Commercialization Center in Bridgeton next to Food Innovation Center. It will enable new food pro-

duction companies, like those that graduate from the Rutgers Food Innovation Center Business Incubator program, to leverage technical assistance resources and access 27,000 square feet of space for industrial food processing, shipping and administrative use. It is expected to be completed late 2018.

New Jersey also offers its food companies the several programs to encourage growth.

- New Jersey Manufacturing Extension Program (NJMEP) offers technical and management solutions to assist food manufacturing companies become more productive, profitable and globally competitive.
- New Jersey’s Food Industry Talent Network, led by the Rutgers Food Innovation Center, builds partnerships by connecting the manufacturing industry with businesses, educational institutions, workforce organizations, training groups, and community-based organizations to develop and support advanced manufacturing in the Garden State and formulate strategies for competing at the regional, national, and global levels.

NJ: #42 In Local Food Commitment

New Jersey is #42 in the country in its commitment to local food, falling one notch since last year, according to the 2018 Locavore Index.

The Index ranks the 50 states, plus Puerto Rico and the District of Columbia, using a variety of indicators related to local food production and consumption. It has been produced annually since 2012 by Strolling of the Heifers, a non-profit food advocacy organization based in Vermont.

Vermont ranks #1, followed in order by Maine, Montana, Oregon, New Hampshire, Massachusetts, the District of Columbia, Hawaii, Wisconsin and Rhode Island. Not only is New Jersey #42, but it ranks way behind #22 Alaska with its short growing season.

The Index bases its rankings on number of farmers markets, community-supported agriculture operations (CSAs), and food hubs — all compared on a per-capita basis — along with the percentage of each state’s school districts with active Farm-to-School programs and the percentage of the budgets of those programs spent on local food.

The index includes data from the USDA’s Census of Agriculture, including data on the dollar volume of direct-to-the-public food sales by farmers, including sales at farmers markets, (CSAs), farm stands and online sales.
The Index incorporates data from the US Department of Agriculture on its “Know Your Farmer – Know your Food” grants, as well as the per-capita value of a set of U.S. Department of Agriculture grants focused on local food, such as the USDA’s Local Food Program Promotion Grants, Specialty Crop Block Grants, Farmers Markets Promotion Grants, and Farm-to-School Grants.

Consumer Interest in Local Food

The USDA Census of Agriculture’s 2015 Local Food Marketing Practices Survey\(^{15}\), the first-ever national survey focused on local food market practices, found that 167,009 producers sold through local markets in 2015. Sales totaled $8.7 billion, of which 35% was sold direct to consumer (e.g., farmers markets, roadside stands, CSAs), 27% was sold to retailers (e.g., Whole Foods, Kroger’s), and 39% was sold to institutions (e.g., K-12 schools, universities, hospitals) and non-traditional suppliers (e.g., suppliers that market locally branded food products such as food hubs).

The food industry research firm Packaged Facts predicted local food sales would jump to $20 billion in 2019, outpacing the growth of the country’s total food and beverage sales.\(^{16}\)

Supporting data from Statista\(^{17}\) in 2015 shows that interest in local foods in the United States has risen rapidly in the last years as the “locavore” movement continues to sweep the nation. Consumers cited several reasons for preferring local brands, but the majority said they prefer them for a better price/value and a positive experience with the brand. As of spring 2015, the number of people who said they purchase locally grown food amounted to around 82 million. When asked how often they eat locally grown foods, over a fifth of U.S. consumers in 2014 stated twice a week.

Jersey Fresh Program

Jersey Fresh is an advertising, promotional and quality grading program launched in 1984 by the New Jersey Department of Agriculture to help farmers inform consumers about the availability and variety of fruits and vegetables grown in New Jersey. Since then, consumer awareness has increased, and it has become the benchmark for other states to initiate their own state-grown agricultural marketing programs.

The New Jersey Department of Agriculture promotes Jersey Fresh to restaurants, schools, colleges, big box stores, local communities, hotels, hospitals and more. The cost to the farmer is $30 per year. More than 1,000 farms in the Garden State use the Jersey Fresh logo on their packaging.

Farmers who use the Jersey Fresh logo report receiving better prices for quality-graded products. Retailers profit by the program because consumers perceive it as high-quality produce and are willing to pay more for it.

Over the years, the Jersey Fresh program has done a range of conventional and digital advertising, including television, radio, bus wraps, billboards and social media. They have developed recipe videos, run photo contests and engaged food bloggers and brand ambassadors. They also provide Jersey Fresh branded aprons for in-store nutritionists to wear, promoting the “health angle” of using local produce.

In addition, the “Made with Jersey Fresh” logo is available to companies who make food items using New Jersey’s agricultural products. The logo alerts consumers that the products are made using local ingredients. Incorporating Jersey Fresh products into processed foods extends the season to year-round and expands distribution well beyond the region. There are even a few beers and distilled spirits starting to use this logo.

In 2018, the New Jersey Department of Agriculture launched a new Jersey Fresh website, FindJerseyFresh.com, focused on connecting consumers, distributors and retailers with growers of Jersey Fresh produce, wineries, breweries, distilleries and restaur-
rants. It features a wholesale buyers’ guide and interactive mapping to serve as a match-making resource for consumers and buyers to find Jersey Fresh produce and products.

According to a news report, total annual spending on Jersey Fresh marketing over the years has “swung as wildly as the weather in a New Jersey planting season.” It started at $325,000 in 1984 and hit almost $1.3 million by 1988, only to be cut back to just $50,000 in 1992. Two years later, it was back up near $1.3 million, according to a study published by Rutgers in 2005. By 2015, it was back down to $342,000.

Although funding is down, the brand is still relevant and recognized. Results from a recent Fairleigh Dickinson University Public Mind Poll showed strong brand recognition for Jersey Fresh.

- About 95 percent of survey respondents believe that having a strong farming industry is important to the overall economic health of New Jersey.
- About 74 percent say they have heard of the slogan “Jersey Fresh.”
- 59 percent say they seek out the Jersey Fresh label when shopping for fresh fruits and vegetables.

Buying Trends in Retail
Local is still in demand by retailers but there is increasing competition for new products entries. For example, ShopRite is doubling down on its arsenal of locally procured options. The store’s Locally Grown program includes farm-raised beef, seafood, produce, baked goods, honey, craft beer and roasted coffees.

Aerofarms continues growth and penetration of retail. Aerofarms based in Newark, the world’s largest indoor vertical hydroponic farm, renamed its retail brand Dream Greens. The Dream Greens brand hit the shelves of ShopRite, Whole Foods, FreshDirect, and Newark chain Seabras in February 2017. Before that, the business was selling its greens into food service under the Aerofarms brand.

In 2017, food prices in America were down for the longest period in about 60 years. A number of foods — most notably, beef, eggs and dairy — saw price drops over the course of 2016 and into 2017. For 19 months straight, the U.S. government reported declines in the food consumer price index, which compares supermarket prices with what they were a year earlier.

The food index increased 0.2 percent in June 2018. The food index increased 1.4 percent for the 12 months ending June 2018.

Online grocery shopping sources are gaining traction with millennials and other shoppers. US consumers are getting more comfortable buying food online. According to Nielsen data, 23% of Americans bought groceries online in 2017.

Millennials are more apt to use online shopping to order food.

Fresh Direct allows its customers to shop “local.” If you live in New Jersey, Fresh Direct defines “local” as the northeast U.S. according to its website.

While interest in online shopping for food is increasing, keeping those customers isn’t easy. Customer retention rates for the meal-kit sector are reportedly dismal for all the major players. Consolidation is expected to continue.

Buying Trends in Education
School demand for local continues to grow.

As cited in the 2017 Farm to School Network Report, 42% of all schools in the U.S. participated in farm-to-school activities in the 2013-2014 school year, reaching 23.6 million children and incorporating almost $800 million worth of local food products into schools.

In New Jersey, approximately 48% of districts participated in farm-to-school activities as of 2015 according to the most recent USDA Farm to School Census. Produce is the biggest purchase, followed by milk.

The Economic Impacts of Farm to School report published by the National Farm to School Network stated that the reality of getting local food into school districts has proven challenging for a myriad of reasons, including cost and the lack of processing abilities in schools. The most effective way of gaining entry may...
be to go through an existing distributor or food service management company that may deliver meals in pre-prepared forms.

Summer meals at schools can present an opportunity. According to the 2015 USDA Farm to School Census, 6% of New Jersey schools are using local foods in summer meals.

**Buying Trends in Restaurants**

Locally sourced products are still in demand in restaurants. Locally sourced produce and meat/seafood is once again on the annual “What’s Hot” list compiled by the National Restaurant Association.

The National Restaurant Association has named local foods as a top trend every year since 2010. Restaurants say buying and serving local foods yields good publicity, greater flexibility in order quantities, and improved customer experience thanks to better tasting, fresher ingredients.

Chefs at the Foodshed Alliance Buyer Roundtable estimated “about 20% of diners really care about the origins of the food.” Farm-to-table has “been there forever” but its marketing impact remains important.

**Related Food Trends**

**Transparency**

According to the Mintel 2018 Global Food & Drink Trends Report, consumers are increasingly demanding transparency as to what is in the products they buy. Food and drink manufacturers are moving towards being more forthcoming about their ingredients, production processes, and supply chains. This is a big opportunity to cite local sourcing. Even beer has new local label.

**Plant-based products**

Interest in natural, simple and flexible diets is driving further expansion of vegetarian, vegan and other plant-focused formulations, according to the Mintel 2017 Global Food & Drink Trends Report. An example cited is a product, Not Milk, which is made with almonds, peas, rice, nuts, linseed, coconut and vanilla.

Meanwhile, meat demand is decreasing nationally with millennials, with 12% now identifying as “faithful vegetarians.”

**No Waste**

In the US, Americans waste 133 billion pounds of food annually. The amount of waste in the US has motivated the government to propose a goal to halve the amount of food wasted in the US by 2030 and, along the way, “to create a generation of Americans who are sensitive to food waste.”

Consumer awareness of the issue of food waste is also spreading because of efforts by retailers and restaurants to reduce or donate food and drink that is past the sell-by date, blemished or damaged. In the US, grocers ranging from Whole Foods Market to
Walmart are testing sales of imperfect produce as well as the founder of Trader Joe’s with Daily Table. There are also businesses such as Full Harvest and Hungry Harvest that purchase imperfections from farmers and sell to consumers or at wholesale.

