

Federal-State Marketing Improvement Program
Final Performance Report
For the period of February 28, 2014 – September 30, 2015

Date: December 18, 2015

Recipient Name: New Entry Sustainable Farming Project

Project Title: World PEAS Farm-to-School/Institution and Food Safety Expansion

Grant Number: 12-25-G-1712

Project Location: Massachusetts

Amount Awarded: \$37,374

Match Amount: \$53,946

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Background

In 2005, New Entry Sustainable Farming Project (New Entry) staff and farmers formed World PEAS Food Hub (WPFH) to sell ethnic crops grown by immigrant and refugee farmers to diversified markets at better prices in the region. Since the time of establishment, World PEAS expanded into a full-service “Food Hub” serving a diversity of new and beginning farmers and operating a self-supporting Community Supported Agriculture (CSA) program serving over 400 families of diverse income levels. As the CSA movement has matured and become more saturated/competitive in the Boston area, WPFH is looking to alternative markets for potential growth. Several of the more promising market segments for Food Hub expansion include restaurants, Farm-to-Institution, and Farm-to-School produce buyers. Adding a robust institutional and wholesale distribution model to the WPFH business plan allows producers to move more specialty products and seek opportunities to extend the growing season.

This FSMIP grant addressed the challenge of determining the best methods for expanding the WPFH business model to new markets and meeting new food safety requirements imposed by new markets as FDA’s Food Safety Modernization Act (FSMA) is implemented. Specifically, at the time that we wrote this grant proposal, WPFH had recently expanded and moved its aggregation and distribution facility to downtown Lowell - with access to two loading docks - and its cold-transport capacity to conduct deliveries to various markets while maintaining high quality standards, which favourably positioned the Food Hub for future growth. Beginning in 2012 with the move to our new facility, we arrived at the point where we needed to expand the market base to help support the new overhead and operational costs and support the growing number of producers who want to participate in the Food Hub. The FSMIP request was primarily to help conduct the research needed to access larger wholesale and institutional markets/schools, and also to support development of farmers’ capacities to perform successfully in order to achieve the results needed for growth and long-term economic viability of WPFH.

Goals and Objectives

Our first major objective was to build long-term viability through development of a comprehensive business plan outlining a growth strategy targeting farm-to-school and farm-to-

institution connections. In order to meet this objective, we conducted comprehensive market research to identify new institutional outlets, and expanded sales to existing institutional outlets. In addition, we increased volumes, varieties and overall selection available to clients.

Our second major objective was to build the production and marketing capacities of new, beginning, and immigrant and refugee farmers as capable and sustainable producers for the WPFH to improve their long-term success as market-oriented producers. In order to meet this objective, we provided training and technical assistance (T&TA) to farmers to produce high quality crops suited for the expanded WPFH markets. In addition, we assisted farmers to develop harvest, post-harvest, and food safety plans that specifically meet the needs of WPFH customers and comply with FSMA or Good Agricultural Practices (GAP) standards. We also assisted farmers to investigate on-farm value added and season extension options.

Our third major objective was to develop a guide to “Scaling up a Food Hub Business Plan” for use by others considering a similar multi-producer approach to marketing. We designed a practical marketing-oriented report and guide for use by other small-scale multi-farmer marketing focusing on FSMIP-funded T&TA strategies and content, and distributed the guide to Food and Farming organizations. We worked closely with two graduate school interns from the Tufts Friedman School (one of our two fiscal sponsors) to prepare the report. The report was sent via our email lists to EMASSCRAFT, our email list of over 200 farmer graduates, and posted to our website resources section, which received over 14,000 views in the 12 months ending 09/30/2015.

Contribution of Project Partners

Partnerships were essential to the success of our work. For the 2014 season, sales to institutional markets included 2 restaurants; seven senior community centers; the Lowell Women, Infant and Children’s office; a center for homeless individuals; and a children’s summer feeding program.

Restaurant Sales - \$2,123 (new partnership)
Lahey Clinic Senior Centers - \$36,250 (new partnership)
Bridgewell’s Pathfinder Homeless Shelter - \$12,000 (expansion of existing partnership)
Elder Services of Merrimack Valley - \$5,010 (new partnership)
CTI Summer Feeding Program - \$2,235 (continuation of existing partnership)
Dorchester Kit Clark - \$6,648 (expansion of existing partnership)
Somerville/Cambridge Elder Services - \$1,859 (continuation of existing partnership)
Springwell Senior Group - \$1,659 (continuation of existing partnership)

World PEAS Food Hub 2015 institutional sales included partnerships with 15 organizations, including 2 restaurants; eight senior community centers; the Lowell Women, Infant and Children’s office; a center for homeless individuals; a food bank that manages distributions at low-income apartment buildings; a children’s summer feeding program; and two food service locations. A total of four new institutional markets were established during the 2015 season. Final 2015 institutional sales numbers are below:

Restaurant Sales - \$2,123 (one new partnership in 2015)
Tufts University Dining Services - \$2,057 (existing partnership)
Salvation Army Kroc Center - \$10,603 (new partnership in 2015)

Medford Council on Aging/Medford Farmers Market - \$9,582 (new partnership in 2015)
Lahey Clinic Senior Centers - \$39,949 (continuation of existing partnership started in 2014)
Bridgewell's Pathfinder Homeless Shelter - \$5,000 (continuation of existing partnership)
Dorchester Kit Clark - \$8,737 (expansion of existing partnership)
Somerville/Cambridge Elder Services - \$1,558 (continuation of existing partnership)
Springwell Senior Group - \$1,109 (continuation of existing partnership)
CTI Summer Feeding Program - \$4,600 (continuation of existing partnership)
Merrimack Valley Food Bank - \$894 (new partnership in 2015)
Women, Infant and Children's Program - \$4,375 (continuation of existing partnership)

For all of our Senior Community Center partners, we provide senior-specific newsletter content to accompany the distributions. The newsletters include nutrition information specific to seniors, profiles of farmers (some of whom are seniors), recipes geared towards seniors, and simple activities to highlight WPFH sustainably-produced food. In this way, customers are able to make connections between their food, and the New Entry farmers who grow the food.

In addition, New Entry partnered with a team of six students from the Heller School of Social Policy and Management at Brandeis University, to develop a strategic plan for the WPFH. We also partnered with a team of two students from the Harvard Business School to develop a strategic plan around institutional sales specifically. We also partnered with interns from the Friedman School of Nutrition Science and Policy at Tufts University to develop a guide to scaling up food hubs (see Summary of Results below regarding all three partnerships).

Summary of Results and Lessons Learned

Marketing

Over the course of this FSMIP grant period, WPFH experienced a decrease in direct-to-consumer sales, resulting from a general downward trend of CSA product sales in our region due to increased competition from farmers markets and other CSA providers. That being said, an increase in sales to institutions (supported by this FSMIP grant) helped to offset the loss from decrease in direct-to-consumer sales. World PEAS experienced a sharp increase of 225% in sales to institutional markets from 2013 to 2014. Sales to institutional markets grew the following year, from \$87,013 in 2014 to \$95,490 in 2015, an additional increase of 9.7%.

At the completion of our 2015 growing season, we conducted an evaluation with our institutional partners at our food access sites. Feedback was overwhelmingly positive. All respondents were happy with the quality, variety and delivery of the produce. The expectations of staff prior to the 2015 season mainly included connecting their clients to fresh, local produce to increase healthy habits. The evaluation revealed that not only were staff expectations met, they were exceeded. Staff at sites receiving weekly deliveries commented on the social aspect of the program as well. They felt that their clients truly enjoyed every aspect of the fresh produce program.

We also surveyed our CSA customers. The 2015 WPFH CSA survey revealed that our customers felt that the produce quality of the World PEAS CSA was either consistently good (45%) or generally good (42%). Customers felt similarly about the variety of items offered. 85% felt that the variety offered was just enough.

New Entry worked with graduate students from the Tufts University Friedman School of Nutrition to develop a *Guide to Scaling Up Food Hubs*. This guide helps others consider whether to and how to develop a similar type of food hub and expand into institutional or school food markets. It examines the complexities of scaling into wholesale supply chains, coordinated supply and marketing, including steps involved from initial production planning through to final deliveries. It documents the specifics of World PEAS, reflecting the focus of FSMIP-funded project work on strengthening farmer capacities around planning, production, harvest and post-harvest, delivery, and on-farm value-added. By combining case study and best practices / lessons learned and viable financial strategies, the report illustrates implementation through specific examples while providing general recommendations that can be used by others. The report encourages individuals to consider food hub operations and guides individuals regarding how establishment of a food hub can be carried out successfully over time.

A Guide for Scaling Up Food Hubs – Educational Booklet, World PEAS Staff and Interns, Published May 2014:

https://nesfp.org/sites/default/files/resources/worldpeas_scalingupguide.pdf

New Entry worked with a team of Brandeis students to develop a strategic plan for the WPFH. The Brandeis students developed a comprehensive report, including several important recommendations. The students recommended that we re-brand WPFH to better connect the food hub to the mission-based work of New Entry. Branding materials should highlight a broader understanding of New Entry, World PEAS, and the food access initiatives holistic approach to building and strengthening local food systems. As such, we hired a consultant to redesign our on-line store front to better highlight our mission-based work. Visit the link below to view our on-line store front: <http://www.worldpeasfoodhub.org/Default.asp>

The Brandeis report suggested that WPFH requires a major shift in improving customer retention, attracting new customers, and building partnerships with other organizations. The primary recommendation is to focus sales efforts on social justice organizations who share a similar mission with New Entry/World PEAS' food access programming. As such, we focused our attention on the expanding and growing institutional sales with social justice organizations, as detailed above in the Private Agency Partners section of this report.

The Brandeis report also recommended that we develop a new product, which we call the "Fair Share", for individuals who wish to contribute each week to our low-income subsidized produce initiatives, while at the same time purchasing a CSA share. We launched the Fair Share product in 2015. A total of 31 individuals purchased the Fair Share product, generating revenues of \$20,927, which represents 7% of total WPFH sales for 2015. In 2014, we introduced a new egg share. A total of 10% of our customers purchased egg shares in 2014, and 12 % purchased egg shares in 2015.

Growing Food, Growing Access – A Strategic Plan for the World PEAS Food Hub – Brandeis, Published August, 2014:

https://nesfp.org/sites/default/files/resources/hellertcp-newentry-2014report_minimized.pdf

Farmer Training

Total New Entry farmer earnings through the WPFH were \$218,400 in 2014 and \$191,250 in 2015. The decrease in total farmer earnings was a direct result of a decrease in total sales, noted above in the “Marketing” section of this report (reduction in CSA shares sold).

We provided training on production and post-harvest strategies for attaining production and post-harvest standards. Through site monitoring and weekly meetings, we focused on assuring that each farmer can continuously improve quality and overall performance and work toward food safety compliance goals. We provided assistance to new incubator farmers on estimating harvest volume in the field, harvesting, proper washing procedures, and packing and cooling procedures using our newly constructed cooler.

The major quality challenges we noticed during the 2015 growing season pertained to harvest speed and issues related to heat. The 2015 growing season was especially warm, and our TA Coordinator needed to pay special attention to ensuring that produce was delivered to the on-site cooler in a timely basis. There is a three step diagnosis process for crop quality, involving (i) field-level production; (ii) harvest; (iii) and post-harvest/transport. In prior years, the TA Coordinator trained farmers directly to provide support around these three steps. For 2015, in addition to direct farmer workshops, we established a new system to better utilize staff time and provide a comprehensive system for better training regarding crop quality.

With the new system, the TA Coordinator conducts “train-the-trainer” sessions so that WPFH staff, World PEAS volunteers, and our Farmer Resource Coordinator can pass on important information to farmers in order to improve crop quality. The TA Coordinator visits the World PEAS Site on a bi-weekly basis to review produce as it is being packed. In the meantime, the World PEAS Food Hub staff captures diagnostics of produce quality through photos in order to provide documentation for trainings. The TA Coordinator trains the staff regarding quality issues and reasons for the issues (in particular, he identifies which step in the production or quality diagnosis failed). The staff passes this information on to farmers during their weekly interactions or at the time that WPFH farmers deliver produce to the WPFH Packing Site. Through this new system, staff is now able to determine which step of the process failed in the case of substandard produce quality. As a result of this new system, the TA Coordinator has seen a decrease in substandard quality of produce.

During this grant period, with support from other (non FSMIP) funders, we retrofitted an on-farm refrigeration cooling unit from an insulated box from a former delivery truck, and installed this new cooler at one of the two Dracut incubator farm sites. We constructed a new GAP compliant packing area adjacent to this retrofitted refrigeration unit. Using support from our FSMIP grant, we worked directly with individual growers to teach them to make the best use of the new refrigeration facility and to provide the highest quality produce for both our World PEAS CSA as well as for other markets such as restaurant direct sales and local farmer’s markets.

Two incubator farmers at our Newburyport site were successful in their application to NRCS for receipt of EQIP funding for purchase and construction of new high tunnels. Using support from our FSMIP grant, our TA Coordinator provided data to the farmers regarding structural integrity

and management of crop production in a high tunnel environment. The new high tunnel will allow these farmers to extend their season in the spring and the fall.

In 2015, using support from this FSMIP grant, we provided one-on-one TA to two new incubator farm operations regarding utilization of the high tunnel at our incubator farm site in Dracut. One farmer conducted three crop rotations in the high tunnel. The second farm operation planted seasonal greens.

Using support from this FSMIP grant, we provided one-on-one TA to one farmer to purchase and construct their own independent cooler (purchased with support from another funder) to help provide better quality produce for season extension deliveries to institutional markets. This farmer worked independently to negotiate an agreement directly with the landlord of the WPFH Packing and Distribution site to locate her cooler at the site. This farmer achieved the highest gross revenue of all New Entry farmers for the 2015 growing season (over \$18K).

Project Benefits

Support from this FSMIP grant helped us to engage additional assistance around our goal of increasing institutional sales. Since September, WPFH staff has worked with two Harvard Business School (HBS) Entrepreneurial Club students to generate a business plan around WPFH institutional sales. The final plan is due in May 2016. HBS deliverables will include the following:

- 1) Review and analysis of existing WPFH operations
- 2) Report on challenges and best practices for similar organizations involved with institutional sales
- 3) Analysis of institutional sales markets in World PEAS Food Hub market area
- 4) Marketing and growth plan for World PEAS institutional sales
- 5) Final report summarizing all activities, findings, conclusions, and recommendations with respect to an institutional sales expansion plan

WPFH staff will utilize this report to scale up its wholesale markets for their 2016 season.

Recommendations and Next Steps

Technical assistance that we conducted with farmers as a result of support from this FSMIP grant allowed us to identify improvements needed at the World PEAS Packing and Distribution site, in order to continue and enhance our work. Using support from non-FSMIP funders, our next steps include purchase of a replacement refrigerated produce delivery vehicle, in order to meet the demands of our newly established, multiple institutional markets and to retain product freshness. In addition, we will purchase a new stationery refrigerated unit to replace our existing (aging) unit in order to retain quality of produce that farmers drop off at the WPFH pack site for distribution to institutional and CSA markets. Also, we will install a new system for packing of boxes, which incorporates the use of gravity roller tables to make the process more efficient, in order to meet the demands of our growing institutional markets.

In September 2015, the World PEAS team met with representatives from Provender.com, an on-line network providing chefs with direct connection to dozens of local farms. Provender's model allows for farmers to sell to restaurants without incurring commission charges, since the commission fees get passed along to the restaurants. We feel that this model is well-suited both for the WPFH consolidated farmer produce niche crops, and for New Entry technologically-savvy farmers who have the capacity to work directly with chefs. We plan to initiate activity using Provender technology beginning in the 2016 growing season. We will likely move to the Provender system to manage all of our restaurant sales, in order to streamline our restaurant sales record-keeping, and avoid the need to run multiple parallel ordering and fulfillment systems. The TA provided by our staff (supported by this FSMIP grant) provided farmers with the skills they need to meet the needs of these new restaurant markets.

Project Beneficiaries

A total of 30 World PEAS farmers benefitted from this FSMIP program, 12 of whom are women (40%). A total of 12 are immigrants/refugees (40%). All farmers are small-scale, beginning farmers and many are economically disadvantaged.

A total of 17 community organizations serving institutional customers benefitted from this FSMIP program, as listed in the Private Partnership section of this report. These organizations serve over 1,800 low income individuals, including seniors, children, pregnant or lactating women, homeless individuals, and families.

Publications:

A Guide for Scaling Up Food Hubs – Educational Booklet, World PEAS Staff and Interns, Published May 2014:

https://nesfp.org/sites/default/files/resources/worldpeas_scalingupguide.pdf

Going Local – Promotional Brochure, World PEAS Staff, Published May 2014 (See attached)

Growing Food, Growing Access – A Strategic Plan for the World PEAS Food Hub– Brandies, Published August, 2014:

https://nesfp.org/sites/default/files/resources/hellertcp-newentry-2014report_minimized.pdf

2015 Annual Report of the World PEAS Food Hub – Evaluation Publication – World PEAS Staff, Published December 2015:

http://nesfp.org/sites/default/files/resources/2015_annual_report_0.pdf

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GOING LOCAL:

How World PEAS Food Hub can help your wellness program engage local food.



Local food means good business

Through wellness programs, Massachusetts employees are continually finding ways to encourage employees to choose healthier lifestyles, which can help to reduce healthcare costs. Since diets high in fruits and vegetables are important strategies for staying healthy and reducing the risk of chronic diseases, providing greater access to a variety of nutritious foods can improve wellness programs and encourage healthier living for employees. The World PEAS Food Hub offers employers a unique and ready opportunity to offer fresh, locally-produced foods to employees and their families through workplace programs with World PEAS. Furthermore, by engaging the local food system, workplaces form a mutually-beneficial relationship with local agriculture, which builds communities, supports local farmers, and strengthens the local economy.

Why local?

Local food systems generally encompass agricultural products that are grown, processed, distributed, and marketed within in a state or region. As people become increasingly interested in where and how their food is produced, the demand for local food increases. Participating in the local food system allows people to become better-informed consumers, get to know their farmers, and gain greater access to fresh, healthy food. World PEAS offers a tremendous opportunity to access locally-produced food in and around Boston.

What is World PEAS Food Hub?

Established in 2005, the World PEAS (People Enhancing Agricultural Sustainability) Food Hub began as a cooperative to help immigrant and refugee farmers connect with local consumers seeking fresh produce. World PEAS aims to build long-term economic self-reliance and food security among farmers and communities in eastern Massachusetts,

and to expand access to healthy and culturally appropriate foods in underserved areas through production of locally-grown foods.

Partnering with World PEAS

A partnership with World PEAS Food Hub allows your employees to connect with over 30 beginning, immigrant, and refugee farmers, who work all season-long to provide your workplace with a variety of fresh, seasonally-appropriate fruits and vegetables. A partnership could involve a workplace Community Supported Agriculture (CSA) program, where boxes of freshly harvested produce are delivered weekly to your place of work for participating employees' convenient pick-up.

Employers could also offer a payroll deduction for share payments to make the program more affordable for employees. Another option is a partnership with your workplace cafeteria's staff or food service provider, in which World PEAS would supply the cafeteria staff with variety of fresh, local produce for preparation. For example, World PEAS works closely with Tufts University's Dining Service to provide the school's student body with seasonal, locally-produced dining options. World PEAS Food Hub is willing to partner with a variety of institutions, such as business, hospitals, schools, and other types of workplaces.

More information

Interested in finding how a partnership between World PEAS and your workplace could develop? So are we. We are excited to discuss the possibilities in further detail with you. Please contact Kate Petcosky, the CSA and Food Access Coordinator for more information at 978-654-6745 or kpetcosky@comteam.org.



GOING LOCAL:

How World PEAS Food Hub can help your community program incorporate local food.



What is local?

Local food systems generally encompass agricultural products that are grown, processed, distributed, and marketed within in a specific area, such as a state or region. As people become increasingly interested in where and how their food is produced, the demand for local food is growing. In and around the Boston area, there are tremendous opportunities to access locally-produced food. Participating in the local food system allows people to become better-informed consumers, get to know their farmers, and gain greater access to fresh, healthy produce and food.

What is World PEAS Food Hub?

Established in 2005, the World PEAS (People Enhancing Agricultural Sustainability) Food Hub began as a cooperative to help immigrant and refugee farmers connect with local consumers seeking fresh produce. World PEAS aims to build long-term economic self-reliance and food security among farmers and communities in eastern Massachusetts, and to expand access to healthy and culturally appropriate foods in underserved areas through production of locally-grown foods.

Make your Community Program Farm-Fresh

World PEAS has worked with a diverse set of social impact partners, including community centers and shelters, summer feeding programs, elder service centers, and federally-funded nutrition programs. Our staff can work with you to identify potential sources of co-funding to serve resource-limited communities and increase your clients' access to locally-grown fruits and vegetables. By purchasing Community Supported Agriculture (CSA) shares from World PEAS you can magnify your impact:

improve your clients' wellness while improving the economic resilience of low-income farmers in eastern Massachusetts. Your organization's staff and clients will enjoy the opportunities to know their farmers through World PEAS newsletters, outreach and farm tours.

Success Stories

As a mission-driven food hub, World PEAS continually seeks opportunities to work with social support organizations to provide their constituents with healthy, farm-fresh food. Through a partnership with Pathfinder, a Lowell-based transitional living community, World PEAS provided 14 CSA shares to the Pathfinder Drop-In Center, enabling the center to feed 28 diners per week throughout the 2013 growing season. World PEAS partnered with the East Boston Neighborhood Health Center from 2009 to 2011 to provide free CSA shares to low-income clients with funding from an EBNHC nutrition program grant and donations from World PEAS shareholders.

More information

Interested in finding out how a partnership between World PEAS and your organization could develop? So are we. We are excited to discuss the possibilities in further detail with you. Please contact Kate Petcosky, the CSA and Food Access Coordinator for more information at 978-654-6745 or kpetsosky@comteam.org.

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A Guide for Scaling Up Food Hubs

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New Entry Sustainable Farming Project is a program of:

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Science and Policy



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Introduction

Food hubs are responding to two opposing trends in the U.S. food system. Consumers are becoming increasingly interested in knowing where and how their food was grown, processed, and marketed, and they want to support smaller scale, local farms. At the same time, small and mid-scale farms are declining in number, making it difficult for these farmers to find marketing opportunities at a scale and price that enables them to stay viable (Lerman, 2012). Direct-to-consumer channels are limited in the volume of products they can move and have difficulty achieving economies of scale. Even wholesale customers, like restaurant chefs, who are committed to supporting the local food economy may find that the benefits of sourcing locally do not outweigh the time and frustration involved in identifying and managing multiple vendor accounts, as well as the risk of facing stock-outs (Clark et al., 2011).



The USDA defines a regional food hub as a business or organization that actively manages the aggregation, distribution and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand (Fischer et al. 2013). Wholesome Wave further goes on to define a healthy food hub, which “consists of a variety of fully integrated businesses, social services, and safe public spaces that mutually support each other in ways that leverage profitability and long-term sustainability in innovative ways.” (Bragg & Barham, 2010).

The Wallace Center at Winrock International and the Michigan State University Center for Regional Food Systems released the results of its 2013 National Food Hub Survey in 2013. Among the survey’s 106 respondents, 62 percent of the food hubs represented began operations in the last five years, and about one-third had been in operation for two years or fewer. The wide range of reported 2012 revenues indicate the diversity of the respondents; the median revenue (sales income plus outside funding) ranged from \$1,500 to \$75 million, with a median of \$450,000. However, revenue was significantly correlated with years in operation; 10 of the 33 hubs in operations for 0-2 years had revenue of \$100,000 or less. Similarly, gross sales varied widely, with a median of \$324,500 and a range from \$3,206 to \$75 million (Fischer et al., 2013).

Purpose

A Guide for Scaling Up Food Hubs is intended to provide food hub leadership and staff with knowledge and tools to develop a successful strategy for expanding operations and increasing sales growth. The broad USDA definition of food hub encompasses a great diversity of organizations, including non-profit organizations and for-profit enterprises, ranging in scale from single-producer Community Supported Agriculture (CSA) models to regional distribution networks of producers and buyers, with a variety of missions. Including the many types of organizations under one umbrella is useful because it allows diverse organizations to participate in a greater movement to develop resilient regional food systems and allows them to benefit from resources developed by organizations like the Wallace Center’s National Good Food Network and Wholesome Wave. At the same time, although food hubs might share common goals, what determines a food hub’s model and level of success is ultimately location-dependent (Marsden 2012). This guide documents lessons learned from the food hub literature and experience gathered in key informant interviews with management staff at selected food hubs in New England. While these lessons will help food hub leaders weigh their options and develop their own marketing strategies for scaling up, there is not (and should not be) a one-size-fits-many template (Blay-Palmer et al., 2013).

World PEAS Food Hub and Key Informants



This guide is the result of collaboration between New Entry Sustainable Farming Project's World PEAS Food Hub and students at the Tufts University Friedman School of Nutrition Science & Policy. In 2013, New Entry won a Federal State Marketing Improvement Program (FSMIP) grant, co-funded by the USDA's Agricultural Marketing Service and the Massachusetts Department of Agriculture. One of the grant objectives is to develop a guide to scaling up a food hub business plan based on a case study of World PEAS and other food hub models.

In preparing this guide, the authors reached out to nine food hubs in the New England region, of which three were willing to be interviewed. The purpose of these interviews was to gain a deeper understanding of what strategies successful food hubs employed as they were scaling up their operations. Key lessons gleaned from these interviews are featured throughout this guide.

World PEAS Food Hub



World PEAS Food Hub is a program managed by the New Entry Sustainable Project, non-profit partnership of Tufts University and Community Teamwork, Inc. based in Lowell, MA. World PEAS was established in 2005 to expand marketing opportunities for graduates of the project's Farm Business Planning Course, most of whom are under-resourced and beginning farmers. Over the past nine years, World PEAS has matured into a full-service food hub, with the large majority of its sales coming from its self-operated CSA program. Since 2005, the food hub's annual gross sales grew from \$7,000 to over \$300,000 by 2012. In addition to providing marketing services to farmers, World PEAS has a mission to improve access to healthy, culturally preferable foods among low-income households. This differentiates its operational structure from that of more market-oriented food hubs in New England and elsewhere, which may respond more directly to market signals.

Red Tomato



Red Tomato is a 501c3 non-profit food hub based in Plainville, MA whose mission is to connect farmers and consumers through marketing, trade, and education. Founded in 1996, Red Tomato originally functioned as a small-scale warehouse and distribution

operation that marketed and sold local and regional products to retailers. In 2002, the organization divested its assets and shifted to a model in which it manages logistics through a network of farmers, independent truckers, and wholesale partners. Red Tomato now markets produce for a network of over 40 farms and apple orchards, selling to over 200 retail stores in New England, New York, and the mid-Atlantic region, reaching \$4.1 million in annual revenues in 2012 (redtomato.org/ourhistory.php).

Black River Produce

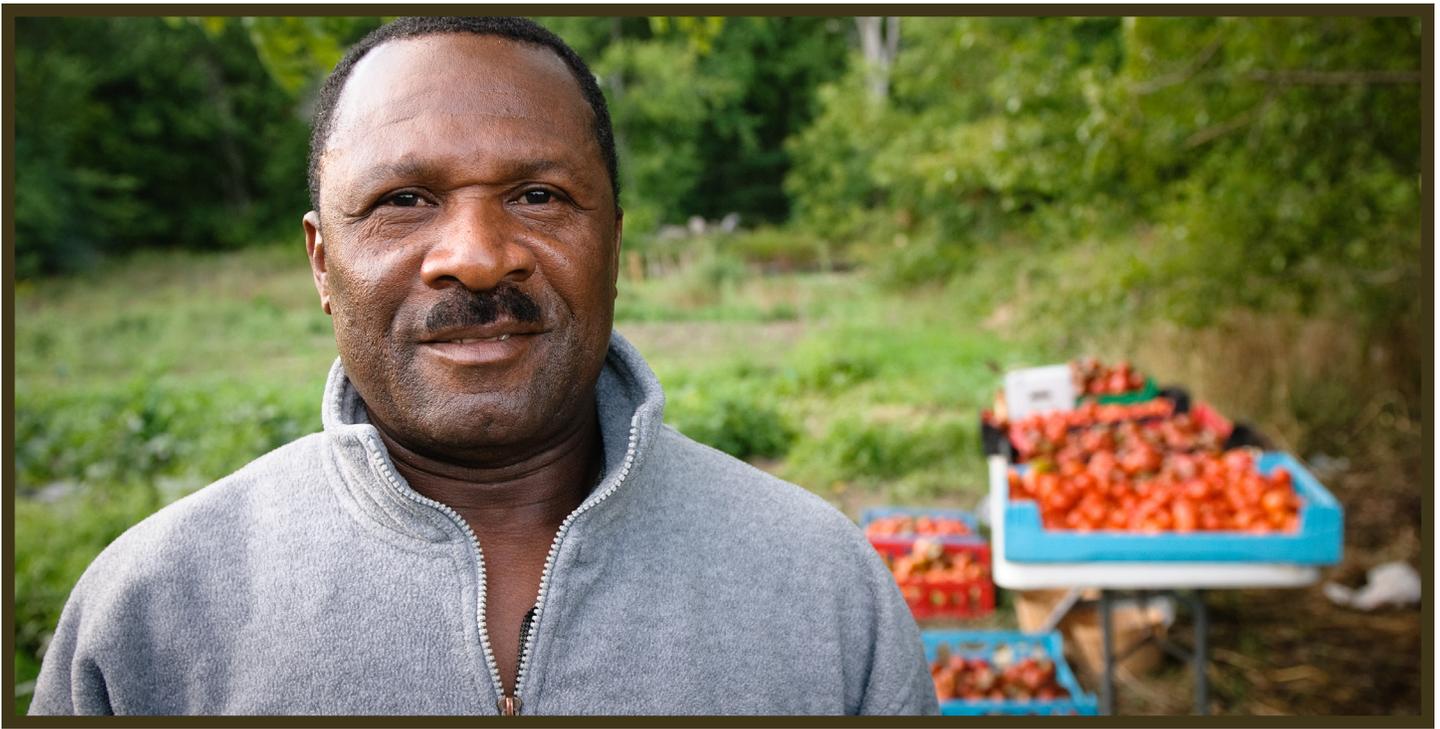


Black River Produce is a for-profit wholesale distributor based in North Springfield, VT. Although they operate on a much larger scale than a more traditional food hub, Laura Edwards Orr at Red Tomato identified them as an example of a for-profit company that operates according to the ethical values that drive food hubs (L. Edwards Orr, personal communication, April 9, 2014). When Steve Birge and Mark Curran founded Black River Produce in the 1970s, their idea was to fill what was then a significant gap in the local market by bringing a supply of high-quality local fruits and vegetables to consumers. The business got its start with Mark and Steve driving their van down to the Boston wholesale market while stopping at farms in southern Vermont on the way to fill up the van. Local chefs spread the word and within a year, they were supplying more than 30 restaurants. Today, Black River Produce supplies more than 2,000 wholesale customers in Vermont, New Hampshire, New York, and Massachusetts. In addition to produce, the business has expanded to include fresh and frozen seafood, locally processed meats, and cut flowers (<http://www.blackriverproduce.com/about.html>).

Farm Fresh Rhode Island



Farm Fresh Rhode Island is a 501c3 non-profit, founded in 2004 with a mission to grow a local food system that values the environment, health and quality of life of Rhode Island farmers and eaters. Its objectives include preserving farmland and agricultural and culinary knowledge, building healthier communities, increasing access to fresh food, improving the impact of food production on the environment, and strengthening community-based businesses (farmfreshri.org/about/about.php). Farm Fresh RI was born out of a project by a Brown University student and started with trying to connect local farmers and local eaters through a its Local Food Guide. Out of that effort, the organization expanded its programming to include seasonal and year-round farmers markets, pooled farm-to-business delivery through Market Mobile, and partnerships with the Rhode Island Department of Health and Division of Agriculture to expand access to fruits and vegetables to seniors and participants of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Supplemental Nutrition Assistance Program (SNAP) (J. Rye, personal communication, April 29, 2014). Farm Fresh RI brought in \$1.11 in revenues in 2012, which included private and government grants (43 percent), fees retained for product sales, distribution services and market rental fees (46 percent), and individual donations (11 percent) (<http://www.farmfreshri.org/about/docs/2012review.pdf>).



Legal Status and Business Models

Legal Status

Food hubs have diverse business structures, but overall the three most typical models are non-profit organizations, for-profit businesses, and cooperatives. Food hubs that are just starting up should define their structure according to what best fits their particular mission, objectives, market conditions, local food environment, growing capacity, existing infrastructure, financial resources, and the capacity of its stakeholders (Lerman et al., 2012). A food hub's legal business structure defines its tax liability, general approach to risk management, and liability exposure (Thompson & Hayenga, 2008). Non-profits have tax-exempt status and cooperatives can deduct patronage refunds to its members from taxable income (Baarda, 2007). According to a USDA analysis published in April 2012, out of 184 projects surveyed, 28 percent were non-profit, 19 percent were cooperatives, and 53 percent were classified as "other", which included buying clubs, direct farm sales, multi-farm CSAs, box delivery projects, virtual farmers' markets, and institutional buying connections (Blay-Palmer 2013).

Market Segment

Aside from legal business status, food hub business models differ according to the market segments they serve. The CSA model is one example of a direct-to-consumer marketing strategy, and is the primary source of revenue for World PEAS Food Hub. But direct marketing to consumers extends beyond individuals CSA subscriptions. Food hubs may look to partner with corporate wellness programs that encourage employees to sign up for shares. Food hubs also bring local food into the wholesale supply chain; the Wallace Center found that 33 percent of food hubs in the U.S. are farm-to-business operations that sell local food to grocery retail markets, and 28 percent are hybrid food hubs that supply both wholesale and farm-to-consumer markets (Cantrell et al., 2014). Food hub managers looking to expand their business should first use Wholesome Wave's Competitor Comparison Chart and Market Sizing and Segmentation Sales Pipeline tools to assess their market position and to determine the best marketing strategy (wholesomewave.org/hfci). One strategy would be through market penetration, in which case the food hub would try to achieve growth with existing products within its existing customer base, either through additional marketing or more assertive sales efforts. By

contrast, a market development strategy would involve targeting multiple new market segments with its existing products (e.g., direct-to-consumer CSA shares, local restaurants, and local universities) (<http://www.quickmba.com/strategy/matrix/ansoff/>).

Non-Profits

Non-profit organizations are tax-exempt, can apply for grants from government donors, foundations, and can also accept tax-deductible charitable donations from individuals or groups. An organization may elect non-profit status if their model places more emphasis on their social values over profitability (Matson et al., 2013). Non-profit food hubs tend to incorporate one or all of the following motivations in their mission:

- Economic resilience: increasing incomes and expanding marketing options for local farmers;
- Ecological resilience: promoting agro-ecologically sustainable production practices; and
- Social justice and food security: increasing access to fresh fruits and vegetables among low-income consumers (Blay-Palmer 2013).

Most organizations focus more on one of these objectives than others (Mount et al., 2013). For example, the Toronto Food Strategy and Toronto Food Policy Council prioritize social justice and food access (Fridman & Lenters, 2013). In fewer cases, organizations attempt to keep all three issues in balance. An example is Just Food Ottawa, which “works to promote a vibrant, just and sustainable food system” and whose objectives include expanding food access, improving ecological sustainability, providing sustainable livelihoods for producers, and encouraging local citizens to be actively engaged in the food system and food-related decision-making processes (Balamingie & Walker, 2013).

Social justice-motivated hubs may see their organizations as cutting out profit maximizing

“middlemen”, linking producers to customers while retaining a minimal margin to cover their administrative costs. Amanda Osborne, director of Ecotrust’s FoodHub, challenged this assumption, pointing out that food hubs “are competing in one of the world’s most cutthroat businesses, which often operates on net margins of less than 1 percent, and they are trying to return more money to the farmers, operate on smaller scales, and provide additional social and environmental services...the reality is that there is no way to challenge the economies of scale of industrial food production, which is propped up by subsidies, kickbacks, and money-saving environmental shortcuts” (Jacobsen 2013).

If a non-profit food hub wants to address both goals (fair income and food access) while achieving a certain level of financial self-reliance, the organization could maintain separate project budgets for each enterprise or activity. For example, Farm Fresh RI has eight or nine activity budgets to accurately track its projects (J. Rye). This allows the organization to set a goal to achieve self-sufficiency of its trade business and provides



a tool to measure progress towards that goal. In this example, self-sufficiency is achieved when the commission retained from sales exceeds the cost of maintaining the trade business. Depending on the model, this could include marketing, administration, and warehousing and distribution costs. Maintaining separate profit and loss statements for each activity allows a successful non-profit organization like Red Tomato to demonstrate its legitimacy as a self-sustaining trade operation, while still allowing it to pursue philanthropic support to achieve its food justice goals (L. Edwards Orr). In years when trade income exceeds operations costs, the excess funds can be reinvested into the organization's community development efforts or as capital investment. In years when trade income falls short, such as in years of investing in additional staff or capital, the organization can use grant funding to cover the difference.

Non-profit distribution enterprises that rely on grant funding for their operations may face some challenging questions related to long-term goals and economic viability (Day-Farnsworth et al., 2009). However, non-profits who can successfully obtain funding may enjoy the flexibility to take risks:

“We’re constantly trying to innovate, stay at the front of the market, and push the limits of our organization, and work not only as a successful trading organization but also as a learning laboratory around our core purpose and our core values. There’s a lot that we undertake that might not work in the marketplace, we have funders who are behind us because they want to learn what we can learn given our position in the market, and there’s so much to know and to learn that we wouldn’t necessarily want to be limited in that way...our nonprofit status gives us a lot of flexibility...to take on risky pilots or do scientific research that we wouldn’t be able to cover with our trade margin”

– Laura Edwards Orr, Red Tomato

On the other hand, the governing structure of a non-profit may lead it to be naturally risk-averse.

“I think being a nonprofit sometimes makes us more risk averse. Because all of our decisions are vetted through our board of directors, it’s never just one person with an entrepreneurial idea that’s going to make something happen, it’s always something that’s very thought out on a team level and on an organizational level, and in terms of risk, we actually try not to assume much risk because [a lot of] the funding that we’re working with...is restricted.”

– Jesse Rye, Farm Fresh Rhode Island



For-Profits

Among respondents to the 2013 Food Hub Survey, forty-seven were for-profit businesses, but more than half of food hubs that opened in the last two years were for-profit (Fischer et al., 2013). The survey analysis found significant correlation between operating structure and reliance on grants; 69 percent of for-profit hubs reported they were not reliant on outside funding. There seems to be a shared sentiment among for-profit food hubs that relying on grants is equivalent to lacking economic viability and longevity. Black River Produce does not accept any grant funding for this exact reason (S. Sparks, personal communication, April 14, 2014). Mad River Food Hub in Waitsfield, VT is another example of a for-profit enterprise whose founder did not want to rely on grants, viewing the model as unsustainable. This point of view influenced Mad River's targeted customer base as well; while they initially they sold to institutional clients such as schools and

cafeterias, they found the price points to be prohibitively low (Jacobsen 2013).

According to the responses to the 2013 National Food Hub Survey, for-profit hubs were more financially profitable than non-profits, but were less profitable than cooperatives. The survey analysts calculated the average business efficiency ratio for each respondent, which is the proportion of total expenses to total revenue. A number lower than 1 indicates profitability. The average ratio for for-profit food hubs was 1.06, but the range was wide (0.33 to 3.53). Food hubs that had the word “environment” in their mission statement were less likely to rely on outside funding (73 percent were not at all dependent and 27 percent were somewhat dependent) (Fischer et al., 2013). Black River Produce integrates environmental stewardship into its operations in an attempt to reduce their carbon footprint. They have the largest solar array in Vermont, use clean diesel and biodiesel in warm months when they can, installed LED lighting motion sensors, and a refrigeration system that uses outside air for cooling (S. Sparks).

In their investigation of small-scale food hubs, Horrell et al., found that for hubs that distributed profits to shareholders, financial viability was the primary driver, with social/ethical considerations being a secondary motivation (Horrell et al). Balancing the tensions between social and commercial work can be difficult to manage, and there was a recognition that commercial success could lead to a drift towards replicating the conventional food system they had originally intended to provide an alternative to (Horrell et al). Shareholder-owned hubs appeared to invest in strong operational and IT systems to control variable costs and had staff with experience in the private sector (Horrell et al.).

Cooperatives

A cooperative is owned and democratically controlled by its members; the members elect the board of directors. Cooperatives can be producer-led, retailer-led, or have consumer members (e.g. buying clubs). The cooperative structure is a well-known, established community entity with strong roots in agriculture (Matson et al., 2013). Membership fees provide working and investment capital, and any surplus revenue is distributed and returned to members. According to the 2013 Food Hub Survey, cooperatives were the most financially successful food hubs, with a mean business efficiency ratio of 0.94 (Fischer et al., 2013). No cooperatives had language about food access in their mission statements, but cooperatives had the highest amount of language about consumer awareness and the environment (Fischer et al., 2013).

The cooperative model aggregates the market power of its members, who benefit from efficiencies gained and better prices as a result of centralized marketing and business development efforts. A cooperative can serve as a business incubator for its members, whether for new growers trying to establish themselves in the market or for existing growers looking to expand and diversify. The cooperative can help growers improve their practical knowledge, marketing skills, and business relationships (Lerman et al., 2012).



The horizontal leadership structure of the cooperative model has its disadvantages. If the organization lacks clear delegation of responsibilities, “this model can result in disorganization, leadership imbalance, and fatigue” (University of Wisconsin, 2010). Red Tomato originally considered the cooperative model for its own operation, but decided against it because the founder did not want slow and risk-averse decision-making processes to interfere with the organization’s agility in responding to market demands (Matson et al. 2013).