According to Mintel, just over half (51%) of US adults who purchase vegetables are open to buying less-than-perfect ones, such as those that are bruised or oddly shaped. Mintel also states that there is an opportunity to innovate with materials that would otherwise have been discarded. More attention will be given to innovations that commercialize edible food waste including the previously discarded by-products of juicing, canning and other production processes.

**Mission-based companies**

Trends shaping 2018 include a strength in mission-based companies in the food space. Food companies founded with both altruism and product quality at their core find that their marketing story and higher purpose help them succeed and stand out in today's market.

![Ironbound Farm, a mission-based company that produces Ironbound Hard Cider, is a regenerative farming enterprise that addresses issues income equality, environmental stewardship and former prisoners’ re-entry into society.](image)

**Growth of hydroponics**

Hydroponic growing is becoming more prevalent.
- Hydroponics are being considered for organic certification.
- A new Jeff Bezos-backed warehouse farm will grow enough produce to feed over 180,000 people per year.

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**Partners & Players**

The USDA’s Food Hub Directory documents 224 food hubs in the country and none in New Jersey. However, some sources place the number of food hubs in the country as high as 400. In New Jersey and neighboring states, there are a number of organizations that currently aggregate and distribute local food. Here is a snapshot of those players.

**Zone 7**

- **FreshFromZone7.com**
  - Type: Distributor of local farm fresh food
  - Location: Ringoes, NJ
  - Facility: Warehouse
  - Founded: 2008
  - Founder/Team: Mikey Azzara
  - Farmers: 120+ farms. Most are southern New Jersey farms; very few in the four northern New Jersey target counties
  - Products offered: Produce, grains, eggs, meats, cheeses, and more
  - Customers: 300+ restaurants, grocers, schools and more in New Jersey and beyond
  - Services offered: Distribution only - no processing
  - How to work together or differentiate: They could be distribution partner or a new food hub could be a source of product for them (especially since they are in a different growing zone). Zone 7 has indicated that they are open to discussion.

**Harvest Drop**

- **HarvestDrop.com**
  - Type: “Purveyor” (who does distribute)
  - Location: Morristown, NJ
  - Facility: No physical location, no warehouse; trucks only
  - Founded: 2015
  - Founder/Team: Oliver Gubenko
  - Farmers: 60+ farms throughout New Jersey and eastern Pennsylvania.
  - Products offered: Produce, meats, eggs
  - Customers: Restaurants in Morris County, Essex, eastern Bergen, and Jersey Shore
  - Services offered: Picks up produce from farmers and distributes within 24 hours of harvest
  - How to work together or differentiate: Harvest Drop does not target restaurants in less populated areas which may be an area of opportunity. Also a new food hub could be a source of product for them, and they are especially open to product during the winter season.

**Seashore Produce**

- **SeashoreEast.com**
  - Type: Distributor
  - Location: Vineland and Atlantic City, New Jersey
Facility: Distribution facility
Founded: Originally founded in 1908 in the Atlantic City Terminal Market.
Founder/Team: In 1985 Barry Yagodich purchased the company from the Palmisano family. Today the company is run by Barry’s son, Chad.
Farmers: To achieve scale, works with a lot of national growers such as Andy Boy, Foxy, Sunkist, and Driscoll’s. The bulk of the product is not local but they are interested in more local.
Products offered: Local tomatoes, blueberries, sweet corn, peaches, and peppers, apples, broccoli, Brussels sprouts, mushrooms, sweet potatoes, and more.
Customers: K-12 schools, colleges and universities, healthcare and senior living facilities, business and industry locations, national chain restaurants, independently-owned restaurants, casinos, country clubs, and theme parks. Seashore had the USDA Department of Defense (DoD) Fresh Fruit and Vegetable Program contract for schools for many years until it was awarded to Gargiulo’s Produce in 2018.
Services offered: Primarily distribution; some processing (cutting and bagging portion-sized produce for schools)
How to work together or differentiate: Monitor for future developments on the DOD contract.

Gargiulo’s Produce
GargiuloProduce.com
Type: Distributor
Location: Hillside, NJ
Facility: Distribution facility
Founded: 1929
Founder: Frank Gargiulo
Farmers: Tristate area and Pennsylvania
Products offered: Variety of seasonal produce such as apples, mushrooms, potatoes, cabbage, and squash during winter
Customers: As of 2018 they have the official DOD contract for schools in New Jersey.
How to work together or differentiate: Possible distributor for a new food hub; possible buyer of a frozen corn or other product that works year-round.

Tri-County Cooperative Auction Market
TriCountyCoop.net/
Type: Aggregator/co-operative
Location: 619 Route 33 West, Hightstown, NJ
Facility: Warehouse
Founded: 1934 (originally as a food auction)
Founder/Team: Currently seeking a Manager
Farmers: 45 - 75 local farms; very few in northern New Jersey. Primarily small and mid-size farmers who are not GAP certified
Products offered: Fresh produce, nursery stock, flowers and garden plants
Customers: Wholesale buyers for local food stores, restaurants, roadside stands, farm markets and distributors
Services offered: Aggregation.
How to work together or differentiate: Their warehouse could serve as an aggregation point for a new food hub.

Local Bushel
LocalBushel.com
Type: purveyor and distributor
Location: New York, NY
Facility: No physical location
Founded: 2014
Founder/Team: Yusha Hu, CEO
Farmers: within 250 miles of NYC - small and mid-sized farmers
Products offered: 200 products ranging from heritage breed pork and free roaming chicken to seasonal produce
Customers: Local Bushel picks up and distributes to restaurants - mostly NY
Services offered: online ordering, product harvesting out of field once order placed; delivery
How we work together or differentiate: we could be an additional source of product for them

Lancaster Farm Fresh Cooperative
LancasterFarmFresh.com/
Type: non-profit co-operative (120 farmer-owners/300 farms)
Location: Lancaster, PA
Facility: Warehouse
Founded: 2005
Founder/Team: founded by a handful of farmers; Casey Spacht is co-founder, executive director, and a member farmer of LFFC
Farmers: Primarily from Clarion County, PA (Amish farmers)
Products offered: Certified organic fruits, vegetables, and other farm fresh products
Customers: Retail (through CSA) and wholesale: Eastern Pennsylvania, New York City, and most of the tri-state area
Services offered: Aggregation, distribution
How to work together or differentiate: Serves as a good model of a co-op if that is chosen for a new food hub
Common Market
TheCommonMarket.org
Type: Non-profit food hub
Location: Mid-Atlantic (Philadelphia) and Georgia. Currently surveying the greater New York and northern New Jersey area and are looking at outreach to institutional and wholesale buyers, and greater procurement from local farms
Facility: Warehouse
Founded: 2008 (approximately)
Founder/Team: Haile Johnston, Co-Founder
Farmers: 80 producers in Pennsylvania, New Jersey, Delaware and Maryland.
Products offered: Wide variety of produce as well as local products available year-round including antibiotic-free proteins (chicken, pork, beef and turkey), value-added (canned tomatoes, grains, pickles, spreads, frozen, tofu), dairy and eggs
Customers: Institutional (education, healthcare), corporate, retailers, restaurants, and more
Services offered: Aggregation, distribution, GAP certification
How to work together or differentiate: Common Market could potentially take the lead of the food hub as they look at ways to enter northern New Jersey

Greenmarket Co.
GrowNYC.org
Type: Non-profit food hub
Location: New York City (South Bronx)
Facility: Warehouse
Founded: 2009
Founder/Team: founded by parent organization GrowNYC
Farmers: about 75 regional farmers
Products offered: Produce, grains, eggs, and more
Customers: Retail and institutional buyers
Services offered: Aggregation, distribution and more. New York State is investing $15 million in the construction of a new $20 million facility for the food hub. The state-of-the-art facility will be 120,000 square feet. The Food Hub will create 95 permanent jobs and 150 construction jobs and is expected to open in 2019, selling $18 million worth of product per year.
How to work together or differentiate: Collaboration is undetermined, however ongoing competitive assessment is required, due to the proximity of this facility to northern New Jersey.

Food System Support in New Jersey
There are many governmental and nonprofit organizations working in the state to support farms and the New Jersey food system. In addition to the Foodshed Alliance, some of them are:
- New Jersey Department of Agriculture
- NJ State Agriculture Development Committee
- County Agriculture Boards
- USDA’s Farm Service Agency
- New Jersey Farm Bureau
- New Jersey Farmers' Market Council of Farmers and Communities
- New Jersey Agriculture Society
- New Jersey Farmers Direct Marketing Assn.
- New Jersey Agricultural Experiment Station at Rutgers
- New Jersey’s USDA Natural Resources Conservation Service
- Garden State Dairy Alliance
- New Jersey Future Farmers of America (FFA)
- North Jersey Resource Conservation and Development Council
- Northeast Organic Farming Association of New Jersey
- Duke Farms
- Greater Newark Conservancy
- Genesis Farm Learning Center
- America’s Grow a Row
- Grow it Green Morristown
- Greater Newark Conservancy
- Ironbound Community Corporation
- New Jersey Farmers Against Hunger
- Ample Harvest
- Community Food Bank of New Jersey
- Groundwork Elizabeth
- New Jersey Farm to School Network
Legal & Regulatory Environment

With the advent of the Food Safety Modernization Act (FSMA), we now have a uniform minimum standard of food safety that the overwhelming majority of fresh produce growers must adhere to. The key with FSMA is that it is a minimum requirement. It will not eliminate buyer-imposed programs for food safety, such as Good Agricultural Practice (GAP), that are already in place. Even if a farm is FSMA-compliant, they may still need to be certified under one or more GAPs to sell to certain buyers.

GAP Certification

Good Agricultural Practices (GAP) are voluntary audits that verify that fruits and vegetables are produced, packed, handled, and stored as safely as possible to minimize risks of microbial food safety hazards. GAP audits verify adherence to the recommendations made in the U.S. Food and Drug Administration’s Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables and industry recognized food safety practices. Many institutional buyers will only do business with farms that are GAP-certified.

Food Safety Modernization Act

The Food Safety Modernization Act Produce Safety Rule (FSMA) is in place, and will launch in 2019. In preparation, the New Jersey Department of Agriculture and Rutgers University food safety specialists are offering confidential On-Farm Readiness Reviews to farmers throughout New Jersey. The On-Farm Food Safety Team will work with growers to review their operation and make suggestions for possible modifications to comply with FSMA. Some growers may be exempt from the FSMA Produce Safety Rule. The deadlines for FSMA are staggered from two to four years, depending on how much each farm generates in food sales and other factors.