Relationships

Information exchange and transparency

Relationships built around regular communication and transparency are key to the growth and success of food hubs within a values-based supply chain (VBSC). VBSCs are most effective when producers, distributors, and retailers develop long-term relationships that meet the needs of all parties involved. By avoiding conventions typical of the mainstream food industry and instead openly sharing information among supply chain partners, food hubs form relationships built on trust and loyalty that prove crucial during the scaling up process (Lerman, 2012).

A literature review of VBSCs found that these relationships are regularly characterized by open communication and negotiation, reasonable power structures along the supply chain, understanding of other partners’ business models, and transparency about each other’s strengths and weaknesses (Lerman, 2012). These types of relationships develop through efficient and equitable information exchange. Part of a food hub’s role in the supply chain is to regularly gather and manage information from producers, consumers, and investors in order to facilitate transactions that avoid risk and benefit all partners. Some of this information includes communicating protocols for quality assurance from distributors to producers, relaying customers’ willingness to pay to producers, and sharing production costs with consumers. For many food hubs, price setting is a



transparent process, resulting in efficiency, equity and working relationships built on trust (Matson et al., 2013).

Strategic partnerships

Working relationships within VBSCs are crucial for growth in the local food sector. By devoting resources to relationship development at multiple levels within the supply chain, food hubs are enabled to navigate the scaling up process with greater ease (Clark et al., 2011). Additionally, a repertoire of diverse contacts with complementary businesses and organizations within the community can provide the food hub with needed resources and greater market access. For example, a relationship with Newport Restaurant Group helped Farm Fresh RI learn about restaurants’ expectations and desires for produce ordering, allowing the food hub to increase their Market Mobile sales to restaurants in the area (J. Rye).

By engaging a wide range of community stakeholders, food hubs can leverage a variety of resources that will help the organization reach its

full potential (Barham et al., 2012). The USDA's Regional Food Hub Resources Guide encourages food hubs to reach out to all potential participants in the supply chain, including schools, institutions, distributors, retailers, foundations with shared values, economic development agencies, planning organizations, and health departments at the city, county, and regional levels (Barham et al., 2012). However, focusing first on the sectors that are most open and interested in the food hub's mission and engaging the food hub's work will prove most effective.

In addition to interest, flexibility in the potential partner's operational structure to work with the food hub is also key. For example, it was noted that Ohio retailers had the desire to build relationships with the farmers they were purchasing from, but the opportunity to do so varied with retailer size. Mid-sized retailers and independent stores were found to have the most autonomy and flexibility in purchasing decisions (Clark et al., 2012). To better facilitate growth, food hubs should focus on relationships with business partners and community stakeholders that have both interest in the food hub's work and time and flexibility to develop a working relationship that benefits all involved.

Funding

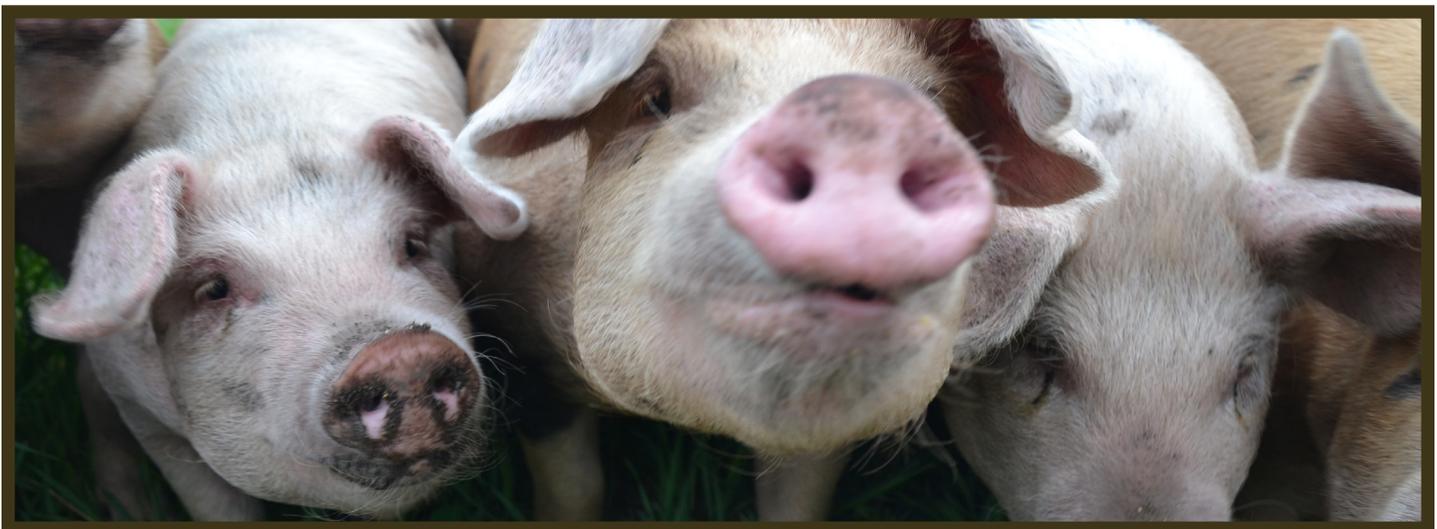
Based on finding from the 2013 National Food Hub survey, 92 percent of food hubs' revenue

came from inside sources on average, including income from services provided, membership fees, bank loans, and private investors. Income from services provided accounted for 86 percent of average revenue. Outside sources included federal state or local government funding, foundation grants, in-kind support, and donations. About one-third of participating food hubs reported revenue from both inside and outside sources. For these food hubs, an average of 77 percent of revenue was from inside sources (Fischer et al., 2013).

Funding sources

When expanding operations or piloting a new project, financial support in addition to the food hub's earned income is often needed to help fund the growth. There are a variety of funding options, such as federal grant and loan programs, philanthropic foundations, and corporate donations. Financial assistance can come in the form of in-kind support as well. Donated equipment or shared processing facilities can help the food hub reduce costs while still expanding operations and market offerings (Day-Farnsworth et al., 2009).

Food hubs should also look for support from partners that have a stake in the food hubs success (Matson et al., 2013). For instance, Laura Edwards-Orr from Red Tomato, stated that when Red Tomato wants to pilot a new project that would not be covered by their trade margin, "we look for relationships with funders, mostly





foundations, that are trying to answer the same questions we are and are interested in partnering with Red Tomato to understand where there's opportunity and where change can be made" (L. Edwards-Orr). Some food hubs, such as Red Tomato, prefer financing growth through grants due to the flexibility and minimized risk that they offer.

Other food hubs prefer to scale up through debt financing. However, access to capital is often a significant barrier for scaling up food hub operations or infrastructure development (Matson et al., 2013). Market conditions for food hubs are encouraging, yet access to capital was frequently identified as a limiting factor to growth in the 2013 National Food Hub Survey (Fischer et al., 2013). The difficulty with accessing capital was also linked to problems related to obtaining

short-term revolving credit to maintain sufficient cash flow for payments (Barham et al., 2012). In addition, inadequate access to capital is often correlated with a food hub's operational scale. This means smaller food hubs have the greatest difficulty accessing capital and are the most restricted in terms of market growth (Matson et al., 2013).

Several unconventional funding opportunities are emerging as well that could prove advantageous for food hubs. Innovative loans from social enterprise organizations, Community Development Financial Institutions, and a few USDA loan programs provide low-interest loans accompanied by technical support for food hub operations. Social enterprise investors may also be drawn to the social benefits provided by food hubs. These social investors are looking for investment opportunities that provide a social or environmental benefit, while also receiving financial returns. There are also a few less traditional options available, such as crowdfunding (Barham et al., 2012).

Funding considerations

Food hubs have a variety of funding opportunities to assist them with market expansion. However, based on business model, operational structure, and mission, not all funding sources are viable options for every food hub. For example, social enterprise investments increase food hubs' access to capital, but food hub management must be able to guarantee financial returns to investors. This investment introduces a new challenge of meeting funder expectations. When selecting funding sources, food hubs should avoid designing programs that meet the needs of the funder but not necessarily the food hub, which could jeopardize the food hub's ability to fulfill its goals and serve its constituents (Horrell et al.). All funding types come with challenges. Therefore, food hubs must carefully consider which funding sources best enable them to carry out their missions.



Managing Growth and Matching Supply and Demand

The current market conditions for food hubs seems favorable, offering much potential for growth. Local food was included in six of the top twenty food trends for 2014 in the National Restaurant Association’s Culinary Forecast. They included locally sourced meats and seafood, locally grown produce, environmental sustainability, hyper-local sourcing, sustainable seafood, and farm/estate-branded items (Cantrell et al., 2014). Eighty-three percent of consumers surveyed in the 2011 National Grocers Association survey indicated that the availability of local food was “very” or “somewhat important” to their choice of a food store (Cantrell et al., 2014).

Food hub managers also recognize the promising market opportunities. In the 2011 National Food Hub Collaborative survey, almost all the food hub operators who responded said that expansion opportunities exist for their food hub. Accessing new markets and increasing product offerings were identified as the clearest mechanisms for growth (Barham et al., 2012). Food hub operators

identified the following areas to have “many” or “some opportunities” for expansion: restaurants, caterers, or bakeries (87%), food cooperatives or buying clubs (74%), corner stores/small grocery (70%), online store (66%), colleges/universities (64%), hospitals (61%), distributors (60%) (Fischer et al., 2013).

Despite conditions being right for food hubs to expand operations, growth is challenging. Managing growth (77%) and balancing supply and demand (59%) were recognized as one of the three greatest challenges faced by food hubs in the 2013 National Food Hub Survey (Fischer et al., 2013). Adding more producers and buyers, managing new expenses related to growth, and maintaining adequate cash flows for payments can be tough (Lerman, 2012). Additionally, food hubs often struggle with the chicken-or-the-egg conundrum of whether to build up supply or demand first. Growth may also require the food hub to increase their technical expertise and management skills.

Challenges for matching supply and demand

Factors frequently cited as hindrances for food hubs matching supply to demand include quantity, product availability, and the growing season. Despite their interest in including more

local produce and products, restaurants, grocery stores, schools, institutions, and corporations are often unable to get local food products in quantities large enough to meet their food service needs (Matson et al., 2013). Distributors and other wholesale buyers also require a sufficiently large, reliable supply of quality product before agreeing to purchase more local food.

Product availability, such as diversity of products offered and available delivery routes and times, can also limit food hubs sales. A customer survey for Regional Access food hub in upstate New York showed that both household (33%) and business (66%) customers were interested in increasing their purchases if Regional Access expanded their product offerings in some way. Household customers desired additional product offerings, smaller minimum orders, and more delivery routes and times. Business customers wanted greater diversity and more year-round products (Schmit, 2013).

The seasonality of produce introduces additional challenges to matching supply to demand. In many regions, the demand for local food exceeds the supply, but this is especially true in the winter season. Season extension practices, such as 'switch seasons' farming' or reducing production in the summer and increasing production in the winter, could help to increase product availability. However, a few food hubs have reported that some growers are not interested in adjusting production practices (Barham et al., 2012).

There is no lack of demand for local food. The challenges with matching demand to supply often involves inadequate information, undeveloped relationships, and logistical difficulties within the supply chain. For example, restaurants, grocery stores, schools, institutions, and corporations frequently face difficulty with obtaining enough information about local products and coordinating the logistics of a working relationship with a local food supplier (Matson et al., 2013). Also, consumers might not be fully aware of the social benefits and differentiated products offered by food hubs.



Supply or Demand? When scaling up, do you build supply or demand first?

“Our rule of thumb is that the market drives everything. So we don’t ever want to be in a position where we’re telling a grower to plant something that we don’t know with some certainty that we can sell. So we’re constantly working to build demand and then carefully ratchet up supply in response to that demand. Five years spent on some seriously successful business development means that we might then spend Five years primarily working on supply development. And I could see an argument for the leap from \$5 to \$10 million being more focused on supply, while the leap from \$1 to \$5 million would be more focused on demand.”

– Laura Edwards Orr, Red Tomato

“They go hand in hand. You can’t really do one or the other first--they need to happen simultaneously, and you need to be thinking long term. Part of it is also building up trust. You can talk to someone about selling them something one year, but if you don’t sell it, or if you don’t work with them to find an avenue for it, the likelihood that they’ll want to work with you again next year is less. But if you can help exceed expectations, which I think we do pretty well around here in terms of helping people find customers. we find that people are more open and willing to engage in crop planning with you .”

– Jesse Rye, Farm Fresh Rhode Island

“Build demand-side first. Farmers who have never farmed before need to study the market, talk to retailers, talk to restaurant owners, and find out where the gaps are, as well as talking to Black River Produce.”

– Scott Sparks, Black River Produce



Solutions

For a food hub to successfully navigate the scaling up process and better manage supply and demand, it must understand the needs and expectations of its suppliers and potential consumers and determine how their interest can be aligned to lead to growth. A food hub can better plan for business expansion by conducting a marketplace overview. A market overview will help the food hub to learn about its market environment, identify possible growth opportunities, and provide comparisons for assessing the food hub's business potential (Moraghan et al., 2014). Gathering information about customers' price points and order expectations, such as quantities and standards, producers' costs, crop plans, and production capacity, and the food hub's services and value to the community will equip the food hub to develop a viable marketing and sales strategy for scaling up (Moraghan et al., 2014).

Matching scale of production

Food hubs serve a wide range of customers, including retailers, distributors, schools, insti-

tutions, corporations, restaurants, buying clubs, and direct consumers, each with their own specifications for what they want and need. With such a range of opportunities, it is recommended that food hubs identify partners that are "well matched in size and scale, and operate with similar goals and values" when expanding operations (Matson et al., 2012).

The key for food hubs is to identify the optimal scale of production needed for the food hub's planned market expansion. Food hubs selling to larger buyers who expect certain quantities must work with a greater number and/or larger producers to supply the demand. Increasing the number of producers can also help the food hub to improve product offerings. Farm Fresh RI works with 50 to 60 different small to mid-sized farmers to meet the size and variety of orders for Mobile Market (J. Rye). Growers Collaborative in California works with farms ranging from less than 10 acres to more than 400 acres. This multi-sized producer models gives smaller farms access to markets while still reaching quantities required by wholesale buyers with product from larger farms (Day-Farnsworth et al., 2009).

Food hubs must understand the importance of well-matched scales of operations, but producers must also be aware and willing to respond to the changes needed for the food hub's growth. Producers need to understand their own production capacity and be informed and in agreement to how much they should supply (Matson et al., 2013). This usually involves active plant scheduling and information exchange about different markets' needs between the producers and food hub. A survey of Ohio retailers indicated that mid-sized retailers and independent stores with more purchasing flexibility showed interest in working with producers to develop crop plans and product lists (Clark et al., 2011). If all parties are willing and able, this is a great way to build trust and loyalty within the supply chain. Food hubs and producers can also consider season-extension options to increase supply and product offerings for scaling up and meeting more demand.

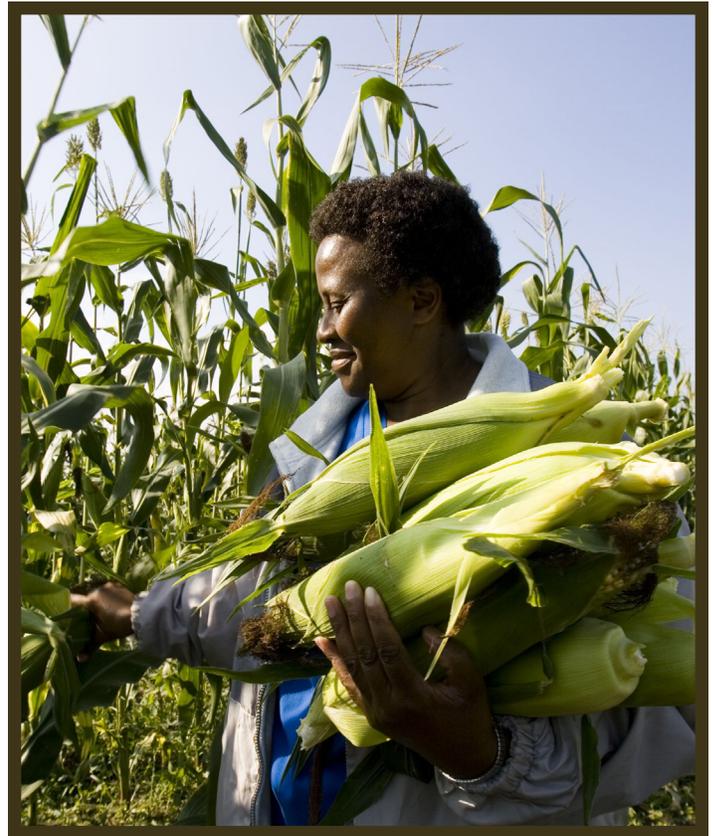
Matching scale of infrastructure

Infrastructure for distribution systems is a crucial element for the success of VBSCs. Like production, the scale of infrastructure must appropriately match the scale and size of the food hub's operations. A 2010 USDA Economic Research Service report indicated that insufficient distribution systems were a major barrier for getting more local products into mainstream markets (Matson et al., 2013). Building and expanding aggregation centers create opportunities for food hubs to expand supply and provide aggregation points for smaller producers that enable them to "jump" scales (Clark et al., 2011). Retailers and distributors have also been reported to increase inventory when common aggregations facilities are available. Some may even be interested in partnering to build the needed distribution infrastructure (Clark et al., 2011).

Although infrastructure is essential for aggregation and distribution of local products, it is not necessary that the food hub is the owner and operator of these facilities. For example, Red Tomato works with mid-sized producers that already have loading docks, refrigeration, and trucking facilities, so the food hub can focus its efforts on marketing, trade, and education (L. Edwards-Orr). Growth opportunities should also seek to maximize the use of existing infrastructure. Farm Fresh RI grew their Veggie Box program by utilizing the same delivery trucks as the Market Mobile program (J. Rye). Food hubs should have or seek to have access to aggregation and distribution infrastructure well matched to the operational scale for the planned expansion in order to reach full potential for meeting demand.

Building demand

Focusing on product differentiation and quality assurance through consumer education and farmer-buyer relationships will help a food hub stimulate demand. Consumer education about the benefits of partnering with a food hub helps to build customer base and brand loyalty. Increasingly, customers are looking for food products that transmit social values and transparency.



Food hubs have the ability to offer this to consumers by providing information about where, how, and by who food is produced (Matson et al., 2013). This information can also be transmitted through labeling, branding, and certification, which provides credibility and builds customer recognition with the food hub's products. Additionally, wholesalers and larger retailers often require formalized certification for the product they purchase. This certification gives the buyers quality assurance, especially when not in close proximity to production, and reduces their risk of including more local food in their inventory. To access these markets, food hubs must be willing to provide or help their producers to provide the certifications required (Matson et al., 2013).

On top of quality assurance, distributors, retailers, and other potential buyers may simply need more information about what a food hub does and how those operations can help their business. Food hubs are creating new business opportunities that assist larger buyers access more local products to meet the growing demand from consumers for fresh, local food. In *Food Hubs: Solving Local*, it is stated that "more retailers and



food service companies are finding that food hubs can help them deliver the real thing: Food from nearby with verifiable people, places, and practices behind it” (Cantrell et al., 2014). Engaging food hubs are innovative strategies for mainstream food businesses to get ahead of their competition. However, food hubs may need to initiate some of those conversations and communicated what they have to offer. Laura Edwards-Orr from Red Tomato, stated, “When we’re building a new program for a new retail customer, it’s very much about who is that retailer, who are their shoppers, what are they trying to do, and how can we help them differentiate themselves in a crowded market” (L. Edwards-Orr).

Price may also be a point of contention that makes matching supply and demand difficult. Some consumers are reluctant to pay price premiums that are often associated with locally grown food. This reluctance can also dissuade distributors and retailers from committing to larger purchases from fear of not moving their product. Again, consumer education and transparency are the first steps for lifting some of this contention. Some food hubs have reported an increased willingness to pay from consumers after devoting resources to education and advocacy about the true costs of production (Barham et al., 2012). Also, promoting the farm “story” resonates with consumers, increasing their sense of social connection and desire to support producers (Lerman et al., 2012). However, increasing customer willingness to pay is a difficult process that will require

patience, dedication, and time. Black River Producer in Vermont, which has been in operation for more than 30 years, stated that they still face the challenge of “getting people to realize that if you want to support local farmers, you truly have to support them financially” (S. Sparks).

Business Processes and Strategies

Pricing

Pricing models distinguish the food hub sector from traditional produce wholesalers and processors. Food hubs tend to be more transparent about the pricing of each step of the supply chain within their control, providing fair prices to growers instead of viewing them as price takers (Moraghan et al., 2014). Local food sellers are able to sell to consumers who are willing to pay a premium if they know the origins of their local food (Matson et al., 2013). At the same time, pricing is the chief concern for food hubs that aim to assure fair prices for producers and affordability for consumers, not to mention the fact that competition from the large companies in the conventional supply chain exert downward price pressure (Lerman, 2012). World PEAS, Red Tomato, Farm Fresh RI, and Black River Produce, despite their diverse models, all share a goal of setting prices that are fair to growers.