“Made in your County” Branding

New legislation signed in January, 2018, allows counties to create “made in your county” promotional labels to propel the popularity of hyper-local agriculture products made right within their borders. “The legislation is based on the idea that there’s a growing interest in local farm-to-table agriculture,” said Senator Steven Oroho (R-Morris, Sussex, Warren), who sponsored the bill. “Helping to highlight where food is actually produced will support that effort and help counties to build their own brands.” Based on the new law, effective immediately, every county has the opportunity to develop its own label at its own expense.

2018 Farm Bill

The 2014 Farm Bill is set to expire on Sept. 30, 2018. As of June 2018, drafts of the bill are expected to voted on by the House of Representatives and the Senate. At this early stage, it appears the draft bills cut funding for programs that support local farmers and conservation; create new pesticide safety loopholes that would threaten farmers, farm workers, and the environment; and restrict anti-hunger assistance. It is unclear whether grants, like the Local Food Promotion Program, and others that have been available to strengthen local food systems, and projects like food hubs, will be reduced or even eliminated.

Proposed Food Hub Legislation S-1953

In May 2018, the NJ Senate Economic Growth Committee passed bipartisan legislation sponsored by Senator Steve Oroho (R-24) that would support small businesses by establishing New Jersey “Food Hub” opportunities for local farmers. “Many of New Jersey’s small to mid-size farms lack the capacity to access larger markets, placing our farmers at a disadvantage,” Oroho stated. “The creation of ‘food hubs’ will provide opportunities for our farmers to access new markets and help more locally grown produce to reach our neighborhoods.” The legislation, S-1953, would direct the Department of Agriculture to authorize and advise “Food Hubs,” which it defines as businesses or organizations that actively manage the distribution and marketing of locally made food products. No funding was proposed or put in the bill.

Revenue Model

Food hubs require a highly complicated and interconnected network of production, processing, warehousing, transportation, distribution, customer service, logistics, and financial management. While social missions are integral to the foundation of a food hub, a strong business plan is necessary to articulate the core business, achieve financial viability, and prepare for challenges ahead.

Food hubs face low margins that necessitate high volumes and efficiency to be successful.

Some sources have recommended a revenue split of 70/30, with 30 percent of gross sales covering the operational cost of the business, and 70% of gross sales being retained by the growers.
The chart above is a summary of revenue from participants in the 2015 NGFN Food Hub Survey. Revenue is shown by years of operation, legal structure, and business model.

Common pricing models for services include:

- **Aggregation**
  - Fee for service
  - Price per unit
  - % of sale

- **Distribution**
  - % of sale
  - Commission

- **Processing for convenience**
  - Fee for service
  - Price per unit

- **Processing for preservation**
  - Fee for service/facility rental
  - Price per unit

- **Training (technical, sales, marketing, etc.)**
  - Fee for service

Should the organization that takes the lead on a food hub be a mission-oriented company, it is important to recognize the balance between mission and profits.

Mission-focused goals might be to:

- Provide competitive, high prices to small, independent growers.
- Support these growers in expanding their production by providing technical assistance services.
- Promote sustainable agriculture by moving only organic products and/or supporting growers to move towards organic production.
- Improve healthy food access by serving institutional customers, retail outlets in food deserts, offering low cost direct-to-consumer services, etc.
• Incorporate workforce development and job creation strategies.

**Business Structure**

There are several options for business structure of the food hub and no single clear choice for the “best” or “preferred” structure or operational model.

Here are descriptions of the various operational models along with sample hubs using those models.

**For-Profit Organizations**

A for-profit organization is formed to conduct business activities while also earning a profit. The profits earned can be used to pay operational costs and be distributed to the owners. For-profit organizations must pay Federal or State taxes on profits. Assets of a for-profit organization belong to the owners of the business. If the food hub dissolves, the assets are distributed to the owners of the business, based on their level of ownership.

For-profit organizations have many options when it comes to financing the business and can offer investors a percentage of the food hub ownership. Profits may qualify for certain grants and may solicit donations, although donations are not tax-exempt to the donor.

**Examples of For-Profit Food Hubs**

- **Cherry Capital Foods**, Traverse City, MI (Multi-Product)
- **Moore Farms and Friends**, Woodland, AL (Produce)

**Nonprofit Organizations**

A nonprofit organization is created “for the purpose of serving a public or mutual benefit other than the pursuit or accumulation of profits for owners or investors.” Nonprofit organizations can earn a profit, but these profits can only be used for the operation of the organization, such as paying employee wages, rent, and utilities.

Besides earned income, nonprofit organizations raise funds through grants and by soliciting donations. Nonprofit organizations may qualify for State and Federal tax exemptions, as determined by the Internal Revenue Service (IRS). Donations made to a qualified nonprofit organization are also tax deductible for the donor. If a nonprofit dissolves, the assets are donated to another nonprofit organization.

**Examples of Nonprofit Food Hubs**

- **Common Market**, Philadelphia, PA (Multi-Product)
- **Local Food Hub**, Charlottesville, VA (Produce)

Whether for-profit or nonprofit, a business can be organized as various legal entities. Corporations, LLCs, and cooperatives are the most common choices for food hubs.

**Corporation**

Corporations offer the investor (stockholder) limited liability protection. Any liability is limited to the value of the stock held in the corporation. Corporations require oversight by State regulatory boards, and in some cases by the U.S. Securities and Exchange Commission. A corporation has a perpetual existence. Owners can routinely sell or reassign stock (or ownership) without disrupting ongoing operations.

While there are different types of corporations, it is worth considering the benefit corporation or B Corp as a legal business entity structure. It is a for-profit corporation that has sustainable principles engrained into its business practices. For example, a B Corp might source only fair-trade products or support a social or environmental cause. While they focus on turning a profit on behalf of shareholders, they are allowed to make decisions and effect strategies that are not solely based on maximizing profit. Benefit corporations are recognized in New Jersey. **Eastern Carolina Organics**, Durham, NC, is an example of a benefit corporation.

**Examples of Corporation Food Hubs**

- **Capay Valley Farm Shop**, Esparto, CA (Multi-Product)
- **Sonoma Organics**, Sebastopol, CA (Produce, Cheese, Mushrooms)

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**For-Profit vs. Non Profit: Comparison**

<table>
<thead>
<tr>
<th>For Profit</th>
<th>Nonprofit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money returned to the owners</td>
<td>Money returned to the organization</td>
</tr>
<tr>
<td>Not exempt from Federal or State taxes</td>
<td>Typically exempt from Federal and State taxes</td>
</tr>
<tr>
<td>Assets distributed to owners after dissolution</td>
<td>Assets distributed to other nonprofits after dissolution</td>
</tr>
<tr>
<td>Funds are raised by offering investors a percentage of ownership</td>
<td>Funds are raised by soliciting donations and applying for grants</td>
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USDA Running A Food Hub Volume 2

Foodshed Alliance Page 23 Food Hub Feasibility Study
Limited Liability Company (LLC)

An LLC’s purpose is to combine the limited liability for its members usually found in the corporate structure (and to limited partners in limited partnerships) with the pass-through tax advantages of a general partnership (any profits/losses pass through to the individual investor and appear on the individual’s tax return). LLC formation and liability characteristics are similar to that of a corporation. Necessary documents must be filed with the designated State agency. Unlike a general partnership, shareholders are not personally liable.

Examples of Limited Liability Company Food Hubs
- Firsthand Foods, Durham, NC (Beef and Pork)
- Sprout MN, LLC, Brainerd, MN (Produce)

Cooperatives

A cooperative is a business owned and democratically controlled by its members. Headed by a board of directors, members hold the voting power within the business.

Equity mainly comes from the members, rather than outside investors, although cooperatives are allowed to raise equity from outside sources. If a cooperative fails, the liability of each member is limited to the amount he/she has invested.

Earnings/losses on business conducted on a cooperative basis are allocated to the members on the basis of the use they made of the cooperative during the year, not on the basis of equity held. The allocations may be distributed in cash or retained in members’ accounts in the cooperative, to be distributed at a later time. Members usually receive a combination of cash and an allocation of equity.

Cooperatives increase the likelihood that farmer interests around price, product mix, buyer requirements, etc. are adequately addressed.

The Lancaster Farm Fresh Cooperative got started by only having five farms participating. It has continually scaled to where now they have 300+ farms participating. They deliver to drop off locations in New York City, Philadelphia, Baltimore and Washington DC as well throughout Pennsylvania.

Examples of Cooperative Food Hubs
- Wisconsin Food Hub Cooperative, Madison, Wisconsin (Produce, Value-Added)
- Tuscarora Organic Growers Co-op, Hustontown, PA (Organic Produce)

Facility and Infrastructure

There are a wide variety of facility and infrastructure options for food hubs. It is important to plan for future growth and flexibility in any physical assets, incorporating a long-term view of infrastructure needs.

Facilities and mode of operations include:
- Virtual/online marketplaces
- Bricks and mortar facilities
- Multiple locations; sub-hubs
- Mobile
- Pop-up locations

There are several things to consider in determining type of facility, infrastructure needed and location.

Proximity to farmers: Tools like EasyMapMaker.com can plot locations of participating farms on a map to help identify a central and optimal location.

Proximity to major roads and customers: This will help determine how easy it will be to transport product in and out of the facility, as well as the ease of customers accessing the business.

Visibility to public: Signage can also function as a marketing tool for the food hub.

Level of interest within a community: Because agricultural businesses, including food hubs, are seldom 9- to 5 operations, considering the community atmosphere when locating a potential food hub is important. Depending on the perception of the community, new businesses can often face “Not in My Backyard” attitudes in a community, creating barriers and obstacles before a hub has even been established.

Zoning: Zoning is the enactment of ordinances to regulate land use to conform to State land conservation and development laws and the county comprehensive land-use plan. Zoning regulations affect land use, lot size, building heights, density, setbacks, and other aspects of property use.

Virtual Food Hub

Virtual food hubs, also known as an online marketplace, can lower costs for both producers and consumers by automating the sales process. Internet-based food hubs offer the advantage that both producers and customers can carry out a transaction, including payments, at any time.

Distribution, or the delivery of ordered product, must be adequately addressed within the virtual system, making it either the responsibility of the farm to deliver or the buyer to pick up, or provide some mechanism...
for sellers and buyers to cooperatively share responsibility of getting the product to where it needs to go.