The World PEAS Food Hub provides a liv-

ing-wage market to graduates of the New Entry Sustainable Farming Project's Farm Business Planning Course. The food hub aggregates produce from over 30 farmers and sells full-season and fall-only CSA shares in the Greater Boston Area. World PEAS retains a 21 percent commission on produce sales to cover its operational costs, which include vehicle and fuel expenses, packaging supplies, lease for its aggregation facility, printing, and World PEAS staff (New Entry Sustainable Farming Project, 2012). For the first time in 2010, World PEAS achieved operational self-sufficiency after earning sufficient revenue to cover its operational expenses. Since scaling up in 2012, when they leased a new packing facility and purchased a used delivery truck, expenses again have exceeded earnings (New Entry, 2013). With plans to scale up its business development, the management team at World PEAS decided to invest in additional infrastructure to facilitate a move to the next level of operations (K. Fitch, personal communication, November 7, 2013).

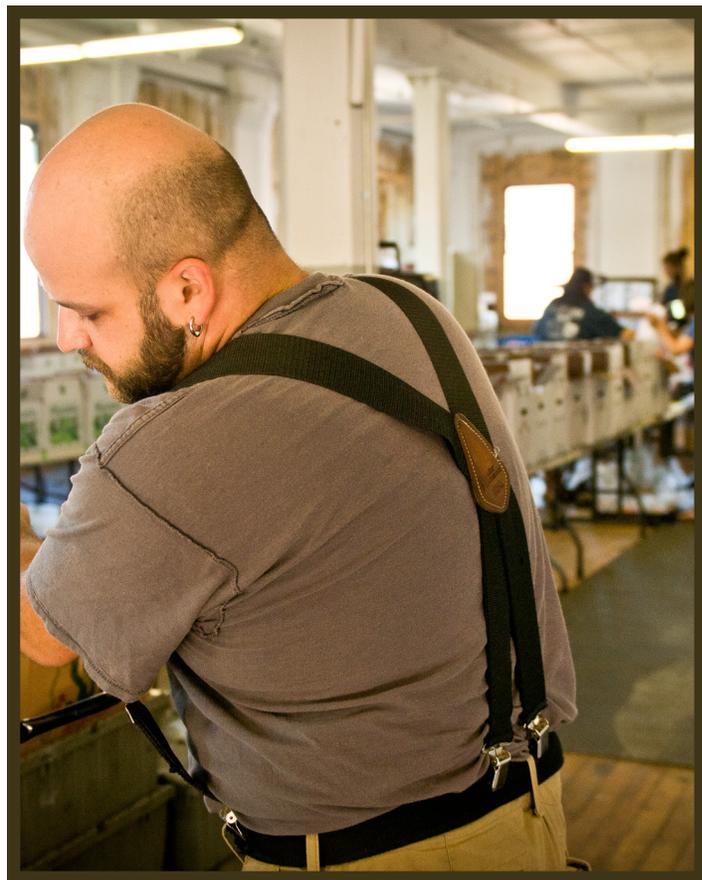
The team at Red Tomato works with growers to understand their costs and to determine a price that reflects cost of production plus a reasonable margin. Through this process they set an "ideal" price for each crop, as well as a "dignity" price, the lowest amount the grower would be satisfied with in times of stiff competition (Alvarez et al., 2010). Red Tomato retains about 10 to 11 percent of the delivered cost of the package to the customer (price paid to the farmer plus trucking cost). This percentage reflects a season average; the margin changes on a transaction-by-transaction basis depending on the cost of moving a product, which is determined by how the product is packed onto a pallet. For example, Red Tomato retains about 6 to 8 percent on sales of bulky corn, which is piled 25 bags to a pallet, while they can retain about 13 percent on blueberries, which are more efficient to ship at 100 trays per pallet (L. Edwards Orr).

Farm Fresh RI started its farm-to-business delivery program, Market Mobile, in 2009. Today Market Mobile distributes local produce, dairy, meat, seafood, and other products from a network of 50 to 60 farms and producers to restaurants, grocers,

hospitals, and schools in Rhode Island and Massachusetts (farmfresh.org/hub). Farm Fresh RI does not directly purchase products from growers; they provide an online marketplace that allows customers to connect with farmers in a prearranged agreement, and retain a percentage to cover distribution and administrative costs. During its pilot phase, Farm Fresh RI received grant funding to start up Market Mobile. By 2013, trade income covered 97 percent of Market Mobile's operating costs, with the additional 3 percent covered by fees retained for back-hauling and logistics services. Initially, Farm Fresh RI was retaining a 10 percent administrative fee, then raised it to 15 percent, but continued to operate at a loss. Realizing that they would have to increase their fee again to break even, management obtained buy-in from growers, producers, and customers to raise the fee to 18 percent. In addition to increasing the commission applied to sales, the organization worked hard to increase the efficiency of its operation. (J. Rye).



“Part of it is the margin...but part of it is also working to understand the efficiency you can gain. However you can have your operation be as lean as possible, that’s something you should be doing before you increase your margins...I think as a food hub you’re obligated to understand what you can do before you try to push that burden onto your growers.”
 –Jesse Rye, Co-Executive Director, Food System Enterprise at Farm Fresh RI



Black River Produce’s approach to pricing involves assessing what the market will bear, looking at what its competitors are charging, and determining what their growers need to earn for their businesses to be successful. Part of the process involves educating farmers on the benefits of selling to Black River Produce and the basis for the prices they can offer. More than simply increasing farmers’ access to local and regional retail and wholesale markets, they assume full responsibility for distribution, nurturing relationships with buyers, and collecting and managing finances. “A lot of farmers think that they can sell to us at the same price as the farmers’ markets but there’s no way that can happen,” explained Scott Sparks, Vice President of Sales. “We can’t buy at retail price and then sell to a retailer who has to market [the product] again” (S. Sparks).

A food hub’s revenue model depends on which activities in the supply chain they focus on, as shown in Table 1, excerpted from Wholesome Wave’s Food Hub Business Assessment Toolkit (Moraghan et al., 2014).

When Intervale Food Hub started its operation in 2008, they began selling at prices that were higher than wholesale market prices. In 2009, farmers agreed to reduce their prices to better

meet market demand and to ensure the economic viability of the food hub. Even after the price reduction, farmers viewed their accounts with Intervale as profitable and reliable, as they were able to sell wholesale quantities at prices varying from 5 to 30 percent above normal wholesale prices (Schmidt et al., 2011).

Infrastructure Models

Food hubs’ asset bases are diverse and depend on the scale of operations and business structure. In addition to the Food Hub Business Assessment Toolkit released in March 2014, Wholesome Wave is currently developing two guides related to physical assets. One will provide metrics for

Type of Activities	First-mile aggregation	Last-mile distribution	Retail or diversified markets	Processing for convenience	Processing for preservation
Revenue model	<ul style="list-style-type: none"> • Fee for service • Price per unit • % of sale 	<ul style="list-style-type: none"> • % of sale • Commission 	<ul style="list-style-type: none"> • Price per unit • Commission • % of markup 	<ul style="list-style-type: none"> • Fee for service • Price per unit 	<ul style="list-style-type: none"> • Fee for service / facility rental • Price per unit

Table 1

evaluating the efficient use of physical resources and the other will elaborate considerations for owning versus leasing physical resources (<http://wholesomewave.org/hfci/>). Some food hubs may be more willing to build up an asset base and own its equipment, others may prefer the flexibility that leasing equipment and vehicles allows (Moraghan et al., 2014).

The World PEAS Collaborative is an asset-based operation. Having outgrown the original on-farm packing site, World PEAS management began leasing an indoor packing facility with a loading dock in 2012, which drastically improved the efficiency of its operations as well as the shelf life and quality of the delivered products. They invested \$13,000 to properly outfit the facility. The staff can now load full pallets in and out of the cooler and into the packing area, reducing the amount of time that produce is exposed (New Entry, 2012).

Michael Roznye founded Red Tomato in 2006, and until 2002 ran it as an asset-based food hub that directly managed all trucking, receiving,

warehousing, and delivery to customers. In 2002, it had become clear that the original model was no longer working. Red Tomato's management team looked at the organization's growth curve and found that they could gain some economic efficiency by outsourcing the distribution logistics. Additionally, managing these aspects in-house at the level to which they had grown was taking a toll on all the personnel, who worked around the clock and rarely on more than four hours of sleep. One thing that facilitated this transition was the logistical capacity within the grower network. Since Red Tomato sources mainly from mid-size wholesale-ready growers, many of them already had loading docks, refrigeration, and trucking capacity. Therefore the capacity was already built into the network, but the responsibility and cost could be transferred (L. Edwards Orr).

"When we let go of those assets and were able to focus on what the team was good at, the gross sales went up dramatically."

– Laura Edwards Orr, Red Tomato

On the other end of the spectrum is Black River Produce, an operation whose management team values maintaining complete control over supply chain logistics. Black River Produce owns everything from its facility to its trucks. For some operations, the advantage of maintaining control of the supply chain and its costs outweighs the management cost. According to Scott Sparks, Vice President of Sales, "we have full control to make any changes [we] want. We don't have a middleman collecting a fee above and beyond the actual cost, resulting in savings on our end" (S. Sparks).

Farm Fresh RI has a warehouse where they receive deliveries each Monday and Wednesday for deliveries to customers on Tuesdays and Thursdays. They do not own any trucks, but instead have a long-term lease on one refrigerated 18-foot truck. Based on the order size, they flex up to three or four additional trucks on any given week. The managers prefer to avoid the cost and staff time involved in owning and maintaining a vehicle fleet. Part of Farm Fresh RI's success stems from the strong relationship they have



established with their local truck vendor. Having established trust and a consistent stream of business, combined with careful planning, they are able to rent refrigerated trucks even during times of year when supply is tight. However, Farm Fresh RI does not always act as the distributor. For example, they serve as a connector between farms and schools that want to purchase local food through the Farm-to-School Program, but does not offer distribution services due to the complexity of accommodating school delivery schedules, contractual requirements, and special food safety requirements (J. Rye).

Staffing Plans

Any food hub's staffing plan is inherently dependent on its model and the scale at which it operates. However, a few lessons emerge from the food hub literature and key informant interviews that may be generally applicable. It is common for non-profit food hubs to rely on support from volunteers to supplement their existing human resource capacity. World PEAS recruits volunteers to help pack its weekly CSA shares throughout the growing season, with the CSA and food

access coordinator managing and overseeing the packing process (K. Petcowsky, personal communication, September 26, 2013). Farm Fresh RI has benefited from having between eight and ten AmeriCorps VISTA members, who serve as full-time volunteers for a year at a host organization. These volunteers were critical to the development of new programs including Harvest Kitchen (food processing by at-risk youth) and Healthy Food, Healthy Families (a multilingual nutrition education programming at Farm Fresh RI farmers markets) (J. Rye). Farm Fresh RI benefited from having dedicated volunteers whose terms of service were long enough that the benefits outweighed the costs of training.

For food hubs that operate at any significant level of scale, it is essential to hire, develop, and retain staff members who are skilled in recordkeeping and accounting (Matson et al 2013). Although it requires long-term financial commitment, it is more cost-effective to hire a professional manager than to rely on volunteer members, interns, or inexperienced staff to oversee a food hub's administration. Ideally, a management team will include individuals with skills and proven expe-





rience in financial management, the food safety regulatory environment, marketing and packaging, inventory, management and quality control, and who can engage meaningfully with farmer/business owners (Matson et al 2013).

Staff must thoroughly understand the costs of their operation in order to establish an appropriate margin and financial benchmarks. Furthermore, food hubs often assume financial risk on behalf of producers and customers. For example, Farm Fresh RI pays its growers on a biweekly basis, even though some restaurants only pay every 60 or 90 days, and some even less reliably. Therefore it is essential to maintain a professional accounting system that enables staff to track payables and receivables and perform regular cash flow analysis (J. Rye). Black River Produce also commits to paying its growers regularly, while it extends lines of credit to restaurants and other customers, assuming the risk and the responsibility of managing cash flow and hunting down customers until they pay their bills (S. Sparks).

“Some of the biggest leaps and bounds we took as an organization came the year or two after we hired our first full-time accountant and bookkeeper.”

– Jesse Rye, Farm Fresh RI

Due to funding constraints, many non-profit food hubs including Just Food in Ottawa, end up managing a wide range of programs under several grants for different donors, within the constraints

of limited staff and budget. This often results in employees extending themselves beyond contractual obligations out of a sense of personal duty. In this way, Ballamingie and Walker noted that people working in the community-based, non-profit sector effectively subsidize the public interest projects for which they work (Ballamingie & Walker, 2013). The most successful food hubs find a way to release senior management from some day-to-day operational responsibilities to focus on business development (Horrell et al.).

As for logistics staff, food hub managers should do a cost-benefit analysis to determine whether it makes sense to hire people through subcontractors or as employees. When Farm Fresh RI was starting out, they hired all of their drivers through subcontracts, giving drivers the discretion to set up delivery routes and times. As the sales volume and scale of operations grew, the subcontractor model was no longer ideal. Currently, there will be some weeks when Farm Fresh RI sends out four or five trucks with each truck making 20-30 stops. Given the level of coordination required to execute the logistics while keeping producers and customers happy, the staff prefer the control they gain through hiring drivers directly as part-time employees (J. Rye). By contrast, when Red Tomato was still an asset-based organization, all of the warehousing and transportation was handled by direct hires. Now that the organization relies on subcontractors and growers for all trucking and storage logistics, none of these individuals are employees.

For food hubs looking to scale up, it is important to first assess its current staffing structure and determine if the organization faces a skills gap in a critical area, such as financial management and recordkeeping. Once the necessary staffing structure is in place and the food hub wants to scale operations by a significant percentage, managers might consider a few options to compare using cost-benefit analysis:

- Does the organization lack institutional knowledge or skills in any critical areas that would aid its scale-up? Would it be worth it to hire a short-term market develop-

ment consultant who has experience in the wholesale and retail sectors?

- Are logistics personnel hired through sub-contracts or as part-time employees? When was the last time the organization compared the costs of each model to determine what strategy is most consistent with the organization's financial and societal goals? Will this change if revenues increase by 50 percent, or even 100 percent?
- To what extent do trade operations rely on volunteer labor? Would it be possible to bring on an additional staff member to gain more consistency?

Mission

Food hubs are unique operations in that they are not simply businesses for marketing, aggregating, and distributing food products. Food hubs are often mission-driven operations backed by a specific set of social values and goals, including both non-profit and for-profit models. Some of these values include supporting farmers, promoting local food, and increasing food access. This often leads many food hubs to offer additional services, such as food pantry donations and education about nutrition, cooking, and gardening. In addition to providing access to markets and higher prices to producers, some food hubs often provide development services to farmers, including crop planning, season extension techniques, business management training, and food safety training (Moraghan et al. 2014). World PEAS' CSA and food access coordinator provides a significant level of crop planning and business development support to its producer members prior to the start of each season (K. Petcosky, personal communication, November 7, 2013).

The mission-based nature of food hubs can often create unique challenges around the business decisions and self-sustainability of these operations. Serving multiple values at once presents significant a challenge if the organization wishes to achieve full financial self-sufficiency; especially since some goals like increasing producer

incomes and increasing affordability of local produce for low-income consumers are directly at odds. Based on the findings from the 2013 National Food Hub survey, offering multiple additional services was correlated with more dependence on outside funding (Fischer, 2013). Investing resources into scaling up operations while simultaneously supporting the food hub's social mission is often difficult to manage, which can lead to tension between social values and self-sustainability.

Because of this, some food hubs have willingly chosen to forgo financial self-sufficiency in order to continually support and grow their social mission. Many food hubs seek outside financial assistance to help them balance maintaining their values and purpose while expanding operations. Self-sustainability is not always the primary goal for food hubs due to their mission-driven nature. However, most food hubs still strive to operate with efficiency and financial responsibility and cover their costs with earned revenue where able. As Jesse Rye from Farm Fresh RI put it, the key is "being able to run an efficient operation while making it true to your values" (J. Rye).

Growing a viable business while maintaining a social mission is no easy task, irrespective of the food hub's business model. Therefore, it is vital for food hubs to consistently look through the lenses of their original purpose and values during every business and financial decision throughout the scaling up process to ensure that the food hub remains true to itself and its social mission.



Other Resources

Business development

There are many valuable tools that help to facilitate business development. Business development assists food hubs with conducting internal and external assessments and planning for growth. Some processes food hubs may want to consider include:

- Market overview or survey
- Feasibility assessment
- SWOT analysis
- Business and/or strategic plan

Wholesome Wave Business Assessment Toolkit

The Wholesome Wave Business Assessment Toolkit assists food hubs with evaluating their readiness for investment. The toolkit provides a framework for assessing the strengths and weaknesses of the food hub's business model and strategy, impact potential, market overview, marketing and sales, operations, organization and management, risk mitigation, technology and systems, and finance. (<http://wholesomewave.org/hfci/>)

University of Vermont Food Hub Management Professional Certificate

The Food Hub Management Professional Certificate is a higher-education learning program for food hub management. It is designed to equip food hub operators with the essential knowledge and skills needed for effective food hub management by addressing many of the same challenges discussed in this guide. The program will be launched in January 2015. (<http://learn.uvm.edu/partners/cals/programs/uvm-food-hub/>)

National Good Food Hub Network – Wallace Center Winrock International

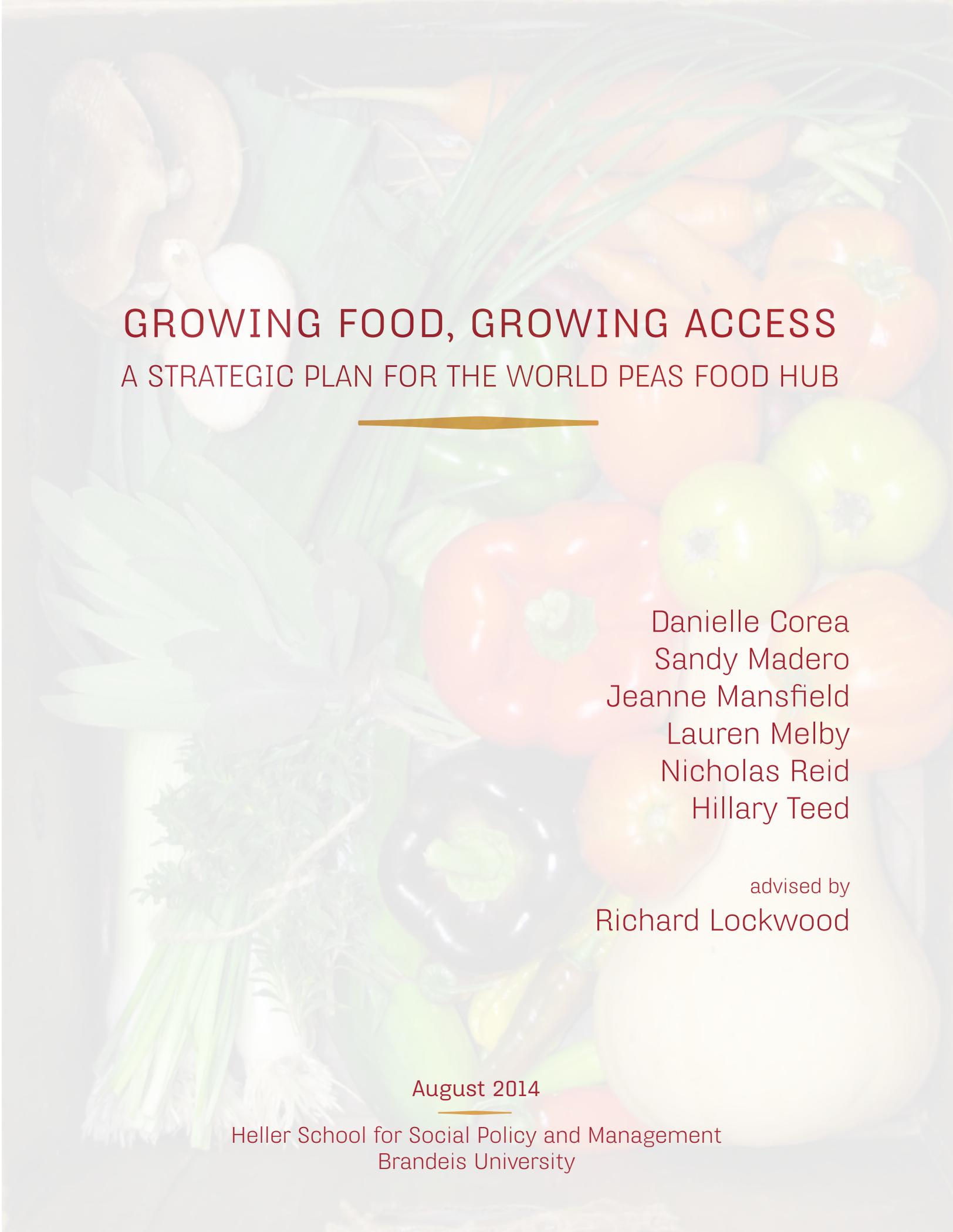
The National Good Food Hub Network (NGFH) is dedicated to the development the Good Food movement by supporting and fostering relationships in value-based supply chain by disseminating information and providing technical assistance. The NGFH online hub provides a wealth of information about the latest research and upcoming webinars and conferences by food hub and VBSC leaders. (<http://www.ngfn.org/>)

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GROWING FOOD, GROWING ACCESS

A STRATEGIC PLAN FOR THE WORLD PEAS FOOD HUB

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EXECUTIVE SUMMARY

The New Entry Sustainable Farming Project (NESFP), based in Lowell, Massachusetts, is striving to bridge the gap that exists between accessible, healthy food and low-income households through its World PEAS (People Enhancing Agricultural Sustainability) Community Supported Agriculture (CSA) produce shares. As its core mission, New Entry seeks to “improve our local and regional food systems” through their farmer-training and career development programs. Through World PEAS, New Entry also operates several food access initiatives including subsidized Supplemental Nutrition Assistance Program (SNAP) CSA shares, outreach to homebound seniors, and donations to Women, Infant and Children’s (WIC) nutrition program participants. Connecting these two vital areas—farmers and “food deserts”—represents a unique, holistic approach to the challenge of improving food security.

World PEAS answers a growing demand in Massachusetts for access to healthy, fresh, affordable produce. Over the past nine years, the organization has grown tremendously and benefited from an upward national trend toward purchasing locally grown foods, particularly CSA shares. Currently, due to an increase in market competition and changing consumer habits, the business model must adapt in some ways to continue to grow in the coming years. Organizational capacity challenges currently limit immediate growth, but with a strategic pivot and new partner networking, WorldPEAS and New Entry can adapt and capitalize on new opportunities in the larger food landscape.

Challenges

The design of this strategic growth plan seeks to address several specific challenges that World PEAS and New Entry must tackle in order to facilitate future growth. The first challenge is an exceedingly common one among small non-profit organizations: staff and resources. The wide scope of duties currently assigned to each full-time employee makes it difficult to concentrate on growth or focus on strategic

opportunities. Rather, the complexities of the day-to-day operation of the various programs require consistent involvement of even high-level staff. In order to grow the organization, NESFP must strategize on how to best allocate staffing resources to more adequately address the needs of World PEAS. Another challenge comes from the declining demand for CSA shares evident in the World PEAS annual financials, particularly in the past two years. The general appeal of CSA shares has declined with the perceived value, due to increased competition from farmers’ markets, an increase in the availability of local produce in grocery stores, inconvenience of delivery and pickup, and a reticence to cooking unfamiliar foods. Finally, World PEAS is challenged with constraining resources for the continued support of the food access initiatives and, as a result, only limited marketing has focused on this vital part of the organizational mission.

World PEAS can adapt and capitalize on new opportunities in the larger food landscape

Overview of Major Findings

Through customer, farmer, and staff interviews, an extensive literature review, a study of best practices, and survey data analysis, our consulting team has formulated and tested numerous hypotheses and produced a number of major findings:

- 1) New Entry’s main factor of differentiation is its holistic social mission;
- 2) There may be future opportunities for greater involvement from farmers;
- 3) The organizational structure of World PEAS could be modified to better facilitate growth.

These findings are discussed in greater detail in the Recommendations section.

Overview of Recommendations

Moving forward and advancing the organizational mission will require some adaptation of World PEAS’ strategy, marketing methods, staffing capacity, and networking. Likely, the best path will include a combination or some formulation of all of these approaches. The consulting team has developed a multi-tiered strategic growth plan, each tier requiring increasingly higher levels of investment and more dramatic organizational pivots. Details for each of the following tiers can be found in the Recommendations section of this paper.

The first plan, Tier 1, recommends some basic messaging shifts in existing marketing materials. This messaging refocuses existing and prospective customers on the core mission and the food access initiative. From our customer survey results, we determined that it would be most effective to frame the mission in terms of what and who their dollars are supporting—under-resourced farmers, low-income populations, and food insecure communities. From the survey, we also found that the target audience is actually comprised of young professionals and near-retired or retired customers. We recommend reorienting some existing staff time toward marketing to these populations.

Tier 2 involves a larger marketing and communications overhaul, as well as a higher investment in part- and full-time staff hours. However, these improvements are projected to increase revenue and improve the financial sustainability of the organization. Increasing staff capacity through additional employees would allow greater focus on cultivating institutional and industry relationships.

The third tier represents a more structural approach to future growth for World PEAS. We recommend developing a “core group” of like-minded collaborators, institutional associates, as well as other current stakeholders including customers and farmers to act in an advisory capacity and help connect the organization to greater resources. Including the reoriented marketing materials and increased staff capacity from the first two tiers, this third tier will also seek out larger grant opportunities and revenue-generating partnerships with similar mission-oriented organizations working in World PEAS target communities. Some of these goals may be outside the three-year scope of the original proposal, but exploring these more long-term strategies may clarify the more immediate opportunities.

Throughout each of these tiers, we examine growth opportunities in three main categories:

- Marketing
- Operations
- Sales

General Cost-Benefit Comparison

Tier 1 and Tier 2

	Tier 1	Tier 2
Incremental Cost	\$\$	\$\$\$\$
Increased Retention		
New Members		

We will explore several examples of additional marketing approaches for each tier. The concept of a “core group” of advisors—representative stakeholders—will be applied to new ideas for structure and operations. Finally, we will propose additional potential partnerships to bolster sales, particularly at likeminded, mission-oriented organizations in the area.

INTRODUCTION

One of our society's many challenges in this still-new millennium is the improvement of the health and prosperity of its citizens. Many of the solutions to that challenge are dependent upon reliable access to one of the most basic of human necessities: healthy food. Here in the United States, even regions of great economic prosperity still offer only limited access to healthy, affordable food for many communities. Some of these communities are in "food deserts," or areas without accessible options for fresh food.

The New Entry Sustainable Farming Project grew out of the Tufts Friedman School of Nutrition Science and Policy and a partnership with the action agency Community Teamwork Incorporated (CTI), also based in Lowell, Massachusetts. New Entry's World PEAS Food Hub began in 2005 with the explicit mission of expanding "access of healthy foods in underserved areas through production of locally-grown foods," as well as providing a reliable market outlet through their CSA program for beginning farmers.

A growing issue both in Massachusetts and across the country is the overall improvement of individual health and well being, and both food and job security. New Entry confronts these interconnected challenges by addressing the local food system in its entirety and working at the intersection of low-income food access and new farmer training. Here, the intersection is the organization's World PEAS Food Hub. World PEAS provides an outlet for New Entry's farmers to sell their produce and provides low-income families with subsidized, affordable weekly CSA shares. In addition, World PEAS also sells CSA shares at market price to its members.

Despite many successes and a level of mission achievement, World PEAS has begun to face numerous challenges, thus stagnating the organization's growth. The limited staffing resources allocated to World PEAS cause individual staff members to be stretched thin, completing tasks that are often out of scope. Furthermore, World PEAS'

market price CSA growth has peaked, and has been on the decline for the last two years. Finally, World PEAS is struggling to achieve financial sustainability, particularly to support its low-income food access initiative.

The ability of the organization to continue to provide access to healthy, affordable food is key in Massachusetts. In the last five years, SNAP benefit utilization has increased by over 37%¹. *Bridging the gap between affordable and healthy food is critical*. Moreover, a 2014 study published in the Journal of Nutrition Education and Behavior shows that SNAP participants are more likely to eat unhealthy foods than individuals not enrolled in SNAP benefits². Bridging the gap between affordable and healthy food is critical for the Commonwealth.

Our task is to develop a three-year strategic growth plan for World PEAS. Our recommendations, based on several key findings, come in the form of a three-tiered plan. Our principal findings indicate that World PEAS can grow its CSA membership, expand its food access initiative, and achieve financial sustainability by aggressively marketing its holistic approach to food system development, particularly its commitment to food access for low-income families. Each tier includes recommendations in the areas of Marketing, Sales, and Operations, which are discussed in detail.

Our final recommendation is for World PEAS to select our Tier 2 proposal, which involves new print and web marketing materials targeted at selling their full-circle mission, the introduction of a "Fair Share" in the organization's CSA program, the addition of new mission-driven partnerships, a new hire to manage development and marketing, and finally the creation of a Core Group of stakeholders to take on an advisory role for World PEAS.



Nasrin Morovaty (left) shows the Supply Team her “hoop house” where she can grow vegetables and herbs all winter long. Nasrin is beginning her second year as a supplier to World PEAS.

METHODOLOGY

In order to better understand World PEAS’ management challenges, our team utilized both qualitative and quantitative approaches. Our methods included in-person and phone interviews, two online surveys, a literature review, the use of several strategic frameworks, as well as marketing, financial, operations, and competitor analyses.

For the first half of the project, we split our team of six into two smaller working groups of three people each based on the logical divide between supply-side and demand-side activities of the client organization. The supply team focused on World PEAS’ farmers, as well as other comparable CSA programs in the Eastern Massachusetts area. This group interviewed four farmers that graduated from New Entry’s incubator training program as well as ten local CSA programs

as part of a competitor analysis. The demand team interviewed several current World PEAS customers and administered a comprehensive survey of over 200 past and present customers. It also performed a literature review of local, regional, and national CSA best practices and other relevant data.

During the second phase of the project, we found it useful to modify the focus of our two working groups from supply/demand to the specific components of our final client deliverable. One working group focused on the organization’s financials and sales, which compared the per unit price of each item in one week’s CSA share with the prices from five retail food stores and farmers’ markets. The second group focused on marketing and organizational structure, including the development of specific marketing suggestions and the formulation

In order to better understand World PEAS’ management challenges, the team utilized both quantitative and qualitative methods.

of the “core group” idea, which is included in the recommendations section of this paper.

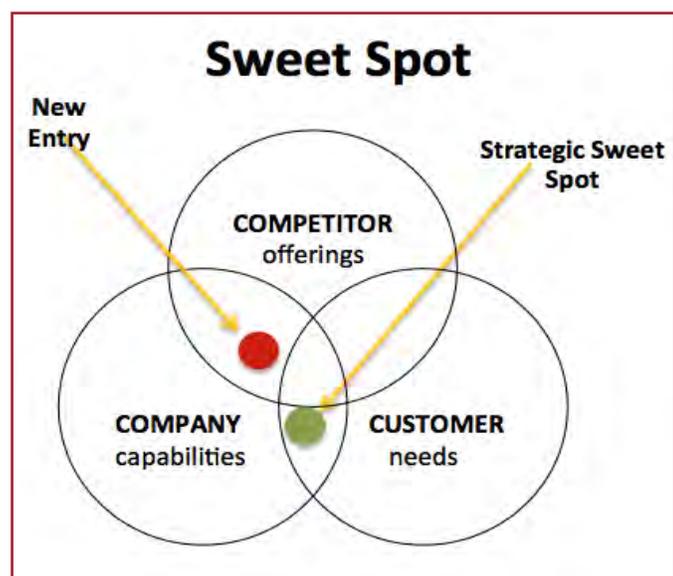
The methodology also used three strategic frameworks: a Sweet Spot analysis³, the “4 Ps”⁴, and Sources of Competitive Advantage, also known as Where to Play, How to Win⁵. We applied these frameworks at different times and on different levels throughout the project. In addition, our framing of the work plan through the initial division of supply and demand fueled many of our eventual conclusions.

The Sweet Spot helps to analyze the relationships between customer needs, competitor offerings, and company capabilities to determine which two the

organization should focus on and which it can afford to ignore. In New Entry’s case, we determined that the sweet spot—and thus the application of future resources— should be between company capabilities and customer needs, because the holistic, mission-oriented model differentiates it sufficiently from competitors.

The 4 Ps, as formulated by EJ McCarthy in 1960⁶, are:

- Price
- Product
- Promotion
- Place



The Sweet Spot analysis focuses on NESFP and World PEAS’ strengths and identifies areas they can ignore. The red dot represents the current outlook, while green represents the goal.

This framework is also known as a marketing mix, in which resources are focused on capitalizing on the strong Ps and shoring up the weaker Ps⁷. In the context of the World PEAS food hub, each of the four showed potential for growth.

Through interviews and industry literature review, we were also able to analyze Sources of Competitive Advantage. This information supplements the findings of the Sweet Spot analysis to allow World PEAS to gain a more complete understanding of the competitive landscape while it focuses on reaching new customers. Generally, the best answers to “where to play” appear to be within the existing customer base, focusing on increasing retention rates through raising awareness of the broader NESFP mission. As far as “how to win,” the key will be in maximizing partnerships with like-minded, socially oriented, mission-driven organizations⁸.

RESULTS & DISCUSSION

Overview

We initiated our process by conducting a literature review of available research publications, journals, and websites, looking at the national and regional CSA market, CSA governance structures, and the local foods market in general. The local foods market breaks down primarily to grocery stores sales, farmer's markets, other CSAs, and local farm stands. Next, we investigated supply-side and demand-side factors of World PEAS' business by interviewing a number of farmers and customers identified by New Entry staff. Using the information gained from these interviews, we sent out a survey to get a wider picture of what was valued by customers and to flag any areas of improvement for World PEAS. Later, we conducted a Pricing Analysis to look at World PEAS share price in comparison to several local competitors. Next, we conducted a sensitivity analysis using New Entry's current financials to project anticipated changes based upon growth assumptions of costs and expenses. This resulted in the final step of our methodology, the creation of pro-forma financial projections that incorporate growth assumptions with our recommendations.

Findings from Interviews with Comparable CSAs

We talked with the CSA coordinators of two of the most successful CSAs in the Boston Area—Enterprise Farm and Red Fire Farm. These farms maintain 700 to 1000 regular members in their CSA programs. Both of the programs are run as for-profit businesses and do not have a specifically integrated social mission. Both have achieved financial sustainability and combine CSA sales with wholesale. Wholesale transactions represent a quarter to half of their revenue. Both CSAs do work with institutional customers but individual customers are the largest portion of their customer base (70% and 90%). They do not have a particular pre-determined marketing strategy and tend to reach new customers mostly through the word of mouth.

These farms consider two main aspects as their key factors of success. First, they offer common products (not exotic or unknown) at affordable prices. CSA

customers know that they will receive consistent produce offerings that they will know how to prepare. Second, they have a large number of pick-up sites, making box deliveries convenient for their customers. It is important to note that Enterprise Farm also offers an extra-small CSA share for customers that do not cook regularly. This strategy began in response to consumer demand for smaller fixed shares of products.

We also compared WorldPEAS CSA share prices with competing CSA share prices and found that WorldPEAS' small and large shares price are above the market average (19% and 38%, respectively). This finding supports our recommendation that New Entry will have to communicate the added social value of their CSA program in order to encourage customers to pay a higher price for their WorldPEAS' CSA share.

Findings from Interviews with Farmers

In our interviews with various farmers several aspects of the ongoing work of New Entry was made clear. First, the support from this organization is invaluable for the farmers with whom they work. All farmers mentioned that New Entry supported them way far beyond what they expected.

The organization supports them through the training program and later on through the purchases of their

products for the CSA shares. New Entry also helps with other aspects of their development as new farmers, such as providing advice for their growing techniques, presentation of products and accessing farmers markets, as well as buying products above their established quota. Many are first-time farmers who have spent their lives in other lines of work. One New Entry farmer, John Migliorini, is trained as a carpenter, and explained his entry into farming, "It's in my blood, I just love to grow."

Groups of growers could gather together to share stands in farmers markets.

“It’s in my blood, I just love to grow.”

—NEW ENTRY FARMER JOHN MIGLIORINI

Farmers noted that it was difficult to access new markets throughout the first stages of farming, thus the CSA program was a very useful system to gain the initial access to the market. After two or three years of farming, farmers felt the confidence to approach new markets on their own, but sales to World PEAS are still a pivotal part of their farming income. Interviews revealed that since farmer time is mainly dedicated to growing activities (for some, as many as 60 hours per week), it is very difficult for them to find time to initiate marketing activities. Currently, farmers have little knowledge about the customer’s needs and market tendencies, and this is the area where they feel the biggest need for improvement.

Another notable finding from the interviews conducted is the lack of an integrated community within New Entry’s farmers. The farmers have a close relationship with the previous and current CSA coordinator



At the Liberty Farm plot in Dracut, MA, John is a carpenter by trade, but also grows and sells his vegetables—including tomatoes, carrots, and “sunchokes”—to the World PEAS CSA.

(Kate and Mary Alice, respectively) but hardly knew other farmers that work with the organization. If New Entry encourages communications and support among farmers, it will help share knowledge while also expand marketing possibilities for farmers outside of the World PEAS CSA system. For example, as one farmer mentioned, groups of growers could gather together to share stands in farmers’ markets; the increased variety of products will make such stands more appealing for customers. Similarly, groups of farmers could also share tools or transportation expenses, making their operations easier or less expensive.

Findings from Interviews with Customers

Our initial interviews with customers indicated that one of the key factors motivating members to sign up for a CSA share was to obtain fresh food products. It was particularly satisfying for them that World PEAS offered “exotic” products that they would not normally buy in their weekly grocery shop. Nevertheless, customers needed to supplement their CSA share with fruits and vegetables purchased at other outlets. Therefore, being part of a CSA program is somewhat of a luxury. In regards to the amount, type and quality of the products delivered in the World PEAS’ CSA shares, customers mentioned being satisfied.

With regard to their knowledge of New Entry and the organization’s work, customers said that they heard about New Entry primarily through word of mouth. One CSA member mentioned learning about New Entry through a friend from his religious congregation. The customers interviewed also said that they have some understanding of New Entry’s mission to support new farmers thanks to the organization’s communication materials. However, many were not aware of the food access initiative for low-income families. To customers, the low-income food access mission was tremendously appealing and they shared their interest in knowing more about this aspect of New Entry’s operations. To follow-up on this information we

developed a customer survey to help us clarify whether these perceptions were shared by the majority of New Entry’s customers. In the following segment, we will present our findings from the customer survey.

Customer Survey

Administering a customer survey allowed the team to explore assumptions on the demand-side more in-depth. Of 780 emails sent to New Entry’s email distribution list (including customers, former customers, and those who have signed up to receive email updates), we received 205 responses—constituting our sample. This breaks down to a 26% response rate and a 99% confidence interval of 6.79 (n=205). While this is a significant sample, it only represents approximately 1 in 4 current or former World PEAS customers. Furthermore, customers that responded to this survey are likely to be disproportionately more engaged with the organization, possibly skewing our findings about customers’ awareness of World PEAS’ mission and new initiatives.

The sample size of defectors was very small, less than 1% of the surveyed participants (n=15). It must be noted that all discussion of defector data is not statistically significant but rather anecdotally informative.

Table 1

Demographics		
Age	Number of Responses	Response Ratio
18–29	47	22.9%
30–39	59	28.7%
40–49	24	11.7%
50 or above	61	29.7%
No response	14	6.8%
Total	205	100%

Results

The majority of respondents are under 40 (51%) or over 50 years old (30%). Only 12% of respondents fall within the 40–49 year old age group. They live as close to World PEAS as Lowell and as far away as 37 miles south in Avon, MA. The full territory of World PEAS customer base (excluding a few outliers) is 800 square miles. However, the highest density of customers falls within 30 square miles in Boston, Cambridge, and Somerville, MA (see map in Appendix).

Figure 1 Of the categories examined, most customers learned about World PEAS through their place of business. The next most frequently occurring categories were through a friend or at his or her place of worship or community organization. The least effective outlets for attracting customers was through social media and advertising materials.

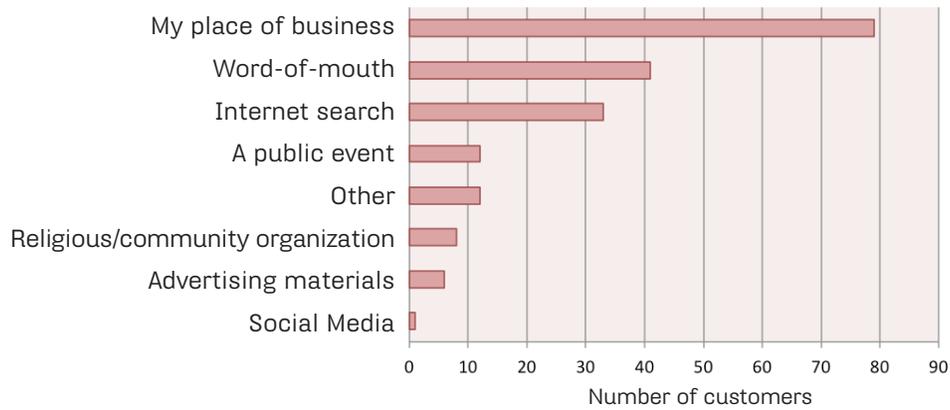
Figure 2 Of the multiple reasons that members were motivated to buy a CSA share, by far most were motivated by the desire to eat more local produce and to support local farmers (99% respectively). However, supporting low-income families and convenience were also cited as important factors.