Virtual food hubs can have high start-up costs due to software development. They are also reliant on farmers constantly updating inventory online, tracking orders, filling orders, and coordinating delivery with buyers.

In 2014, 47FARMS, a cloud-based software solution, was developed by Supply Chain Knowledge Co. of Princeton, NJ, to enable commerce between farmers and institutional buyers. Its model was to create a network of virtual food hubs in New Jersey each consisting of seven or more farms in a 40 mile radius. This model of seven farms in a 40-mile radius was based on the premise of keeping a close connection with the source of your food and the benefit of reducing carbon emissions.

47FARMS created an online ordering system but appeared to be lacking both a sales force to recruit and engage both farms and institutional buyers. It also never appeared to adequately address and systematize the delivery of product. As of the publication of this report, 47FARMS has shut down operations.

**Brick and mortar (central warehouse, etc.)**

A prototypical brick-and-mortar food hub site is a warehouse of about 1,000 - 10,000 square feet based on functions with room to expand.

Components may include:
- Multiple climate zones
- Coolers
- Commercial kitchen
- Refrigeration / freezer (walk-in); ideally with subdivided compartments to provide optimum storage conditions for products that require specific temperature and humidity conditions
- Dry-storage space (store materials such as boxes and packaging, cleaning items, general-use items)
- Office space (including bathrooms, break room)
- General space for reception, loading, unloading, grading, repackaging, and delivery of fresh produce
- Loading zone
- Paved areas for receiving and cooling, outside storage, parking for cars and trucks, ramps, and covered dock space
- Adequate parking for staff
- Equipment and supplies such as: equipment for washing, grading, or re-packing, forklifts, pallets, office equipment, software for ordering/inventory
Due to growing sales in online shopping, retailers from big-box stores to mom-and-pop shops are shutting their doors leaving empty space in New Jersey’s malls, shopping centers, strip malls and Main Streets.

Facilities such as empty grocery stores and warehouses may have the basic infrastructure necessary for a food hub (refrigeration, loading zone, etc.) as well as easy access to major highways.

The Foodshed Alliance has been in discussion with Dr. Jean-Paul Bonnet regarding a warehouse he owns on Route 23 North in Franklin, NJ. Bonnet’s medical practice is housed there and he is hoping to fill the rest of the space with business ideas that fit with his mission, such as a community garden, a café that employs developmentally disabled adults and a recovery center. He hopes to install a refrigerated food storage space and a commercial kitchen, which would compliment a food hub in that space.

**Multiple locations; sub-hubs**

A food hub can be organized so that multiple locations, aka sub-hubs, are aggregation points. For example, farms can deliver their products to a larger farm(s) in their area where the product can be sorted and sent out for delivery.

Common Market, for example, in addition to its brick-and-mortar facility in Philadelphia, has set up aggregation points on existing farms. While not as costly as a brick-and-mortar facility, this decentralized supply chain requires specialized coordination and oversight.

**Mobile**

Some food hubs are completely mobile and operate without any brick-and-mortar facilities at all. All equipment needed for the hub (trucks, coolers, pallet jacks, communication system) can, for the most part, be acquired “off the shelf.” This decentralized supply chain also requires specialized coordination and oversight.

**Pop-up locations**

Some food hubs utilize existing farmers’ markets as “pop-up” locations. The benefit is there is no permanent infrastructure needed and fewer distribution costs. Innovative approaches could get funded like in the Community Foodworks project in the District of Columbia. In New Jersey, the Millburn Farmers’ Market tried a farm-to-institution pickup and it was not successful; buyers did not want to go to farmers’ markets to pick up produce.

**Financing**

The level of capital and infrastructure investment that a food hub requires will depend on its particular business model and plan, which may change over time, as well as the food hub’s core activities and services, existing or planned sales and costs, leasing versus owning opportunities, and the availability of existing infrastructure through partnerships.

There are a number of financing options available based on whether the enterprise is to be a nonprofit, for-profit, or cooperative.

New Jersey food manufacturers may qualify for the Manufacturing Equipment and Employment Investment Tax Credit for the acquisition of equipment and/or for the addition of employees due to equipment investment.

The New Jersey Economic Development Authority (NJEDA) offers loans, loan guarantees, bond financing and more to provide access to capital to meet the specialized needs of food manufacturing companies, both large and small.

Skills Partnership Grants are customized training grants that provide employers up to 50% cost reimbursement assistance to train employees to meet current and future skills requirements. Since 2010, the New Jersey Department of Labor and Workforce Development has invested nearly $10 million to provide training assistance to more than 120 food companies.

Unlike many U.S. states, New Jersey places no personal property tax on machinery, equipment or inventory.
The USDA’s Value-Added Producer Grant (VAPG)\textsuperscript{38} program helps agricultural producers enter into value-added activities related to the processing and/or marketing of new products. The goals of this program are to generate new products, create and expand marketing opportunities, and increase producer income. Applicants may receive priority if they are a beginning farmer or rancher, a socially-disadvantaged farmer or rancher, a small or medium-sized farm or ranch structured as a family farm, a farmer or rancher cooperative, or are proposing a mid-tier value chain. Grants are awarded through a national competition. Each fiscal year, a notice is published in the Federal Register.

The USDA’s Local Food Promotion Program funds the development and expansion of local and regional food business enterprises to increase domestic consumption of, and access to, locally and regionally produced agricultural products, and to develop new market opportunities for farm and ranch operations serving local markets. Examples of food-related initiatives that received funding for 2017 can be found on their website.\textsuperscript{39}

Independent producers, agricultural producer groups, farmer- or rancher-cooperatives, and majority-controlled producer-based business ventures are eligible to apply for this program. The program offers planning and working capital grants.

Planning grants are for planning activities such as conducting feasibility studies and developing business and marketing plans for the marketing of a value-added agricultural product. Working Capital grants are to operate a venture and pay the normal expenses associated with producing a value-added product (marketing and advertising, some inventory and salary expenses, processing costs).

The Fair Food Network\textsuperscript{40} provides financing to good food enterprises that support vibrant working farms and resilient local food economies in the Northeastern United States. They bring a unique mission-driven lens and work with borrowers to match their needs with the right product including loans, royalty financing, or equity investments. Enterprise qualifications are reviewed based on mission fit, management strength, business model, risk, and potential for financial return. Investments are offered as stand-alone investments ranging from $50,000 to $350,000 or as part of a larger financing package. They fund enterprises that meet the following criteria:

- Committed to building vibrant regional food systems in the northeastern United States
- Incorporated in the U.S.
- Financing needs of $50,000 or more
- Annual revenue of at least $100,000
- One or more years of operating history
- Profitable or can demonstrate a path to profitability
- Strong, committed management team
- Able to provide financial projections for three years (five years preferred) including income statements, balance sheets, and cash flow statements

Crowdfunding and Crowd Investing
There are now dozens of specialized kinds of crowdfunding, in addition to rewards-based crowdfunding led by Indiegogo and Kickstarter. In 2016, the U.S. Securities and Exchange Commission started allowing non-accredited investors to invest in startups for equity, birthing equity crowdfunding. For the first time, through equity crowdfunding, smaller investors can legally invest in a piece of a start-up — actually own shares or debt. Entrepreneurs using this method are allowed to raise up to $1.07 million.

Government Support
A public–private partnership is a cooperative arrangement between two or more public and private sectors, typically of a long-term nature. The state of New York saw the value in backing food hubs and playing a role in the regional food supply chain and in 2016 allocated $15 million of the $20 million needed to build Greenmarket’s new 20,000-square-foot food hub.

The co-founders structured The Common Market as a 501(c)(3) nonprofit and was able to get grants for capital, and also tap into low-interest loans. The organization received upwards of $1 million in grants from the W.K. Kellogg and Kresge Foundations, and has worked with RSF Social Finance to fund the $1.2 million acquisition of a 50,000-square-foot warehouse in North Philadelphia.

Leadership/Staff
Efficiently operating a food hub requires numerous roles to be filled. In many cases, multiple roles are filled by one employee, helping to minimize staffing costs. Full-time staff can be supplemented with part-time seasonal labor and volunteer staff. Research from NGFN shows that smaller food hubs with average annual sales of about $500,000 or less average two full-time employees, two part-time employees, and three seasonal employees. On the other end of the scale, food hubs operating at $5 million - $10 million average 42 full-time employees and 3 part-time employees.

Potential roles include:

**General Management and Operations**: Organizing, overseeing, and directing the food hub’s day-to-
day operations. In the early stages of the food hub, the function may also include some of the other functions listed below.

**Food Safety Oversight:** Maintaining compliance (such as for GAP certification), including records and plans, as well as readying the food hub for any audits or inspections included in acquiring the certifications.

**Sales and Customer Service:** Acquisition and development of customers. This often includes travel and face-to-face interaction with current and potential customers. It is preferable to hire someone who already has connections with buyers.

**Order-Taking and Customer Interaction:** Serve as a contact point for customers wishing to purchase products from the food hub. This includes receiving and organizing orders from customers, either by phone or online, and communicating availability and promote the purchase of additional volume.

**Marketing:** Develop branding and create marketing platforms such as website and social media. Support sales staff and build community awareness.

**Producer/Production Coordination:** Coordinate supply for orders and address any logistics or supply chain issues affecting the ability to fill orders and make timely deliveries. Individuals in this role typically interact with producers on a daily basis, both face to face and through other forms of communication, helping to avoid large oversupply or undersupply of product, based on seasonal changes.

**Transportation and Logistics:** Plan and coordinate product pickup and order delivery routes and schedules. This position is chiefly responsible for ensuring that products are efficiently delivered in a timely manner.

**Product Pickup:** If producers are not responsible for dropping off their products at the food hub’s aggregation point, this function entails coordination with producers for scheduling product pickup.

**Order Fulfillment and Delivery:** Delivery product; includes loading, unloading, and delivering product to customers, as well as fueling the truck, cleanup after the delivery is complete, and light vehicle maintenance.

**Financial Oversight:** Secure funding and track relevant financial information.

**Bookkeeping and Accounting:** General administration functions such as filing, recordkeeping, tabulating sales, and maintaining customer files, including products sent and returned. This is also a role that is often contracted to an outside agency.

**IT/Web Management:** Whether the food hub uses proprietary inventory and ordering software or third-party software to track orders, inventory, and deliveries, managing a food hub’s information system’s infrastructure will be necessary. Depending on the food hub’s reliance on software, it may be more efficient to contract for these services.

**General Labor:** Several functions of the food hub will fall under the category of general labor. Product reception, storage, handling, repacking, and fulfilling orders are all examples of such activities. General cleaning and maintenance of food hub facilities is also necessary. Other functions may also be necessary depending on the individual food hub.

**Product Movement and Handling:** Once product arrives at the food hub, it will require general movement and storage or preparation for aggregation and other activities.

**Maintenance:** The food hub facility will require regular maintenance. Depending on the level of equipment used, these activities may be performed by the food hub’s general labor staff. Should the food hub use special equipment, additional staff, maintenance contracts, or employee training may be necessary.
Farming in New Jersey: Statewide and Regional Statistics

New Jersey has 9,071 farms as of the most recent USDA 2012 Census of Agriculture. There are 3,482 farms in Sussex, Warren, Morris, and Hunterdon counties; 38% of total farms in New Jersey.

The USDA Census of Agriculture defines a farm as “any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the year.” In New Jersey, if a property of five acres or more that sells more than $1,000 in ag products (anything from corn silage to firewood), it is eligible for a farmland assessment tax break.

Therefore, it is important to understand that the USDA Census of Agriculture includes in its statistics farms that don’t feed directly people, including commodity crops, such as soy, corn and hay, Christmas trees, nursery/floriculture, sod and equine farms. While it is true under this definition that New Jersey has 9,071 farms (as of the 2012 Census), the actual number of food-producing farms is significantly lower.

The USDA Census categorizes farms by what they produce and does not distinguish food producers from producers of non-food products. Part of the difficulty is that many farms are diversified (one farm can grow vegetables, hay and Christmas trees, for example).

The chart below indicates the number of farms that produce food in NJ. These numbers most accurately describe the supplier market for the food hub.

<table>
<thead>
<tr>
<th>Farms by size (acres)</th>
<th>NJ</th>
<th>Hunterdon</th>
<th>Morris</th>
<th>Sussex</th>
<th>Warren</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 9</td>
<td>2,237</td>
<td>313</td>
<td>115</td>
<td>191</td>
<td>150</td>
</tr>
<tr>
<td>10 to 49</td>
<td>4,221</td>
<td>727</td>
<td>174</td>
<td>424</td>
<td>362</td>
</tr>
<tr>
<td>50 to 179</td>
<td>1,790</td>
<td>319</td>
<td>63</td>
<td>197</td>
<td>187</td>
</tr>
<tr>
<td>180 to 499</td>
<td>541</td>
<td>61</td>
<td>11</td>
<td>56</td>
<td>60</td>
</tr>
<tr>
<td>500 to 999</td>
<td>182</td>
<td>16</td>
<td>3</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>1,000 +</td>
<td>100</td>
<td>11</td>
<td>0</td>
<td>7</td>
<td>12</td>
</tr>
</tbody>
</table>

As indicated in the chart on the following page, the total market value of crop sales in these four counties is 17% of statewide value. However, livestock sales is a significant 47% of statewide sales.

Number of Farms Producing Food in NJ and in Regional Counties

<table>
<thead>
<tr>
<th></th>
<th>Veg</th>
<th>Nuts</th>
<th>Fruit</th>
<th>Berries</th>
<th>Poultry</th>
<th>Meat Goats</th>
<th>Sheep &amp; Lamb</th>
<th>Hogs &amp; Pigs</th>
<th>Cattle &amp; Calves</th>
<th>Milk Cows</th>
<th>Organic certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ Total</td>
<td>1127</td>
<td>38</td>
<td>516</td>
<td>101</td>
<td>1549</td>
<td>581</td>
<td>819</td>
<td>298</td>
<td>1224</td>
<td>127</td>
<td>43</td>
</tr>
<tr>
<td>Hunterdon</td>
<td>100</td>
<td>10</td>
<td>68</td>
<td>11</td>
<td>311</td>
<td>101</td>
<td>209</td>
<td>47</td>
<td>234</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Morris</td>
<td>61</td>
<td>1</td>
<td>42</td>
<td>11</td>
<td>75</td>
<td>19</td>
<td>46</td>
<td>17</td>
<td>36</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Sussex</td>
<td>80</td>
<td>1</td>
<td>57</td>
<td>2</td>
<td>212</td>
<td>62</td>
<td>89</td>
<td>46</td>
<td>207</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>Warren</td>
<td>58</td>
<td>3</td>
<td>51</td>
<td>11</td>
<td>155</td>
<td>59</td>
<td>101</td>
<td>39</td>
<td>181</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL 4 COUNTIES</td>
<td>299</td>
<td>15</td>
<td>218</td>
<td>35</td>
<td>753</td>
<td>241</td>
<td>445</td>
<td>149</td>
<td>658</td>
<td>81</td>
<td>12</td>
</tr>
</tbody>
</table>
## Statewide vs. Regional Farm Statistics

<table>
<thead>
<tr>
<th></th>
<th>NJ Totals</th>
<th>All 4 counties % of total NJ</th>
<th>Sussex % of NJ</th>
<th>Warren % of NJ</th>
<th>Morris % of NJ</th>
<th>Hunterdon % of NJ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># of Farms</strong></td>
<td>9071</td>
<td>38%</td>
<td>885</td>
<td>10%</td>
<td>784</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Acres in Farms</strong></td>
<td>715,057</td>
<td>34%</td>
<td>61,033</td>
<td>9%</td>
<td>72,250</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Avg. Farm Acreage</strong></td>
<td>79</td>
<td>n/a</td>
<td>69</td>
<td>87%</td>
<td>92</td>
<td>116%</td>
</tr>
<tr>
<td><strong>Market Value of Products Sold ($000)</strong></td>
<td>1,006,936</td>
<td>20%</td>
<td>$18,654</td>
<td>2%</td>
<td>$91,205</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Crop Sales ($000)</strong></td>
<td>890,767</td>
<td>17%</td>
<td>$11,590</td>
<td>1%</td>
<td>$54,622</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Livestock Sales ($000)</strong></td>
<td>116,169</td>
<td>47%</td>
<td>$7,064</td>
<td>6%</td>
<td>$36,543</td>
<td>31%</td>
</tr>
</tbody>
</table>

USDA 2012 Census

### Leading NJ Agriculture Sectors

- $367M in fruit and vegetables
- $355.7M in nursery/greenhouse/sod
- $93.3M in field crops
- $65.7M in poultry and egg
- $46M in equine
- $22M in dairy


### New Jersey is a National Top-Ten Producer of Fruits and Vegetables

<table>
<thead>
<tr>
<th>Produce</th>
<th>Rank</th>
<th>Production</th>
<th>Prod. Value</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>eggplant</td>
<td>2nd</td>
<td>14.8 million lbs.</td>
<td>$44.01 million</td>
<td>650</td>
</tr>
<tr>
<td>peaches</td>
<td>2nd</td>
<td>42.2 million lbs.</td>
<td>$44.01 million</td>
<td>4,700</td>
</tr>
<tr>
<td>cranberries</td>
<td>3rd</td>
<td>56.9 million lbs.</td>
<td>$16.45 million</td>
<td>2,500</td>
</tr>
<tr>
<td>spinach</td>
<td>4th</td>
<td>30.7 million lbs.</td>
<td>$9.47 million</td>
<td>2,200</td>
</tr>
<tr>
<td>asparagus</td>
<td>4th</td>
<td>5.6 million lbs.</td>
<td>$12.42 million</td>
<td>2,000</td>
</tr>
<tr>
<td>bell peppers</td>
<td>4th</td>
<td>63.3 million lbs.</td>
<td>$35.90 million</td>
<td>3,100</td>
</tr>
</tbody>
</table>
58% of those surveyed in the Foodshed Alliance Farmer Survey identified “more stable sources of income” as a top priority, followed by “larger sales volume” at 45% and “new customer markets” at 33%.

“Other” priorities included: “growing within our limited time available for management;” “develop repeat customer base;” “increase customer base;” “value added to identify and differentiate our products.”

77% of those surveyed online were interested in expanding their markets; 23% were not interested.

Of those interested in expanding their market:
- 52% cited “finding and engaging with new buyers” as a top challenge.
- 35% cited “advertising/marketing” or “business planning.”
- 10% cited “distribution lines.”
- Respondents that answered “other” cited labor/”finding good employees” as a challenge.

Our online survey results showed that:
- More than 50% of those surveyed grow or produce some kind of meat/poultry/livestock.
- Nearly 43% grow vegetables.
- 30% produce eggs.
- More than 22% grow fruit.
- 20% produce grains.
- 11% produce dairy products.
- 7% produce a value-added product.

One-third of farmers surveyed sell all that they produce. Two-thirds have at least some product that does not get sold.

Some products have more excess than others; all have at least some excess and could be considered for the food hub as prime products or as imperfects (pending other factors such as labor required to get product off the field). The following percentage of farms had at least something left unsold:
- 96% of farms that produce fruit
- 85% of farms that produce vegetables
- 71% of farms that produce eggs
- 65% of farms that produce meat/poultry/livestock
- 36% of farms that produce dairy
A food hub could help farmers sell excess produce, based on some of the top reasons it is not sold.
- More than 40% have more quantity than buyers; a food hub could help with this.
- More than 25% have imperfect produce; this may be an opportunity for the food hub to create a value-added product or process a less than perfect product.
- Almost 15% stated that “lack of workers” is the reason product is left on the field.
- Another respondent in our survey clarified that product was left on the field because “there is a very small local market and productions are not large enough for large scale distribution.” In addition, one of the farmers at the Foodshed Alliance Farmer Roundtable said that he sometimes must leave apples on the field because “there is not a market to sell to.”

More than one-third cited “less profit selling wholesale” as a reason they do not sell to institutions.
- One of the farmers at the Foodshed Alliance Farmer Roundtable stated that if selling to wholesale, he would “have to sell at 80-90% of retail” if he was “going to make a living.”
- Another farmer at the Roundtable balanced the cost of scaling up with profit, stating that she “may not be able to scale up if there is only a 1-5% premium.” The “cost to go offsite to deliver is too much.” Currently she has people come to her which is very easy.

Many farmers currently donate excess food to soup kitchens or charities.
- More than one-third currently donate excess product to these sources. In addition, farmers who select “other” used excess product to feed their families or their animals.
- Less than 10% let the product go to waste.
While about a third are not interested in selling to institutions (and 39% don’t have enough product currently), a food hub can address other issues.