Looking at age and motivations together, only two categories were not independent of one another: Those were unique or hard-to-find produce (x2=8.3, df=3, p≤0.05) and price (x2=9.3, df=3, p≤0.05). The 18–29 year old segment was the only group that was interested in receiving unique or hard-to-find produce in their shares: 22 out of the 47 people, or 47%, selected for an interest in unique produce in the survey, compared with 0% for any other age group.

Although the 18–29 year old segment was the only group interested in unique or hard-to-find produce, it should be noted that most CSA members were satisfied overall with the variety of the produce in their shares: 159 out of 180 respondents, or 88%.

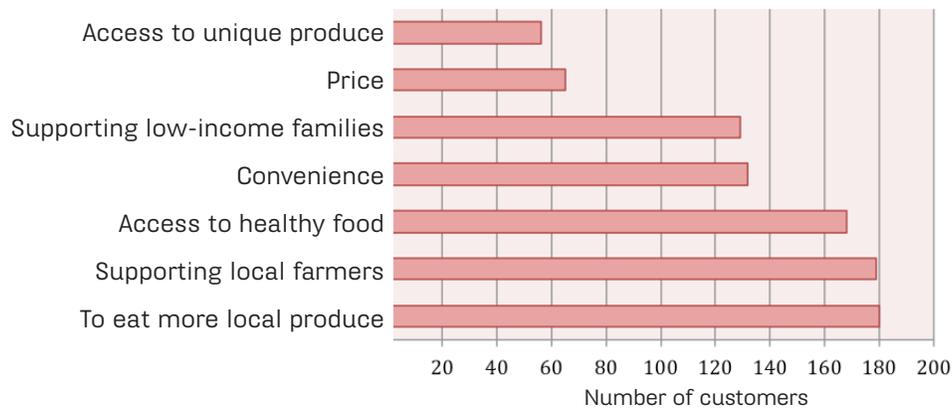
Where customers first learned about World PEAS

Figure 1



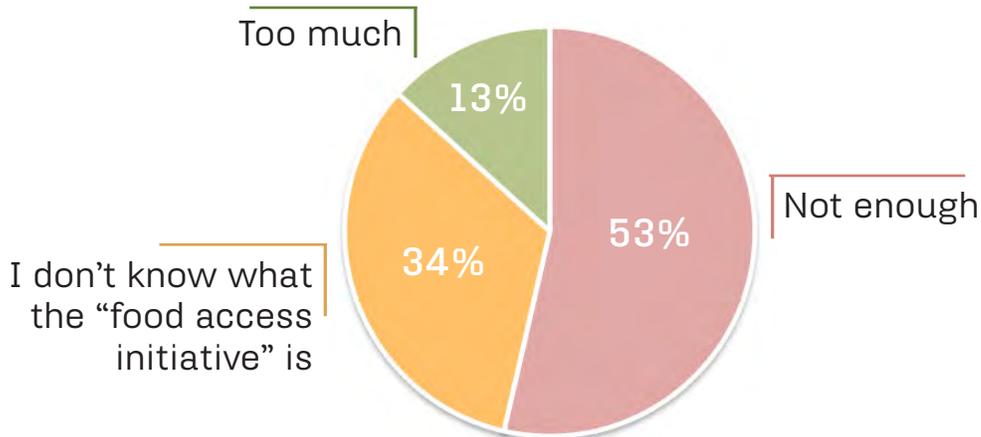
Motivations for buying a share

Figure 2



How much information customers have received about the World PEAS Low-Income Food Access Initiative

Figure 3



*"No response" not included in this graph

Table 2

Is supporting affordable access to healthy food for low-income families important to you?

	Number of Responses	Response Ratio
Yes	167	81.4%
No	12	5.8%
No response	26	12.6%
Total	205	100%

Table 3

How much more per week would you have been willing to spend on your CSA share if the proceeds went directly to subsidizing access to healthy food for low-income families in your community?

	Number of Responses	Response Ratio
\$0	77	44.5%
\$3-\$5	85	49.1%
\$6-\$10	12	6.9%
\$10 or more	6	3.4%
Total	173	100%

Table 4

Including only “yes” responses from Table 2

	Number of Responses	Response Ratio
\$0	66	42%
\$3-\$5	78	49%
\$6-\$10	10	6%
\$10 or more	5	3%
Total	159	100%

Figure 3 The willingness of customers to support the low-access program may also point to important findings about further marketing efforts necessary to broaden messaging. For example, when asked if customers had received ample information about World PEAS Low-Income Food Access Initiative, over 77% of respondents said that they either did not receive enough information about this program or did not know what the initiative is. Making customers aware of this program will be a crucial aspect in marketing the mission of the organization.

Survey participants were asked whether or not supporting access to healthy food for low-income families was important to them (Table 2). This was followed with a question gauging participants’ willingness to pay more in their shares to help subsidize the low-income food access program (Table 3).

Table 3 shows the data combined across all surveyed current or new customers. Table 4 further refines this question and shows the responses to the question above but is filtered for customers that answered “yes” to the prior question about whether or not supporting access for low-income families was important to them.

In summation, 81% of respondents think that supporting access to healthy food for low-income families is important, and over half are willing to spend more in order to achieve this mission. Across categories, the vast majority of respondents would be willing to pay on average \$3.00–\$5.00 more weekly in support of the program.

Overall, customers have expressed satisfaction with World PEAS. 84% of respondents rated their share experience as either “good” or “very good.” When asked if they would recommend World PEAS to others, 162 out of 205 participants, or 79%, answered yes.

14 out of 15 respondents said that although they are no longer customers of World PEAS, purchasing locally grown food is still important to them.

Produce replacement outlets for former customers

Figure 4

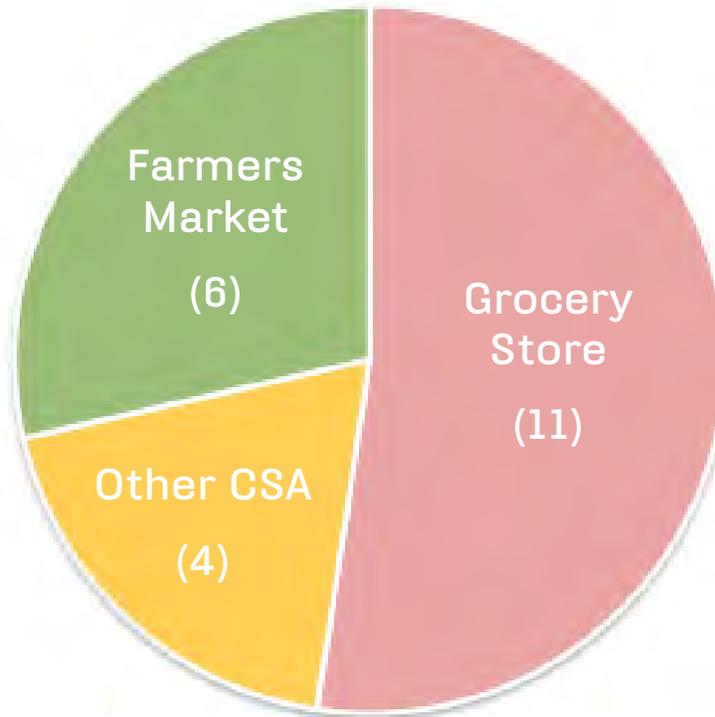


Figure 4 The 15 respondents were asked to select all places in which they currently purchase produce. Today, they are purchasing produce in the following three outlets: farmers markets, grocery stores, and other CSAs.

Discussion

1) Given our results on customer age, we believe that World PEAS should continue to target marketing towards the 18–39 year old customers as well as the ≥50 age group. Customers aged 40–49 are not a substantial group, perhaps due to factors involving career and family life during this period of time. Targeting two distinct marketing messages for the groups of focus with different marketing campaigns may better bring in these target customers. Furthermore, as will be discussed later in the recommendations, if an even smaller, less-expensive share option will be made available to customers, it is important for World PEAS to include hard-to-find produce in those shares since the customers will likely fall into the 18-29 year old category.

The organization serves a customer base over 800 square miles, with density in the Greater Boston area. This area is approximately a 30 mile drive from NESFP's headquarters and is often fraught with traffic. The distance leads to significant fuel expenses, time, and driver costs. Some competing CSAs charge a per-mile fee for delivery of \$0.55/mile or incentivize customers that live closer (within 10 miles) by charging a small flat-rate for delivery⁹. Other models restrict deliver to within certain area codes. Other models restrict deliver to within certain area codes.

2) The low yield from social media may be a result of a lack of engagement from World PEAS' embracement of this marketing tool. While New Entry's website contains information about the CSA, World PEAS lacks its own presence online, maintaining only a Facebook page with under 500 likes. With a database of 8,378 active email contacts on its Constant Contact account, social media may be a focused area of improvement for World PEAS.

3) The willingness of customers to support the low-access program may also point to important findings about further marketing efforts necessary to broaden messaging. For example, when asked if customers had received ample information about World PEAS low-income food access initiative, most respondents said that they either did not receive enough information about this program or did not know what the initiative is. Making customers aware of this program will be a crucial aspect in marketing the mission.

4) The high customer satisfaction rate confirms a priori expectations that World PEAS does not have an issue with quality or variety. Furthermore, that 79% of survey participants would recommend World PEAS as “net promoters” is an important finding, particularly when considered alongside information about where customers discovered World PEAS, the second most selected category being “word-of-mouth.” Word-of-mouth seems particularly relevant to marketing efforts of this CSA share in particular and the CSA share market in general.

5) The alternate shopping outlets in Figure 3 utilized by defectors to purchase local produce is consistent with market research about increased competition in the local foods market regionally and nationally.

Industry Analysis

Findings from the customer survey point towards targeting a young professional segment. One way for World PEAS to become more attractive to this group would be through keeping up with competitors’ offerings by experimenting with “extra-small shares.” Through our interviews and in research, this trend appeared in other parts of the market, and it seems applicable for young professionals who are often cooking for less people than a family demographic. If World PEAS experiments with this type of share, it should include produce that is unique or hard-to-find, since that was cited as important to young professionals in the World PEAS customer survey.

The next industry trend that appears in the literature is the “Core Group.” This industry term describes a structure, which is similar, though not synonymous, to an advisory board. It consists of 10–17 members of mixed stakeholders (farmers, staff members, customers, etc.). World PEAS does not currently have any similar structure within their organization. Reports of CSAs that have Core Groups are correlated with receiving higher revenue¹⁰. This is a strong option for World PEAS to restructure governance and bring in additional revenue.

Finally, an interesting model appeared in our research—The Trustees of Reservations—an organization that focuses on land preservation. The Trustees also offers a CSA share, but the shares are offered as a donation to their larger mission, not as a core aspect of its business. If World PEAS adopted a similar model, this different orientation would shift customers’ view of the CSA share from a product to a stronger focus on supporting the mission, which ties in with our larger recommendation for World PEAS to focus primarily on “marketing the mission.”



Tools of the trade, New Entry farm plot in Dracut, MA

RECOMMENDATIONS

Overview

Over the course of this project, our team has come to fully appreciate the whole-hearted efforts of the NESFP and World PEAS staff. With limited capacity and resources, the organization accomplishes a great deal toward its mission of a more sustainable and equitable food system. To better facilitate that mission and encourage further growth, the team has envisioned several paths forward for the organization over the next three years and beyond. In this section, we will present our recommendations in the form of three fully developed tiered strategic growth plans, each representing a different level of investment for WorldPEAS to consider, as well as an optional “core group” add-on. Each tier of our growth recommendations can be broken down into three distinct areas: marketing, sales and operations. We will discuss the goal of each area, generally, before outlining the three distinct tiers.

Three Growth Areas

Marketing

World PEAS has an opportunity to improve its messaging and build a stronger brand. The overall goal of the marketing recommendation is to differentiate World PEAS from other local CSAs in the area, and improve its value proposition by informing existing members, prospective members and potential partner organizations of World PEAS’ larger social mission, particularly the food access initiative. Branding materials should highlight a broader understanding of New Entry, World PEAS, and the food access initiative’s holistic approach to building and strengthening local food systems.

There are a multitude of tools from which the organization can choose to achieve these goals, starting simply with the information the organization shares in the CSA share itself, in its newsletter and on its website. We also recommend updating marketing materials and creating new ones: brochures and

infographics. At the highest level, this would include a total rebrand: A new name or logo that more clearly identifies the larger mission of the organization and better unifies the activities and objectives of New Entry and World PEAS.

Sales

It is clear that WorldPEAS requires a major shift in customer retention, new customers and partnerships with other organizations. Our primary recommendation is to avoid wholesale customers, and focus sales efforts on social justice organizations, with which the mission of the organization will resonate most highly. Within this category, we see opportunities for partnerships that are primarily aimed at creating new customers, but also partnerships to increase donations or grants.

In terms of sales initiatives, we see an opportunity for more partnerships with religious organizations, which already provide referrals to WorldPEAS, specifically, the Unitarian Universalists, whose Boston-area congregations have been a source of referrals for World PEAS in the past. Other organizations to target in these partnerships are large, local non-profit organizations like Oxfam America, the Appalachian Mountain Club, and WGBH.

Other partnerships with community health centers, food banks, or school programs should be considered as sales opportunities. A partnership with the Greater Boston Food Bank, for instance, might serve to help raise money to provide fresh produce to low-income families.

Structure and Operations

Our operational recommendations are primarily tied to the previous areas of concentration; shifts in programming, delivery routes and internal staff to support the needs of new sales and marketing initiatives. For example, successful partnerships with local religious organizations might necessitate new delivery routes on Sunday.

In addition, we have several specific recommendations regarding share offerings that we are categorizing under “operations.” Comparable CSAs offer a “half share”, or “extra-small share” for customers who travel frequently or cook at home infrequently. We think the increasing percentage of World PEAS customers opting for a Small Share (versus a Large Share) indicates an interest in this direction. On the other end of the spectrum, we recommend a new higher-priced share, “FAIR Share,” that is comparable to a small share, but tied to a direct donation to the Food Access Initiative (see Appendix).

In addition to the operational changes above, we also recommend a change to the structure of the Food Hub. We believe that World PEAS should adopt a “core group” to assist with activities including decision-making, feedback generation, some marketing/sales tasks, fundraising, and membership/partnership recruitment and retention. Core groups are an important part of CSAs throughout the United States, yet their structure and function varies widely depending on the specific arrangement. For World PEAS, we the core group could be an optional add-on to any of the three tiers of investment. It includes a separate cost/benefit analysis, discussed in the results section and included in full as an appendix. The main expense of the core group includes a full-time development and communications staff member, which will be offset by the additional revenue that the core group is expected to bring in.

The most recent National CSA Farm Survey, conducted in 1999 by the University of Wisconsin-Madison and other partners, compared CSAs with and without core groups. While 72% of the survey respondents did not have a core group, the 28% that did “had significantly higher mean CSA income than non-core group farms.”¹² Specifically, the annual median income for core group farms was almost \$10,000 higher than for non-core group farms¹³. Since this survey data is now 15 years old, it can be reasonably assumed that the percentage of CSAs with core groups has increased, strengthening the argument for their use.

Three Growth Plans

As requested by New Entry in their initial project proposal, we have crafted three distinct growth plans that incorporate elements from each of our three “recommendations” categories—marketing, sales and structure/operations. Each of the three options is intended to accomplish the same goal, and reflects distinct levels of investment and potential returns. Tier 1 involves the lowest degree of investment, with a projected positive profitability for World PEAS in year three; while Tier 3 involves the largest level of investment with greater returns and profitability in year two.

Below, we will present each of the tiers, with an estimated cost in each recommendation category, along with projected returns in distinct areas. In projecting the “returns” for each Tier, we used three distinct metrics: customer retention, new customers, and fundraising.

World PEAS’ customer retention for the last two years has averaged approximately 31% (33% in 2012–2013, and 30% in 2013–2014). Comparable CSAs and national averages suggest that successful CSA’s frequently achieve a 60-65% retention rate¹⁴. In our projections, we will use 30% as a baseline for improvement, and refer to incremental improvements in retention as a percentage. In other words, a 5% increase in retention would mean an over-all retention rate of 35%.

World PEAS’ most valuable asset: the unique and holistic mission

For the last few years, World PEAS membership has remained relatively flat, declining slightly in 2014, which is accounted for in the decline in retention. In other words, World PEAS has attracted a relatively steady number of new customers, around 240. In the following projections, we use 243 (the total number of new members, regardless of their share size) as a baseline for new customers. We will refer to increases in new customers—as a percentage of 243. We assume

the new members would remain steady with no change at all, but an increase in new membership would mean 267 new members (243 + 24).

We mentioned previously the importance of attracting new donors—private, public or institutional. In 2014, World PEAS estimates that it will attract \$16,500 in donations, through their winter fundraiser and direct giving from CSA members. We assume that these fundraising activities will continue in future years, however, our projections will include a flat, dollar amount in donations in each distinct Tier, based on resources allocated to fundraising activities.

Tier 1

The least extreme tier represents only slight changes in World PEAS' structure and operations. It emphasizes some new messaging in marketing materials, targeting strategic, mission-driven partners, and a new core group that will fill an advising and fundraising role.

Tier 2

Our recommended growth plan represents the “medium” approach. The largest changes are in marketing: We suggest an investment of nearly \$45,000, over three years, in marketing. Our plan includes an internal shift in their current marketing materials, outreach and social media, and hiring an outside design consultant to develop more appealing materials like a brochure and infographics. It also includes a large investment in World PEAS website improvements to better incorporate the larger mission and consolidate their programs and messages.

All three plans include a sales emphasis on targeting socially conscious businesses, churches and community organizations that share a commitment to social justice and healthy food systems. We have included lists of likely religious institutions and other non-profit organizations from which to start. We also recommend a “premium” share—a share that costs more, but with a specific contribution to food access initiative programming. We recommend materials to promote this new share, and a premium of \$100, which amounts to contribution of \$5/week over the course of the season.

The plan for Tier 2 also includes hiring a new staff member; 50% of their time as a sale representative, and 50% as a development officer.

Tier 2 includes the formation of a Core Group to serve as advisors to World PEAS staff, and volunteers doing outreach and soliciting feedback from members. Like many non-profit “boards,” the Core Group, which is not a formal board in this iteration, would focus much of its time on fundraising and identifying potential partnerships. The part-time development officer would be responsible for coordinating the fundraising efforts of the Core Group and writing grant proposals.

Tier 3

At the highest degree of change and investment, Tier 3 includes all the elements of Tier 2, but in addition to the marketing recommendations; it includes a complete rebranding, including a brand audit, consolidating the marketing messages of New Entry and World PEAS, and a new logo (potentially a new name entirely).

In sales and structure/operations, Tier 3 is similar in content to Tier 2, but is decidedly more aggressive, hiring a staff member (again, 50% sales, 50% development) in year one, to rapidly expand new sales and fundraising.

Conclusion

In examining the various aspects of the World PEAS business model, and its relationship to New Entry, it is clear that there are many possible paths forward. There is a high degree of loyalty and buy-in from the farmers, a deep base of possible customers, and most importantly a solid holistic mission that sets World PEAS apart. These strengths will propel the organization forward as it tackles the strategic challenges of the growth plans presented in this report. Success may require increased time and financial investment, but the ultimate goal of sustainability can be achieved if the right balance can be found. Though Tier 2 represents our group's overall recommendation for a three-year strategic growth plan, many of the initiatives we explored could be added to support growth further into the future.

Tier 1

Marketing	Design- Outsource Redirect Message (Existing Marketing)	5,000 Annual 0
Sales	Focus on Partnerships (Existing) Churches Non-Profit and LI	
Operations	Minimal Maybe new drops are worthwhile	
Structure	Core Group Focused on Fundraising/New Sales	5,000 Annual
Retention		40%
New Customers		15%
Fundraising Revenue		

Tier 2

Marketing	Website	\$ 25,000
	Marketing Design	\$ 15,000
	Print	\$ 5,000
	Focus on Partnerships (Existing) Churches Non-Profit and LI S&M Part-Time Year2	\$ 25,000
	1 New Sunday Route FAI Premium	???? 1,000
Structure	Core Group Focused on Fundraising/New Sales	\$ 5,000 Year 1
	Development Part-Time Year2	\$ 25,000 Year 2/3
Retention		50%
New Customers		25%
Fundraising Revenue		

Tier 3

Marketing	Website	25000
	Name/Logo Rebrand	25000
	Marketing Materials	15000
	Focus on Partnerships (Existing) Churches Non-Profit and LI S&M Part-Time Year1	\$ 25,000
	1 New Sunday Route FAI Premium	???? 1,000
	Core Group Focused on Fundraising/New Sales	\$ 5,000 Year 1
	Development Part-Time Year2	\$ 25,000 Year 1
Retention		60%
New Customers		35%
Fundraising Revenue		

END NOTES

¹ Food Research and Action Center. 2014. SNAP Data. Retrieved from http://frac.org/wp-content/uploads/2011/01/snapdata2014_apr.pdf

² Journal of Nutrition Education and Behavior. 2014. Retrieved from [http://www.jneb.org/article/S1499-4046\(13\)00677-5/pdf](http://www.jneb.org/article/S1499-4046(13)00677-5/pdf)

³ Collis, David and Michael Rukstad. “Can You Say What Your Strategy Is?” *Harvard Business Review*, April 2008. Retrieved from: <http://hbr.org/2008/04/can-you-say-what-your-strategy-is/ar/1>

⁴ McCarthy, Jerome E. 1960. *Basic Marketing: A Managerial Approach*. Homewood, IL: Richard D. Irwin.