- Just over a third cited less profit selling wholesale. However, the correct food hub strategy could address this.
- About one-third said they “don’t have the connections or time to sell” and over 11% cited “distribution ability.” This is something a food hub can help with.

There was interest in the services a food hub could offer.
- Marketing/promotion, distribution, and value-added production were most often cited, each with over 30% interest.
**Findings**

**Buyers**

**Interest in Local Sourcing**
All but one of the respondents in our buyer survey are currently purchasing local products from New Jersey.

When asked where they purchase local food from, respondents to our buyer survey provided a wide array with over 30 sources: Profeta, Bobolink, Alstede, Ironbound Farm, The Foraged Feast, Blue Moon Acres, Fossil Farms, Brick Market, Melicks, Roaming Acres Farm, Goffle Road Poultry Farm, Ledgewood Farm, Race Farm, Pittenger Farm, Catalpa Ridge Farm, Totten Family Farm, Hackettstown Livestock Co-op, Cream O Land Dairy, Zone 7, Harvest Drop, Ordille, Lancaster Cooperative and ShopRite.

The respondents from the institutional buyer survey indicated that there was an interest in buying from a new local food hub.

**Interest in a Food Hub, by type of buyer**

<table>
<thead>
<tr>
<th>Type of Buyer</th>
<th>No interest</th>
<th>Some interest</th>
<th>Neutral</th>
<th>Very interested</th>
<th>Extremely interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributor</td>
<td></td>
<td></td>
<td>50%</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Grocery Store</td>
<td></td>
<td></td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Healthcare</td>
<td></td>
<td>18%</td>
<td>9%</td>
<td>45%</td>
<td>27%</td>
</tr>
<tr>
<td>Meal Kit Service</td>
<td></td>
<td>72%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant (chain)</td>
<td></td>
<td></td>
<td>50%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Restaurant (independent)</td>
<td></td>
<td>36%</td>
<td>9%</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td>School (non-public)</td>
<td></td>
<td></td>
<td></td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>School (public)</td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Value-added food</td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>processor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
All buyer segments expressed interest and can be considered as potential buyers.

- Restaurants
- Schools (public and non-public)
- Grocery stores
- Healthcare Organizations
- Distributors
- Value-added food processor
- Home delivery meal kits

Survey respondents indicated interest in procuring a wide range of local product, ranging from seasonal vegetables and fruit most in demand. However, animal products—eggs, cheese, and meat—were also of interest to half to almost three-quarters of survey respondents.

There is interest in an array of value-added products. For survey purposes, a list was created of options for value-added offerings based on some of the most abundant crops noted by farmers (corn, tomatoes, apples, peaches, berries). The most favorable items were:

- Canned or jarred tomatoes (over 60%)
- Tomato sauce (over 60%)
- Sliced apples, peaches, or melons (over 50%)
- Frozen corn (over 50%)
- Frozen peaches or berries (over 40%)

There is a market for imperfect produce. More than 50% of survey respondents would purchase produce that is less than “perfect” looking.

With the exception of distributors, most buyer segments seem to be open to imperfect produce.
Organic produce is somewhat important to food buyers but may be showing signs of cooling down.

From New Venture Advisors: “In the regions we’ve studied, certified organic production is often very limited, representing less than 15% of production among producers we survey. At the same time, buyers do not typically express a strong preference for certified organic, echoing the sentiments of A.C. Gallo, president and CEO of Whole Foods: ‘Over the last five to seven years…our customers are more interested in buying produce that’s local than organic.’ This finding was reiterated by market research recently conducted by The Hartman Group.”

Volume of demand ranged from low, medium, to high amounts (varied by product); the majority would buy at least some amount of product per week.

More than 80% of food buyers purchase for 10 or fewer individual units (schools, restaurants, etc.), although there are a few who buy for more than 20 units.
Buyers would spend more if product was available from a new source.

The majority of respondents (> 80%) would pay some level of premium for local food. A food hub must charge enough to sustain as a business but should provide a fair price to the farmers for product.

50% of respondents are willing to pay a 1% - 5% premium, and over 25% are willing to pay 6% - 10%. A few respondents were willing to pay greater than 20%. 18% would pay no premium.

In terms of buying process, some buyers must work through pre-approved vendor lists. It will be easier in the short-term to work with customers who do not have to go to pre-approved vendors, however over the long-run it could be beneficial to take the steps to get on a pre-approved list.

When asked whether each buyer was required to purchase food from pre-approved vendors, the overall response was close to 50/50.

Healthcare, schools and, to some extent, grocery store chains were most likely to have to buy from pre-approved vendors. Restaurants were less likely.

While some hospitals may be able to purchase independently, many have to go to approved vendors such as AFI, Performance Food Group, Sysco, or Plainfield Produce. In either case, quality of vendor produce and pricing is critical.

One retail buyer explained: The process has evolved. About 12 years ago, there was little freedom in-store to work with a farm or local producer on their own. You had to go through regional guy and general directive was had to be big enough to supply all stores. Then, about five years later, after some of the Michael Pollan books, the stores were more empowered to source locally - each store had their own “forager.” Now it is swinging back, and the regional foragers are now more global as they try to consolidate buying power. There are a few exceptions where small farms deliver directly to a couple stores.

Most public schools buy through distributors, not with individual farms. There are extensive USDA procurement procedures and a lot of regulations.

Individual restaurants (not chains) seem to have freedom to order what they want.

Survey respondents were asked to select their top 5 most important attributes. Overall, pricing (80%), quality (73%), freshness (63%), convenience (60%),

<table>
<thead>
<tr>
<th>How important are the following attributes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive pricing</td>
</tr>
<tr>
<td>Quality and consistency of aesthetically appealing</td>
</tr>
<tr>
<td>Product must be extremely fresh; from farm within 24 hours</td>
</tr>
<tr>
<td>Convenience: Product is delivered to me</td>
</tr>
<tr>
<td>Support of local farmers</td>
</tr>
<tr>
<td>Short lead-time; able to place order and get delivery</td>
</tr>
<tr>
<td>Quantity of product</td>
</tr>
<tr>
<td>Year round availability</td>
</tr>
<tr>
<td>Unique product</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
and support of local farmers (53%) were the top five most important attributes for buyers/survey respondents. A unique product was the least important with 20% ranking it in their top 5.

In terms of barriers, the top three issues were high pricing (consistent with the prior question asking which were their most important priorities), difficulty in getting local product year-round, and “other” which yielded a variety of random requests.

There is a mixed response as to whether GAP certification is required.

The majority need product delivered.
Recommendations
Recommendations

Need for a Food Hub

Based on the findings of this study, the Foodshed Alliance has concluded that 1) a food hub that aggregates and distributes farm food could help strengthen the farm industry in New Jersey by giving farmers easy access to institutional buyers to fill the need for locally grown, fresh healthy food and 2) there is both need and opportunity in northern New Jersey for the establishment of a food hub.

In going forward in the development of a food hub, there are several “best practices” cited in research sources such as the Hudson Valley Food Hub Study, New Venture Advisors, and National Good Food Network. We strongly recommend making these best practices foundational in the food hub’s development.

- Launch with “anchor” buyers and sellers.
- If needed, provide initial assistance to farms with food safety and obtaining necessary certifications.
- Create strong systems for inventory management, quality control, and customer service as they are the minimum requirements for food hub survival.
- Market products as high value and source-identified with a connection to the farms that produce them.
- Address the challenges of seasonality.
- A high-quality staff with an entrepreneurial attitude is critical. Involve leadership that has the necessary business experience and skill for long-term business success; vision and passion are not enough. In start-up phase, hire staff with multiple skill sets.
- Partnerships can be beneficial in areas such as distribution and grower expansion.
- Be diverse and flexible in order to meet the demands of the marketplace. Be willing to change.
- Do not underestimate financing needs. Lack of funding will constrain growth.
- Develop systems, forms (order forms, contracts, etc.), and training materials early in the startup process. Lacking these documents can cause inefficiency and take time to produce correctly.
- Break development into phases, allowing new elements of the project to be created as demand warrants and capital dollars become available.

Recommendations are presented in three phases, each approximately one year long. Each area of the food hub operation is addressed for each phase.

Phase 1

Suppliers

We recommend starting with five to ten “anchor” farms within a 15-mile radius of each other.

During Phase 1, select farms to meet buyer demand based on strengths and specialties, (for example, a farm that is known for apples). This will establish a strong brand reputation for the food hub.

When selecting producers, make sure no one farm is responsible for more than 20% of food hub sales. This will minimize the risk if any one farmer has challenges with production.

In order for the food hub to be efficient as it begins operations and not have to spend time repacking from a bulk bin, it would be ideal if these farms would be “wholesale ready” and do field packing at the farm.

It is expected that, in Phase 1, the food hub will be primarily purchasing excess prime product (what farmers aren’t currently selling direct to consumers or wholesale) as well as imperfects (which may be currently being donated to food pantries or plowed under).

From the beginning, frame the food hub as a “network weaver.” Both farmers and buyers are part of a network and deal with challenges together. Participants build relationships, as farmers and buyers to get to know each other. Farmers will know where their food is going and buyers will know the farmers who produced it.

Clearly articulate how the food hub creates value for producers and develop evidence to support this value proposition. The value proposition may include support services to suppliers that its competitors do not offer (for example, we are an aggregation site con-
conveniently located in northern New Jersey, we can sell your excess products, we can provide favorable payment terms or higher prices paid, we save time, we provide co-marketing services, we provide GAP training).

Since the Foodshed Alliance was launched in 2001, it has worked to strengthen sustainable farming in New Jersey and can assist in recruiting farms for the food hub. Recently, as an example, the Foodshed Alliance team introduced about 10 farms to Pomptonian Food Service, which was looking for New Jersey farms to provide fresh local produce to schools.

During Phase 1, farmers, buyers and food hub management should actively anticipate year 2 and beyond in planning for ramped-up production to meet anticipated demand.

**Buyers**

During the start-up phase, develop a small core of institutional buyers or “anchor customers” (5 – 10 initially) who are willing and able to purchase from the food hub.

For maximum efficiencies in the early stages of operation, buyers should be within 20 miles of the each other and the farms. They should be “clustered” together as much as possible. One distributor recommended a benchmark of delivering $3,000 - $4,000 worth of food per hour to attain the economics of distribution.