⁵ AG Lafley and Roger L. Martin. *Playing to Win: How Strategy Really Works*. 2013. Boston: Harvard Business Review Press.

⁶ McCarthy, Jerome E. 1960. *Basic Marketing: A Managerial Approach*. Homewood, IL: Richard D. Irwin.

⁷ McCarthy, Jerome E. 1960. *Basic Marketing: A Managerial Approach*. Homewood, IL: Richard D. Irwin.

⁸ AG Lafley and Roger L. Martin. *Playing to Win: How Strategy Really Works*. 2013. Boston: Harvard Business Review Press.

⁹ CSA FAQs. (n.d.). Retrieved August 20, 2014, from <http://www.rootnroost.com/#!csa-faq/cd6j>

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¹⁰ Center for Agroecology and Sustainable Food Systems. 2014. Teaching Direct Marketing and Small Farm Viability: Resources for Instructor. University of California: Santa Cruz. Retrieved from: <http://casfs.ucsc.edu/about/publications/Teaching%20Direct%20Marketing/index.html>

¹¹ Lass, David, Stevenson, G.W, Hendrickson, John, and Ruhf, Kathy. “CSA Across the Nation: Findings from the 1999 CSA Survey.” University of Wisconsin-Madison: Center for Integrated Agricultural Systems (CIAS). 2003. Retrieved from <http://www.cias.wisc.edu/wp-content/uploads/2008/07/csaacross.pdf>

¹² Lass et. al, 2003, p. 15

¹³ Center for Agroecology and Sustainable Food Systems. 2014. Teaching Direct Marketing and Small Farm Viability: Resources for Instructor. University of California: Santa Cruz. Retrieved from: <http://casfs.ucsc.edu/about/publications/Teaching%20Direct%20Marketing/index.html>

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RAW CUSTOMER SURVEY RESULTS

Sample Size	Total	Current/Returning	Defectors
% of Respondents	n= 205	n=188	n=15

CURRENT OR NEW MEMBERS

Where did you first learn about the WorldPEAS CSA program?

	Number of Response(s)	Response Ratio
My place of business	79	42.90%
Socially (from a friend)	41	22.20%
My religious institution or community organization	8	4.30%
Internet search	33	17.90%
A public event	12	6.50%
Advertising materials	6	3.20%
Social media (Facebook, Twitter, etc.)	1	<1%
Other	12	6.50%
Total	184	100%

Did the following factors motivate you to subscribe to the WorldPEAS CSA program?

	Yes	No
To eat more local produce	180 99%	2 1%
Access to unique or hard-to-find produce	56 35%	103 65%
Access to healthy food	168 94%	11 6%
Supporting local farmers	179 99%	1 1%
Supporting low-income families	129 77%	39 23%
Convenience	132 77%	40 23%
Price	65 42%	89 58%
29 Comment(s)		

Are you aware of the organization's mission to improve local and regional food systems by supporting new farmers?

	Number of Response(s)	Response Ratio
Yes	172	83.90%
No	4	1.90%
No Responses	29	14.10%
Total	205	100%

How much information have you received about the World PEAS Low-Income Food Access Initiative?

	Number of Response(s)	Response Ratio
Not enough	97	47.30%
Too much	24	11.70%
N/A- I don't know what "The Food Access Initiative" is	60	29.20%
No Responses	24	11.70%
Total	205	100%

Is supporting affordable access to healthy food for low-income families important to you?

	Number of Response(s)	Response Ratio
Yes	167	1.00%
No	12	5.80%
No Responses	26	12.60%
Total	205	100%

DEFECTORS

Are you aware of the organization's mission to improve local and regional food systems by supporting new farmers?

	Number of Response(s)	Response Ratio
Yes	14	6.80%
No	0	0.00%
No Responses	191	93.10%
Total	205	100%

How much information did you received about the WorldPEAS Food Access Initiative?

	Number of Response(s)	Response Ratio
Not enough	6	2.90%
Too much	0	0.00%
N/A- I don't know what "The Food Access Initiative" is	8	3.90%
No Responses	191	93.10%
Total	205	100%

Is supporting affordable access to healthy food for low-income families important to you?

	Number of Response(s)	Response Ratio
Yes	14	6.80%
No	0	0.00%
No Responses	191	93.10%
Total	205	100%

Please give an overall rating of your WorldPEAS CSA experience:

	Number of Response(s)	Response Ratio
Very poor	0	0.00%
Poor	1	<1%
Good	3	1.40%
Very good	10	4.80%
No Responses	191	93.10%
Total	205	100%

Is purchasing locally-grown produce still important to you?

	Number of Response(s)	Response Ratio
Yes	14	6.80%
No	0	0.00%
No Responses	191	93.10%
Total	205	100%

Now that you no longer subscribe to the WorldPEAS CSA share, where do you purchase your produce? Please select all that apply.

The grocery store
A CSA share from another farm or organization
Farmers Market
Other
Total

Number of Response(s)	Response Ratio
11	78.50%
4	28.50%
6	42.80%
0	0.00%
14	100%

TOTAL

What is your age?

18-29
30-39
40-49
50 or above
No Responses
Total

Number of Response(s)	Response Ratio
47	22.90%
59	28.70%
24	11.70%
61	29.70%
14	6.80%
205	100%

PROSPECTIVE CLIENTS: RELIGIOUS INSTITUTIONS

The list below highlights a few religious institutions whose values seem to align well with New Entry's mission. These institutions do not yet subscribe to or act as a distribution site for another CSA share at this time.

In addition to speaking with church leaders at these particular locations, we especially encourage outreach to World PEAS current CSA members' places of worship via the members themselves approaching their own church leaders. This would be consistent with the effectiveness of word-of-mouth marketing typical of CSAs and also fits in with most church organizations with grassroots involvements of its congregation/parish/laity/etc. Deliveries should be planned to coincide with regularly scheduled services, so a special effort should be made to coordinate the delivery schedule based upon time and location.

From a small-scale internet search, it appears that Unitarian Universalist and Synagogues have the highest saturation of CSAs shares already, whereas Catholic, Presbyterian, and Episcopalian churches do not seem to have many offered yet. The reasons behind these market trends are unclear from this investigation.

Unitarian Universalist

1. The Unitarian Universalist Church of Medford
147 High St
Medford, MA
P: 781- 396-4549
<http://uumedford.org/about-us/theology/>
<http://uumedford.org/serve/social-justice/>
2. First Parish Milton
535 Canton Ave
Milton, MA 02189
Email: office@fpmilton.org
P: 617-698-6329
<http://fpmilton.org/>
3. First Church in Belmont
404 Concord Ave
Belmont, MA
P: 617-484-1054
<http://uubelmont.org/>

Roman Catholic

4. Church of St. Ignatius of Loyola
28 Commonwealth Ave.
Chestnut Hill, MA 02467
P: 617-552-6100
Email: Ignatius@bc.edu
http://www.bc.edu/bc_org/prs/stign/
5. St. Cecilia Parish
18 Belvidere St
Boston, MA 02115
P: 617 536-4548
<http://www.stceciliaboston.org/>
6. Parish of St. Paul – Roman Catholic Church in Harvard Square
29 Mount Auburn Street
Cambridge, Massachusetts 02138
Telephone 617-491-8400
Fax 617-354-7092
E-Mail info@stpaulparish.org
<http://stpaulparish.org/>

PROSPECTIVE CLIENTS: RELIGIOUS INSTITUTIONS (cont.)

Jewish

7. Temple Reyim
1860 Washington St, Auburndale, MA 02466
P: 617-527-2410
<http://www.reyim.org/>
8. Temple Beth Israel
25 Harvard St
Waltham, MA
P: 781-894-5146
<http://tbiwaltham.org/>

Episcopalian

11. Cathedral Church of St. Paul
138 Tremont St
Boston, MA
P: 617-482-5800
<http://www.stpaulboston.org/>
12. St. James Episcopal Church
1991 Massachusetts Ave
Cambridge, MA
P: 617- 547-4070
<http://www.stjames-cambridge.org/>

Presbyterian

9. Citylife Presbyterian Church
69 Middlesex Road
Chestnut Hill, MA
P: 617-482-1800
<http://www.citylifeboston.org/>
10. Christ the King Presbyterian Church
99 Prospect St, Cambridge, MA 02139
P: 617- 354-8341
<http://www.ctkcambridge.org/>

QUANTITATIVE ESTIMATES OF PROPOSED CHANGES

Cost savings from replacing packaging volunteers for New Entry's farmers:

Donation to each packaging volunteer: 1 small share per day

Cost to World PEAS of a weekly small share: \$25

Current number of packaging volunteers: 9

Total volunteer retribution cost per week: \$225

Total volunteer retribution cost per season (20 weeks): \$4,500*

* Total yearly savings

Additional Revenues from FAIR Shares**

Additional weekly revenue per FAIR Share: \$3.00

Estimated number of members subscribing to the FAIR Share (70% of current members): 288

Total additional yearly revenues from FAIR Shares: $(\$3 * 288) * 20 = \$ 17,280$

**FAIR Shares are designed as a higher priced CSA share, which extra revenues will directly invested on the Food Access Initiative. The survey results show that 81% of WorldPEAS customers are willing to pay between \$3 to \$5 a week in order to support the Food Access Initiative. On these estimations we consider at least 70% of WorldPEAS' current members will subscribe to a \$3 weekly price increase for the new FAIR Share program.

PRICING ANALYSIS

IN THE CSA MARKET:

CSA Name	Location	Season (week)	Large Share Price	Small Share Price	Price Large Share per week	Price Small Share per week	Price Large Share Compared to World PEAS (%)	Price Small Share Compared to World PEAS (%)
World PEAS	Lowell, MA	20	\$ 805	\$ 540	\$ 40	\$ 27		
Stone Soup Farm	Hadley, MA	20	\$ 412	N/A	\$ 21	N/A	-49%	N/A
Red Fire Farm	Granby, MA	24	\$ 563	N/A	\$ 24	N/A	-42%	N/A
Queen's Greens	Ware, MA	20	\$ 500	N/A	\$ 25	N/A	-38%	N/A
Appleton Farms	Ipswich, MA	22	\$ 650	N/A	\$ 30	N/A	-27%	N/A
Siena Farms	Sudbury, MA	12	\$ 550	N/A	\$ 46	N/A	14%	N/A
Moose Hill Farm	Sharon, MA	20	\$ 600	\$ 350	\$ 30	\$ 18	-25%	-35%
Crimson & Clover	Northampton, MA	20	\$ 550	\$ 390	\$ 28	\$ 20	-32%	-28%
Allandale Farm	Brookline, MA	20	\$ 670	\$ 390	\$ 34	\$ 20	-17%	-28%
Stillman's Farm	Lunenburg, MA	16	\$ 528	\$ 376	\$ 33	\$ 24	-18%	-13%
Enterprise Farm	Whately, MA	10	\$ 320	\$ 254	\$ 32	\$ 25	-21%	-6%
Arrowhead Farm	Newburyport, MA	10	\$ 435	\$ 335	\$ 44	\$ 34	8%	24%
Lindentree Farm	Lincoln, MA	20	\$ 850	\$ 700	\$ 43	\$ 35	6%	30%

IN THE GREATER FOOD MARKET:

Market/Store Name	Small Share	Large Share
World PEAS	\$ 27	\$ 38
Hmart	\$ 17	\$ 26
Trader Joe's	\$ 19	\$ 27
Brookline Farmer's Market	\$ 20	\$ 30
Star Market Unit Prices	\$ 22	\$ 36
Harvest Co-opt	\$ 29	\$ 40
Whole Foods	\$ 33	\$ 45

PROSPECTIVE NON-PROFIT PARTNER LIST

COMMUNITY HEALTH CENTERS

Geiger Gibson Community Health Center	Dorchester
Codman Square Health Center	Dorchester
Upham's Corner Health Center	Dorchester
Mattapan Community Health Center	Mattapan
East Boston Neighborhood Health Center	East Boston
South End Community Health Center	South End

HOSPITALS

Massachusetts General Hospital	Boston <i>"Stoplight" healthy eating program</i>
MGH West	Waltham
Chelsea HealthCare Center (MGH)	Chelsea
Revere HealthCare Center (MGH)	Revere
Mass General/North Shore	Danvers
Boston Medical Center	Boston <i>Healthy initiatives in cafeteria</i>
Spaulding Rehab Hospital	Charlestown <i>No longer serves fried foods</i>
Beth Israel Deaconess	Longwood <i>Known for its high quality food</i>
Lowell General Hospital	Lowell

NURSING/LONG-TERM CARE

Hebrew Senior Life	Multiple locations <i>Relationship with Brandeis</i>
Jewish Family & Children's Service	Multiple locations

OTHER

Healthworks	Multiple locations <i>Provides nutrition services</i>
Network for Excellence in Health Innovation	Cambridge

MARKETING EXAMPLES

TIER 2

The screenshot shows the World PEAS blog homepage. At the top, there's a red banner with the text "WORLD PEAS *blog*". Below this, there are two main article teasers. The first is dated August 21, 2014, titled "Share your story" and includes a photo of stuffed bell peppers. The second is dated August 18, 2014, titled "Food access initiatives grow!". On the right side of the page, there's a sidebar with a "SIGN UP" button, a "WEEKLY FOOD FEATURE" section featuring "Meet King Kale!" with a photo of kale, and an "ARCHIVES" section with a photo of a vegetable box. Social media icons for Facebook, Twitter, and Instagram are also present under the heading "CONNECT WITH US!".

TIER 3



SAMPLE SOCIAL MEDIA VIDEO: <http://youtu.be/pX9kXGBSrg>

ADVERTISING ON THE DELIVERY TRUCK

Selling ads on trucks is an attractive way for small businesses to earn a little extra cash on the side, particularly for a business like WorldPEAS whose delivery truck makes frequent round-trips from Lowell to Boston.

Ad revenues on trucks seem to pay a variable rate depending on the size and location of the ad. One website, TruckAds, offers a brief tutorial for taking out an ad on a company's truck:

http://www.truckads.com/carrier_ad_kit_faqs.htm

This site also offers a place for users to sign up on a free database to make other companies aware of their ad space availability.

While the above toolkit is a useful introduction to the ad truck business, deeper research of profit margins is in order before signing up. TruckAds quotes returns of \$200-\$350/month. However, another source quotes the revenue at approximately \$1,000 (this does NOT specify the size of such a truck, though):

<http://www.wikihow.com/Sell-Advertising-Space-on-Your-Car-to-Make-Money>

The above wiki site is another quick and easy way to learn more about the ad process. Among other tips, this source mentions that renting out ad space can be very competitive. It also cautions readers that they should never be required to pay money to post their ad space availability.

One complication for World PEAS' prospective ad campaign is that their brand is already beautifully displayed on their trucks. In fact, there is no unused space on the truck anywhere. Likewise, World PEAS staff has mentioned a desire to only show the ad on the return trip from the Boston area to Lowell. The implication of this "ask" for businesses is unclear but may be an undesirable option, considering the abundance of truck substitutions in the competitive landscape.

Even so, exploring ads that may serve a temporary one-way purpose seems viable. Many ads are available as removable decals rather than posted straight onto the vehicle. A removable decal example:

<http://www.signazon.com/removable-car-decals/>

Other types of removable ads include magnets, stickers, or "body wraps" (see description in additional resources).

Finally, one drawback from advertising on trucks is that your brand may be diluted or confused by the new ads. Also, if a company advertised on your company's truck gets into hot water, this bad press could negatively affect customers' view of your brand:

<http://www.brighthub.com/office/entrepreneurs/articles/124007.aspx>

Additional Resources

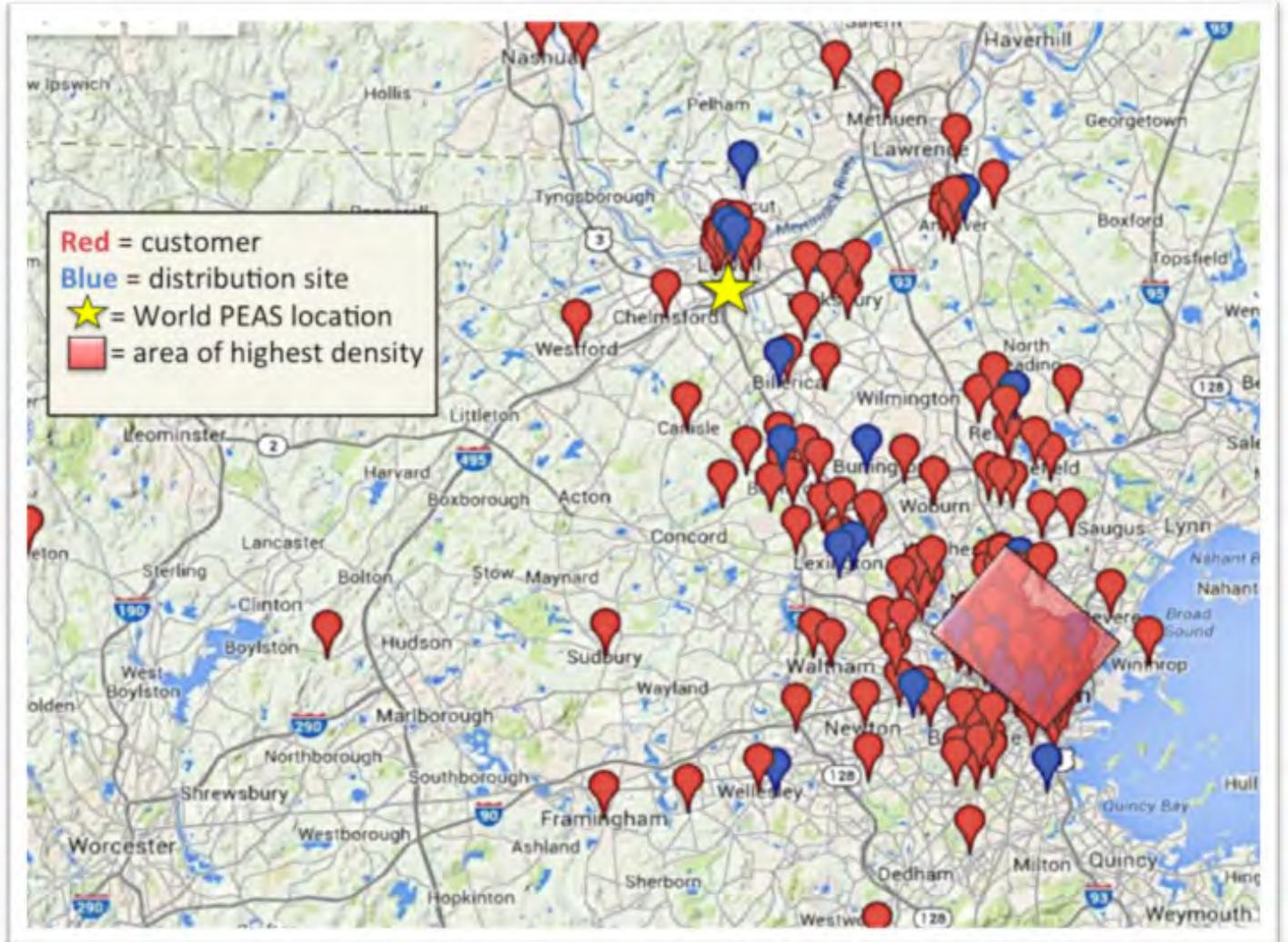
How-To: <http://finance.yahoo.com/blogs/breakout/how-to-get-paid-for-driving-your-own-car-125346537.html>

Body Wraps: <http://www.aretedis.com/pros-and-cons-of-vehicle-wraps.html>

Application of Removable Ads Video: http://www.truckads.com/pdf-bin/truckads_frame_install_video1.html

Truck Ad Frequently Asked Questions: http://www.truckads.com/frequently_asked_questions.htm

CUSTOMER RESIDENCY MAP AND DISTRIBUTION SITES



Retrieval from: <https://mapsengine.google.com/map/u/0/edit?mid=z9yOvUr6eJOk.k0GqPz3NbKfc>

ACKNOWLEDGMENTS

*T*his project has been a great experience, and we feel so fortunate to have had the opportunity to work with New Entry and World PEAS. We would especially like to thank the New Entry staff—Kimberley, Jennifer, Kate, and Mary Alice—who tirelessly answered our many questions despite being very busy juggling about a thousand different things at once. We’d also like to thank our advisor, Richard Lockwood, for all his fascinating insights into the food system and overall project advice, and for being so enthusiastic and supportive. The Heller Team Consulting Project faculty—Carole and Larry—have been immeasurably helpful in guiding our project and presentation. We are also very grateful for such jovial help on data analysis from Professor Steve Fournier. And thanks to all our roommates and significant others who put up with the hours of group discussion about “frameworks,” Excel formulas, Sweet Spot analysis, workplan methodology, wine, and Thai food.