Target customers that have the lowest threshold of entry. For example, independent restaurants, unlike chains, tend to make their own buying decisions and have the freedom to work with a food hub. Another market is private schools which tend to have fewer restrictions (price, vendor choice) than public schools and they can be an excellent market for whole fruit and other product that does not require processing.

Limiting the types of buyers in the beginning will allow hub staff to understand buyers’ needs and develop systems to accommodate them (for example, certain customers might have smaller orders but require more frequent deliveries; some buyers may have different payment terms requiring customized financial procedures). In Phase 1, there will be trial and error and learnings should be documented before moving to new markets and procedures.

The Foodshed Alliance is willing to facilitate discussion with independent restaurants to come on board as anchor customers. Foodshed Alliance has strong relationships with more than 20 chefs who have participated in farm-to-fork events. These chefs have demonstrated a commitment to local sourcing, and many have provided helpful feedback in the research for this study.

In addition, the Foodshed Alliance could facilitate discussions with schools such as Blair Academy, which has collaborated to bring local food into the campus.

**Hungry Harvest** in Maryland is a company that sells “ugly produce” in a reduced-cost CSA model. Hungry Harvest stated it is very interested in obtaining food from New Jersey and would send a truck to pick up product. They also may pay a small fee per case to help a farmer get product off the field. As of December 2017, they had over 10,000 active subscribers for their produce delivery.

Value-added producers that transform raw produce into products such as sauces or jam are also prospects for imperfects.

**Services**

Launch with core services only: aggregation, distribution, sales and marketing.

A foundational component of the food hub will be its ordering and product management system. The challenge, of course, is selling perishable products whose availability and pricing is highly volatile, and managing suppliers with varying levels of ability and desire to utilize technology.

At the outset, the food hub can operate with a manual system that basically gathers a list of available products from participating farmers once or twice each week and emails the list to customers. Customers can then email or call in their orders to the food hub. After delivery, invoices are manually generated, sent to customers. Once the food hub is paid, payment is sent to farmers.

Clearly, this system can be streamlined using available technologies and the food hub in Phase 1 should strive to adopt these systems as soon as they can be afforded. Off-the-shelf and customized systems are available; Wholesome Wave and New Venture Advisors published a *Tech Guide for Food Hubs* to assist food hub managers in determining their requirements and finding the best solutions.

Once product is ordered, food hub personnel must arrange for the product to move from farms to the customers. Farmers and producers should be wholesale ready and pack the product on the farm.

Deliveries can be done by hub personnel with a hub
truck, or it might be possible to contract with farmers to coordinate deliveries using their vehicles and drivers.

It is critical that, even with a small staff in Phase 1, one person should be dedicated to the sales function to establish strong relationships with the anchor customers.

In Phase 1, the food hub should intentionally develop its brand as resources permit. It is critical the food hub brand, such as “North Jersey Food Hub,” is used when reaching customers. However, products should maintain the branding of the farms from which they came. In Phase 2 and beyond, the brand should be further strengthened as additional investment becomes available.

To support the brand in Phase 1, the food hub should institute a simple website where both farmers and institutional buyers can get more information. Once an online ordering system is established, the website can act as a portal to the ordering system.

The food hub should also take advantage of social media channels like Facebook and Instagram. The food hub should also include its information on FindJerseyFresh.com, LocalHarvest.com, and other sites that list agricultural sources.

Phase 1 should include Food Safety and Good Agricultural Practices Training for food hub farmers and should be offered annually. This training can be organized by the Foodshed Alliance, which hosted a session for 22 northern New Jersey farmers in January 2018. Prior to this training, New Jersey Agricultural Experiment Station staff, who run the training, found it difficult to recruit farmers in the northern part of the state. Partnering with the Foodshed Alliance proved to be a successful strategy in recruiting local farmers.

Products
Begin with five to 10 products across no more than three categories. Produce, meat and eggs are recommended for the initial phase.

Meat and eggs are recommended in order to have at least one product that can be offered year-round.

In order to engage farmers without asking them to increase production for a start-up food hub, start off with excess prime product, or product that is within current production volumes.

Imperfects can be considered if institutional buyers indicate an interest in procuring it. It is not necessary to include certified organic in Phase 1, as there doesn’t appear to be a strong demand for it.

Because it is recommended to start with farmers who are “wholesale ready,” each farmer’s product will stand alone; the hub would not be bundling or consolidating at this point. It is important to build up a reputation for each participating farm and prime product as the hub starts.

Value-Added
Creation of value-added products is not recommended during the initial phase of the food hub; however, there may be secondary options to consider that would allow the team to learn more about the process without directly engaging in it:

- Sell product (prime or imperfects) to a value-added producer, such as a tomato sauce producer.
- Work with an organization such as Wakefern to create and market a co-branded product. Wakefern is very experienced in product development, pricing and marketing and they are very supportive of local.

Facility and Infrastructure
Phase 1 can begin with a minimum of infrastructure, if resources are limited, such as an office where staff can work and handle sales, marketing and logistics, equipped with computers/tablets and cell phones.

Unless funding is secured, it is recommended that Phase 1 utilize a decentralized model which requires little or no permanent facility for product. As discussed in the Findings section, this can mean contracting farmers to deliver product, instituting sub-hubs on farms where product can be delivered and picked up, etc. This decentralized model requires a great deal of coordination by staff but can keep costs within reasonable levels for the first year.

Revenue model
While the majority of food-producing farms in southern New Jersey are larger and primarily sell wholesale, farms in the northern half of the state are smaller and largely do direct-to-consumer sales through farm stands, farmers’ markets and CSAs.

The addition of a food hub in northern New Jersey would allow smaller northern farms to diversify their sales by reaching a currently untapped market, institutional buyers.
There is a significant difference between what farmers can charge consumers versus institutional buyers. Many of northern New Jersey’s smaller farms do not currently sell wholesale because they can get better prices going direct to consumer (even though cost of sales are probably higher).

The food hub’s challenge will be to strike a balance that provides farmers a fair price for their products while meeting the budget requirements of the institutional buyers. Critical in this equation is getting both sides to see the value in this proposition: the buyers see the value of paying a fair price for farm-fresh local healthy food and the farmers see the value of getting paid a fair price for food sold through a streamlined supply chain.

The simplest way to begin might be to have farmers/producers to set a price for the product and then add a margin sufficient to cover food hub operations.

Evident in our findings, sales price to buyers should typically not exceed 10% over what they would pay for “non-local” products. Most buyers said they would pay between a 1% - 5% premium for local products, and chefs from independent restaurants may pay slightly more.

Assessing pricing as a balance of supply and demand is a key component of Phase I.

Financing
A public-private partnership could be the best option to move the food hub forward and strengthen New Jersey’s agricultural foundation.

No matter what the business structure the food hub is, it should take full advantage of all of the opportunities available through the USDA and other agricultural support organizations. Although highly competitive, funding is available for food hub ventures.

As the annual Locavore survey shows, New Jersey is under-represented as a beneficiary of federal agriculture support programs. This can be remedied by strong proposals for funding and reaching out to New Jersey’s federal representatives to make them aware of the dire need to rebuild our local-food infrastructure.

Similarly, outreach is needed to make New Jersey’s leadership more aware of the need to support the farmers who produce our food. New York, Vermont and other states have financially supported the development of food hubs, realizing that they drive economic growth across the board as well as promote health and wellness through the distribution of healthy food.

Leadership and Staff
In Phase 1, start with a small team of one or two people with the possible addition of a volunteer.

The ideal leader/general manager will have an entrepreneurial attitude, related business success, a broad base of food-hub related skills, and the vision and passion to drive the project forward. It cannot be stressed enough that selection of the right lead person is critical. This person may be performing multiple functions (i.e., aggregating product from area farmers, distributing product to buyers, and marketing and sales) and will responsible for learning and fine-tuning the optimal strategies, tactics, and procedures.

Phase 2

Suppliers
After Phase 1, the food hub can consider expanding the number of farmers up to 20 or so.

Buyers
In Phase 2, expand the number of customers up to 30 or so, and the distance to 40 miles of the aggregation site.

Small, independent retail stores generally have modest requirements and need smaller quantities appropriate for a Phase 2 operation.

Online companies such as Fresh Direct like to promote that they offer local brands. This company may be a good target to start with as they currently offer some New Jersey products (a small amount compared to other states).

Co-ops such as Mountain Lakes Organic Co-op and Purple Dragon Co-op can be considered as they tend to order weekly and may be looking to supplement current sources. Note, however, that they may require organic produce.

Expand to include regional distributors that may wish to purchase from a food hub (and vice versa). Zone 7 and Harvest Drop are potential customers for a variety of products. Discussions with both companies indicated that that is a willingness to talk; partnerships are often formed with the end result being to please the end customer.

Foodshed Alliance may be able to make connections with value-added food processors that participate in its farmers’ markets. The New Jersey Department of Agriculture has also said it is willing to make introductions to value-added manufacturers looking for Jersey Fresh products. The Organic Food Incubator in
Bloomfield is also willing to make introductions to value-added food processors. Rutgers Food Innovation Center is also a source of value-added food processors. Another category to consider is craft beverage producers who may be looking for products to use for flavoring.

There may be opportunity to service school’s Summer Meal programs (Summer Food Service Program-SFSP) and child and adult meals (CACFP-Child and Adult Care Feeding Programs).

**Services**

Product aggregation increases to three to four times per week.

A small bricks-and-mortar site may be considered as an aggregation point for this phase. However, keep in mind that spending the dollars to lease, buy, or arrange a site could prove costly if initial anticipated volume falls off, and if product procurement is seasonal (then having a site that sits idle with equipment not yet paid for will quickly become a problem).

If the facility includes a commercial kitchen, the food hub may offer light processing such as washing, bagging, or chopping.

Distribution options could expand to partnering with Zone 7 or Harvest Drop if a mutually beneficial arrangement can be made. If business supports investment in a truck for the food hub, the organization should use it as a branding opportunity.

The branding process can be formalized and the food hub will work to educate and galvanize its customers and clients, educating them about the need to pay a fair price for the products. This is long term, incremental work but is not implausible. The steady growth in the organic food market for over two decades and the rapid expansion of “food consciousness” even into small rural communities demonstrate that people’s eating and buying habits can change to their own advantage and that of local farmers.

Consider incorporating Jersey Fresh into the food hub’s branding, especially if participating farms are part of the Jersey Fresh program. Jersey Fresh branding would only be applicable to product that is Grade A, so imperfections could not be included. In addition, the NJ Department of Agriculture could help make introductions to buyers or value-added manufacturers are looking for Jersey Fresh products.

Business and marketing training could be added as fee-for-service options, pending interest by farms.

Consider GroupGAP training in addition to individual farm training. A group of food hub farmers would share the cost of certification and would certify as a group with each farm receiving a GGP certificate. However, the entire group is liable for each farm’s compliance. Additional details can be found at: [https://www.ams.usda.gov/services/auditing/groupgap](https://www.ams.usda.gov/services/auditing/groupgap)

**Products**

Consider expanding product line to dairy and grains, and organic. The number of products can be increased to 20.

**Value-added**

Consider development of a value-added product by outsourcing to a co-packer. Although it is simpler than producing at a new food hub, there are still a lot of details and planning. A good reference document can be found at [The Balance Website](https://www.thebalance.com).

There are many co-packers available in New Jersey, and Foodshed Alliance can make an introduction to Organic Food Incubator in Bloomfield who has made tomato sauces, hot sauces and other products (using both organic and conventional product). Organic Food Incubator can also assist in recipe development if needed although that may limit the taste profile. They would order all ingredients, labels, jars, caps and the like. They would create the product and charge the food hub a price per unit.

The New Jersey Food Processors Association is also a very good resource. Its manufacturing member companies represent all facets of the New Jersey food processing industry, including meat and poultry, seafood, dairy products, cereals and grain products, fruits and vegetables, value-added agricultural products, specialty foods, and prepared foods and beverages. In addition, its associate members companies represent food packaging and ingredient suppliers, food industry equipment providers, service providers, consultants, quality assurance laboratories, chemical and sanitation companies, distribution and shipping firms, and other suppliers.

**Facility and Infrastructure**

Assuming the initial food hub offers limited physical services and aggregates only a few products, it can begin to consider limited facility infrastructure. A small warehouse (1,000-4,000 sq. ft.)—owned, rented or borrowed space—would be appropriate and sometimes can be supplied by food hub farmers. While some hubs maintain long-term storage facilities, many use a “just-in-time” distribution approach that minimizes the need for storage and cooling space.
Food hubs that use larger spaces often rent or lease excess space to producers or other entities for storage to help offset costs.

**Leadership and staff**
Team expands based on functions and resources.

**Phase 3**

**Suppliers**
In Phase 3, the food hub can consider expanding the number of farmers up to 50. Ideally, the food hub will pull from all four counties (Morris, Sussex, Hunterdon and Warren) as there should be more than one aggregation site at that point.

**Buyers**
Expand to 40+ customers statewide, keeping in mind a need for concentration of customers by focusing on the more densely populated counties in the region: Morris, Passaic Essex, Union, and Bergen.

The food hub could also make a concerted effort to reach out to “food deserts” in Newark, Camden and other urban areas that have a dearth of fresh local food, targeting bodegas and farmers’ markets.

In Phase 3, the food hub can reach out to institutional buyers (public schools, healthcare, correctional facilities) with the most restrictive requirements (market pricing, GAP certification, negotiated contracts, approved vendor lists, etc.) Consider discussions with Gargiulo’s Produce (or current DOD contract awardee), Pomptonion Food Service, or Sysco’s Fresh Point program. Foodshed Alliance can also make introductions to large employers such as Crystal Springs Resort and Newton Memorial Hospital.

**Services**
Aggregation and distribution increases to five to six times per week.

In-house value-added processing can be considered.

**Products**
Over time, the food hub will offer a more diverse and complete the product mix. Once a predictable sales volume has been established, it may be appropriate for farmers to increase production/add acreage to meet the product demand.

**Value-added**
Consider producing value-added products in-house, purchasing products from farmers and selling the food-hub branded finished product.

**Facility and Infrastructure**
As the food hub grows and provides more services—such as aggregation of multiple products, grading, packing, sales, and delivery—it may require a larger warehouse, equipment, and other infrastructure. The food hub may require a medium-sized warehouse (5,000-10,000 sq. ft.) that includes sufficient room for truck parking, loading, product storage, dry goods storage, and cooling capacity. When a food hub expands or begins to offer other services—such as light food processing or freezing—supplementary warehouse space and additional equipment are often necessary.

Former grocery stores can also be considered at this stage, as they tend to have the needed infrastructure (kitchen, loading docks, etc.).

As the food hub customer market expands statewide, additional sub-hubs in other parts of the state can be considered. The Foodshed Alliance can make introductions to Tri-County Cooperative Auction Market in Hightstown as a possible partner.
The following chart summarizes our framework for a phased approach. This is meant to serve as a place to start, as priorities may change based on who takes the lead of the project, as well as goals and strategy for the operation. In addition, decisions will be fine-tuned based on further research, which is recommended.

An approximate budget for the first year based on the following Phase I assumptions is approximately $200,000 which consists primarily of labor costs for two people, office space and technology, and leasing of a delivery truck.

<table>
<thead>
<tr>
<th>Suppliers</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers - #s</td>
<td>5 - 10</td>
<td>10 - 20</td>
<td>20 - 80</td>
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<tr>
<td>Location</td>
<td>Within 15 mile radius of each other</td>
<td>Within 20 mile radius of aggregation site</td>
<td>Within all four target counties</td>
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<table>
<thead>
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<th>Buyers</th>
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<tr>
<td>Number</td>
<td>5 - 10</td>
<td>10 - 40</td>
<td>40+</td>
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<tr>
<td>Type</td>
<td>Restaurants (independent) Private schools “Excess product” companies</td>
<td>Add: Restaurants (all types) Independent retailers Online retailers Food co-ops Regional distributors Value-added food processors Education/summer programs</td>
<td>Add: Retailers (all types) Corporate Dining Meal Kit Services Institutions (Schools, healthcare, correctional) Consumer</td>
</tr>
<tr>
<td>Location</td>
<td>Within 20 miles of each other and the farmers</td>
<td>Within 40 miles of aggregation site</td>
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<table>
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<tr>
<th>Services</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregation</td>
<td>Yes - pickup 1 - 2 times per week</td>
<td>Yes - pickup 3 - 4 times per week</td>
<td>Yes - pickup 5 - 7 times per week</td>
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<tr>
<td>Storage</td>
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</tr>
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<td>Light Processing</td>
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<td>Yes</td>
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<td>Processing for Preservation/ Value-added</td>
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<td>Yes - possibly done at food hub</td>
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<td>Sales</td>
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<td>Ordering process</td>
<td>Inventory lists emailed or ordering software</td>
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<td>Yes - our own vehicle or partner with a distributor</td>
<td>Yes - our own vehicle or partner with a distributor</td>
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<tr>
<td>Distribution Frequency</td>
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<td>3 - 4 times per week</td>
<td>5 - 7 times per week</td>
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<tr>
<td>Services (continued)</td>
<td>Phase I</td>
<td>Phase II</td>
<td>Phase III</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Branding</td>
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<td>Yes - co-branding food hub, farm, Jersey Fresh (with labeling)</td>
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<td>Technical Training (GAP Training)</td>
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<td>Yes - and consider GroupGAP</td>
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<td>Commercial Kitchen</td>
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<tr>
<td>Products</td>
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<td>Produce Meat Eggs Dairy Grains</td>
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<td>Category - organic</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Category - Prime (excess or new production) or imperfects</td>
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<td>Excess prime + imperfects</td>
<td>Ramp up production for prime + imperfects</td>
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<td>Consolidated or individual farm products</td>
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<td>Individual + Consolidated</td>
<td>Individual + Consolidated</td>
</tr>
<tr>
<td>Quantity</td>
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<td>20+ products</td>
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<tr>
<td>Value-added Production</td>
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<td>Yes - possibly done at food hub (additional research required)</td>
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<td>Facility &amp; Infrastructure</td>
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<tr>
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<tr>
<td>Team Size</td>
<td>2 employees; 1 volunteer</td>
<td>3 - 10 employees</td>
<td>40+ employees</td>
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</table>
The Foodshed Alliance will share this report with stakeholders throughout the state. Expected outcome will be the emergence of a workgroup to coordinate and carry out the work described below, including development of the action plan, which should include:

- Define business goals and choose a business model that best fits the interested stakeholders. Explore financial models and funding options that fit the chosen business model.
- Review all findings and Phase I recommendations from this report; conduct additional research to refine assumptions as needed.
- Develop a budget for years one through three.
- Engage anchor farmers and customers and select initial products.
- Develop a strong business plan. Evaluate project impacts (jobs, farm income, economic multiplier, etc.).
- Develop a strong competitive distinction, not only for the food hub, but that will help to prioritize the agricultural industry in New Jersey.
- Investigate and secure financing, including options for public-private support.
- Begin hub activities and reevaluate services for efficacy and efficiencies. Maintain demand (buyer) focus throughout, if the hub products are not meeting the buyers need then changes need to be made.
- Monitor industry related resources and updates:
  - Continue to participate with Wallace Foundation and participate on NGFN webinars
  - Be on lookout for 2017 Census of Agriculture, expected to be released in February 2019. [https://www.agcensus.usda.gov/](https://www.agcensus.usda.gov/) This is an update to the last census conducted in 2012.
  - Consider purchasing reports from the economic development organizations for each county. For instance, the Morris County Economic Development Corporation has may datasets available. Their ESRI and EMSI databases provide a wealth of information on various industries including food. They can also analyze the number of businesses within an industry through Hoovers.
- Research all legal and regulatory issues and monitor updates on specific issues:
  - Watch for the passage of the 2018 Farm Bill.
  - Monitor immigration reform as it may impact farm workers.
  - Monitor developments in New York State and any further developments from the NYS/NYC Regional Task Force.\(^58\)
- Take advantage of new marketing opportunities:
  - Make sure the food hub is listed on the Agricultural Marketing Service Food Hub Directory. The directory is relatively new and will be used by buyers of local food, potential food hub farmers/suppliers, lenders, researchers and more. [https://www.ams.usda.gov/local-food-directories/foodhubs](https://www.ams.usda.gov/local-food-directories/foodhubs)
References and Sources

Foodshed Alliance


28. 2015 Farm to School Census. USDA. https://farmtoschoolcensus.fns.usda.gov/find-your-school-district


42. Hungry Harvest. https://www.hungryharvest.net/


P.O. Box 713
27 Main Street, 2nd floor
Blairstown, NJ 07825
kendrya@foodshedalliance.org
908-362-7967