Finally, thanks to our parents, for everything.



2015 World PEAS Food Hub Annual Report



World PEAS is a program of the New Entry Sustainable Farming Project.

Our mission is to improve our local and regional food systems by training the next generation of farmers to produce food that is sustainable, nutritious, and culturally-appropriate and making this food accessible to individuals regardless of age, mobility, ethnicity, or socio-economic status. In doing this work, we provide critical training, career development, and economic opportunity to new farmers.

www.nesfp.org

Overview

World PEAS Food Hub, a program of New Entry Sustainable Farming Project, serves as a flexible, living wage market for limited-resource and beginning farmers, many of whom face continued barriers to accessing high value markets such as limited English language skills, limited production capability, and lack of time/transportation. World PEAS purchases the majority of its produce from 30+ farmers who have graduated from the New Entry Sustainable Farming Project's Farm Business Planning Course. World PEAS also assists farmers by establishing crop production schedules in the winter, offering a microloan program to producers and providing guaranteed marketing outlets through our CSA and sales to institutions, non-profits, and other outlets.

World PEAS continues to address ongoing food justice issues in our region by working with low-income food access partners to make fresh food affordable to low-income families. In 2015, we added two new food access partners [the Salvation Army Kroc Corps Community Center and the Merrimack Valley Food Bank] in addition to expanding relationships with existing partners. We also continued to serve a handful of restaurants and dining halls, adding one new restaurant customer during the 2015 season. We expect our sales to institutional markets, including food access partners, restaurants and dining services to increase in 2016.



Although the World PEAS Food Hub began primarily as a CSA [Community Supported Agriculture] program, we have seen our sales in the CSA market decreasing over the past several years. Between 2014 and 2015, the total number of CSA shareholders decreased from 458 to 382 – a difference of seventy-six individual shareholders. This downward pressure on CSA sales is likely due to increased competition from Massachusetts-based CSA programs as well as an increase in prevalence of farmers markets. We hope to create a strategic marketing plan for the 2016 season to increase – or at least maintain – the current number of World PEAS Shareholders. Total WPFH revenues in 2014 was \$321,213 and total revenues was \$289,560 in 2015.

Farmer Earnings

The total sales to farmers between 2014 and 2015 reflects the change in CSA size. In 2015, World PEAS purchased a total of \$191,249.30 of produce from farmers compared to \$218,388.31 in 2014. As in previous years, the World PEAS Food Hub Coordinator supplemented purchases from New Entry program farmers with produce from established farms to ensure an adequate amount and variety of produce available to customers. We continue to purchase the majority of our produce [70%] from New Entry farmers, providing them with fair compensation for their work.

2015 saw a significant decline in New Entry program farmer earnings compared to previous years [see figures 1 and 2 below]. We attribute this to a decline in CSA shareholders and relatively small growth in farm-to-institution sales. In addition, several New Entry program farmers chose to scale back their farm operations this year due to other full time commitments [school, children, second occupation, etc.]. At least two New Entry farmers faced significant growing challenges due to lack of preparation for pests and disease. We expect that technical assistance provided to these farmers by New Entry's Technical Assistance Coordinator will prevent similar incidents in the future.

While the earnings through World PEAS are insufficient to constitute a farmer's only source of income, these earnings are an essential component of household income for many New Entry program farmers. The majority of New Entry farmers are among the 80% of American farmers who have an off-farm job. Total earnings by farmers over the course of several years, shown on the graphs adjacent, are significant.

Average Food Hub Sales by New Entry Program Farmers

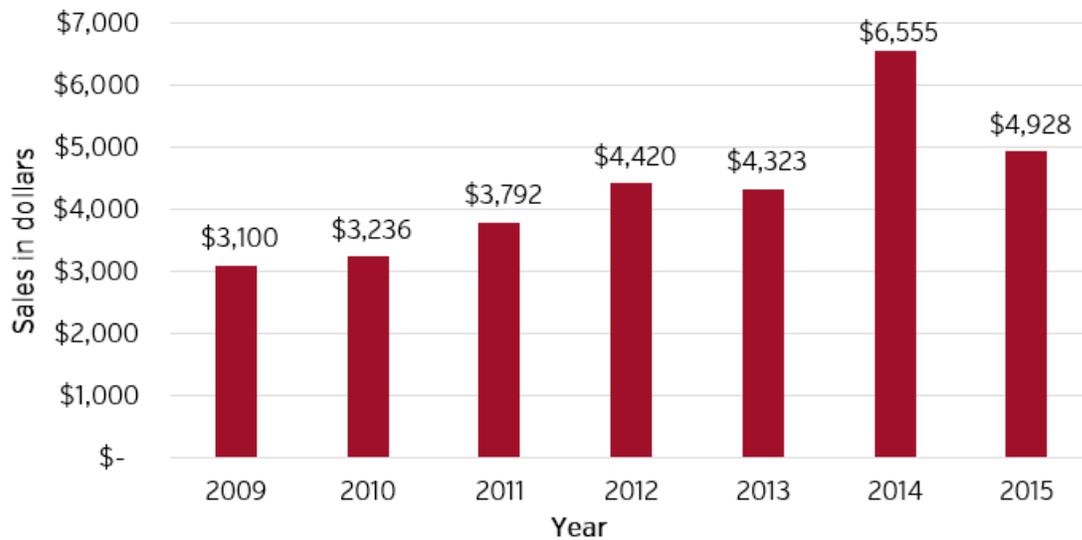


Figure 1: Average sales to World PEAS Food Hub made by New Entry program farmers (farmers who have gone through New Entry's Farm Business Planning Course and/or Incubator Program).

Combined New Entry Program Farmer Income

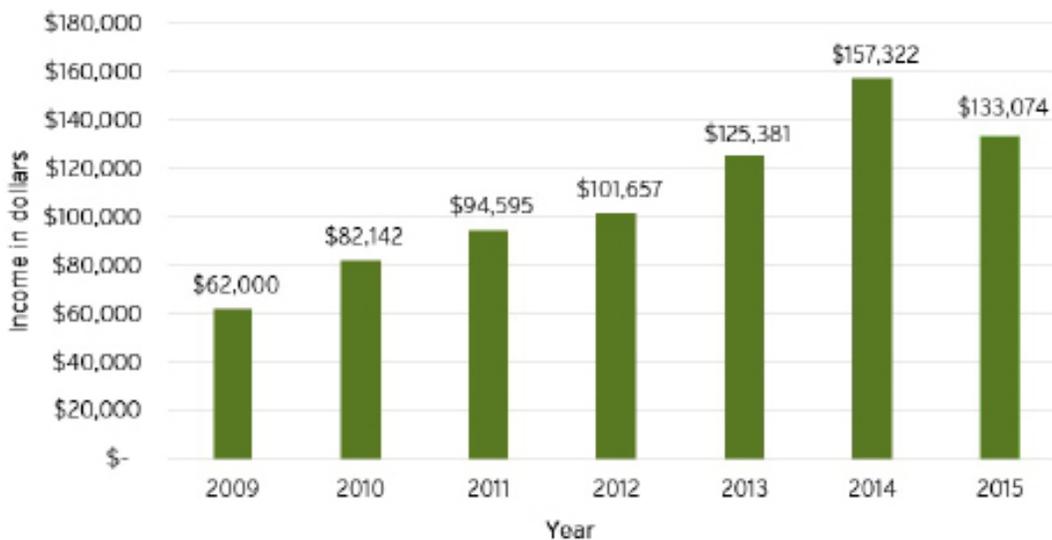


Figure 2: Total income to New Entry program farmers (farmers who have gone through New Entry's Farm Business Planning Course and/or Incubator Program) calculated by combining all sales made by New Entry farmers to World PEAS.

Community Supported Agriculture (CSA)

The CSA continues to be the majority of World PEAS' total sales, making up 68% of total food hub sales. Though the shareholder base has slightly decreased, the CSA model continues to be the most viable market for New Entry farmers in terms of flexibility and livable wages.

New Entry Staff, including the World PEAS Food Hub Coordinator, Beginning Farmer Resource Coordinator and Technical Assistance Coordinator worked together in 2015 to provide quality feedback to New Entry program farmers in the area of crop production. As a result, 89% of shareholders reported that crop quality was either consistently good or generally good. Shareholders also reported that our newsletter, weekly recipes, and variety of produce set us apart from other CSAs. Shareholders were attracted to the fact that fruit is included in the price of any size World PEAS CSA share, something often charged as "extra" in other CSA's. World PEAS and New Entry staff members also provide farmers with a significant amount of assistance in crop planning, allowing farmers to plan their harvests alignment with the needs of the food hub.



Shareholder Testimonials



"I have been a World PEAS CSA member for 4 years and I love it! There is a good variety of vegetables every week, and great information provided on selections that may be a bit unfamiliar. The newsletter has recipes and storage information that is useful. The program is well run, the produce is excellent quality and I love the fact that people are learning to make a living at organic farming through the program."

"World PEAS was my first CSA experience and it was lovely, an interesting variety of veggies never tried and old favorites were frequently available, getting to help folks is such a great perk too!"
"This was my first CSA. It will not be my last. The produce was excellent and some was new to me. Loved the whole experience and especially the food!"

"We organized a CSA Farm Share Program at our office and not only was it a great experience to receive fresh organic produce each week, it brought together several people from different departments and business groups that otherwise wouldn't. The comraderie between co-workers as we shared recipes and cooking stories was very special."



Increasing Food Access

In 2015, World PEAS worked with a dozen organizations serving low-income clientele that we categorize as our “Food Access Partners.” These organizations graciously distribute World PEAS produce to their clients through farmers markets, produce featured in meals cooked on-site, homebound senior CSA deliveries, and more. The World PEAS Food Access sales grew significantly in 2014 (by 224%) and that growth continued in 2015 (by 7.6%). In total we distributed \$88,606 worth of produce to our Food Access Partners and contributed \$14,913 in subsidy to leverage their purchasing power. In total, we served low-income and low-access clientele through 14 separate distribution channels [see Figure 3]. In 2015, World PEAS introduced the “Fair Share” option where customers can choose to contribute \$6.50/week to fund low-income food access programs. A total of 31 Fair Shares were sold, representing 8% of total shareholder purchases.

Population Served

In 2015, World PEAS produce reached the tables of approximately 1,800 low-income people through farmers market style distributions, meals cooked on-site, and homebound CSA deliveries. The majority of clients were served through meals cooked on-site using World PEAS produce for the meal. Weekly “farmers’ markets” were extremely successful at five senior center distribution points. Participants were able to pick up \$15-\$22 of vegetables along with a newsletter featuring storage instructions and recipes. Seniors participating in a weekly farmers market self-reported that they ate more fresh vegetables due to the market and will continue to do so in the future.

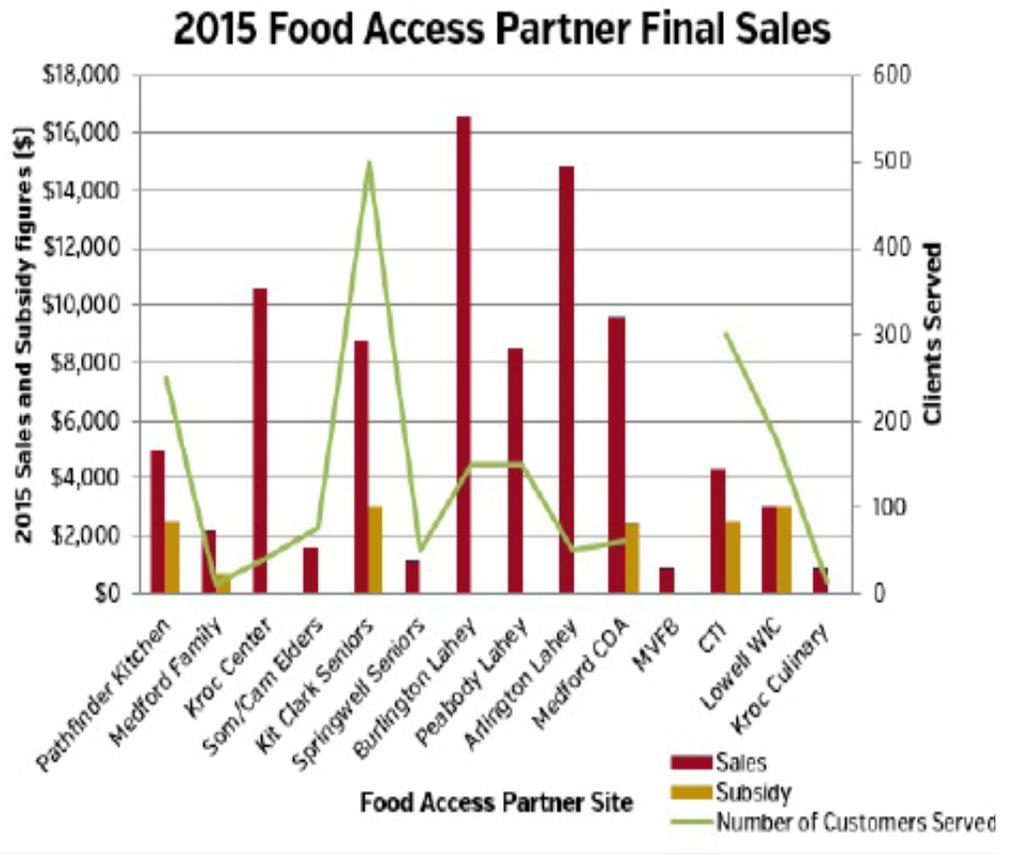


Figure 3: 2015 sales and subsidy figures compared to number of clients served at each food access partner site.

The success of a particular site is very dependent on our Food Access Partner’s staff capacity and how committed staff are to the World PEAS mission and serving their clients fresh local food. Overwhelmingly, the most positive feedback came from sites operating a farmers’ market-style distribution, suggesting that this may be a high-impact way to connect clients to produce.

In order to measure program impact, World PEAS staff sought customer feedback at food access sites through a paper survey tool. In total, 124 responses [33% response rate] were recorded from six separate partner sites. Respondents cited a number of barriers that prevented them from eating more fresh fruits and vegetables, with the largest being physical disabilities (Figure 4).

Outcomes of Fresh Produce Program

- 94% of participants ate more fruits and vegetables
- 90% of participants self-reported that they would purchase/consume fresher produce in the future
- 94% of participants will cook more fresh items in the future

Trends

The impact assessment data exposes trends that can be relevant for future decisions regarding our food access work. Most importantly, the data suggests that clients would be consuming more fresh produce on a regular basis if barriers to access were decreased. Specifically, physical disabilities and cost are the greatest barriers for respondents.

Transportation was also a limiting factor, which may be related to physical disability and age. Overall, clients overwhelmingly felt that the fresh produce program helped them eat more vegetables and clients will continue to eat more fresh items even after the distribution ends. Greater consumption of fresh produce is ultimately the goal of the food access program so data verifying the goal is extremely promising.

Selected Testimonials

"I thoroughly enjoy everything you gave me. I also enjoy the history about the farmers and where the produce comes from. I also like your recipes. I hope they do it again next year. Thank you again."

"I actually enjoy trying the new and unfamiliar items because it forces me to think outside of the box and try new things."

"Some items are strange to me but I cooked with them. The newsletter is very helpful with info on veggies, farmers and recipes. This week I made lemongrass tea and used leeks in potato soup."

"Very excellent program. It has helped me keep up good nutrition through the summer and I have enjoyed the produce I did not know about."

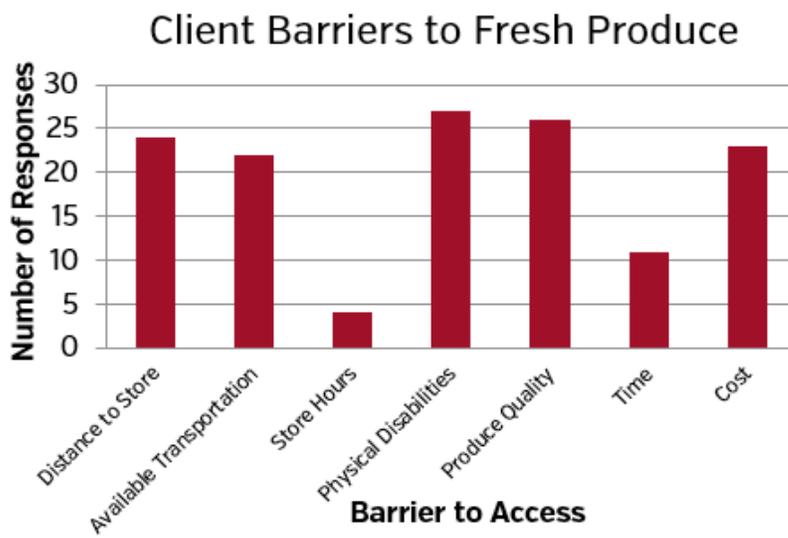


Figure 4: Perceived barriers to fresh produce, based on a survey of 124 individuals who received fresh produce via World PEAS' food access partners.



Farm to Institution

In 2015, World PEAS increased sales to restaurants and dining halls. We continued to deliver fresh, local produce to Artistry Inn on the Green and to Tufts Dining Services. In addition, we supplied produce to a farmers' market on the Tufts University campus in Medford. We also added a new restaurant account, Tamper Café, close to the Tufts campus in Medford. The Café was interested in sourcing local produce and heard about World PEAS through increased marketing efforts in the area.

World PEAS would like to increase sales to restaurants and dining halls in 2016. A group of Harvard University Business School students will be researching marketing strategies for World PEAS to help achieve this goal.

Staff, Intern, and Volunteer Experience

The World PEAS Food Hub could not function without the help of our invaluable volunteers! volunteer sharepackers assist the World PEAS staff in packing shares and bulk orders each morning, sorting and aggregating produce that will eventually feed CSA shareholders, restaurant customers and beneficiaries of food access partners across the greater Boston area. Without volunteer sharepackers, our farmers' produce would not reach so many mouths and bellies!

Volunteer cluster coordinators enable World PEAS to establish pick-up locations in eastern Massachusetts and are responsible for maintaining the cleanliness and functioning of each pick-up location. Both sharepackers and cluster coordinators are compensated with a free Small Share for their efforts.

In a survey distributed to all 2015 World PEAS volunteers, 75% of participants reported that learning about sustainable agriculture and food systems was a motivation for volunteering with us. These same participants also stated that they wanted to “gain experience in the sustainable food sector,” indicating that volunteering at World PEAS may be a way for individuals to explore a new career field and potentially build their resumes. The World PEAS staff was very pleased to note that 100% of survey participants stated that they were either “very likely” or “extremely likely” to recommend this volunteer opportunity to friends and family.



World PEAS Income Statement

The World PEAS Food Hub experienced a deficit in 2015. The Food Hub continues to experience deficits, primarily due to its activities around food access, from which limited earnings are absorbed. The Food Hub deficit is covered through grants and donations, mainly funding our food access work. The deficit increase for 2015 can be attributed to a decrease in CSA sales, an increase in expenses related to low-income food access work, and an increase in indirect costs due to additional fees charged by our new fiscal sponsor for farmer payments. Our prior fiscal sponsor, Community Teamwork, Inc (CTI) did not charge indirect costs on farmer payments since farmer payments were considered to be passthroughs under CTI's organizational structure.

World PEAS Food Hub Actual and Projected Operational Profit/Loss

	Projections					Projections	
	2011	2012	2013	2014	2015	2016	2017
	302 Sm. Shares, 124 Lg. Shares, 137 Ext.	332 Small Shares, 80 LG. Shares, 94 Ext.	335 Sm. Shares, 76 Lg Shares, 56 Student	356 Sm. Shares, 50 Lg Shares, 52 Fall	264 Sm. Shares, 32 Lg Shares, 55 Fall, 31 FAIR Share	265 Sm. Shares, 32 Lg Shares, 80 Fall, 55 FAIR Share	265 Sm. Shares, 32 Lg Shares, 90 Fall, 65 FAIR Share
Price Per Share	Lg= \$705 Sm= \$465 Ext. = \$125	Lg= \$710 Sm= \$470 Ext. = \$130	Lg= \$795 Sm= \$525 Fall = \$225	Lg= \$805 Sm= \$540 Fall = \$235	Lg= \$815 Sm= \$545 Fall = \$240 FAIR= \$675	Lg= \$825 Sm= \$555 Fall = \$245 FAIR= \$685	Lg= \$835 Sm= \$565 Fall = \$250 FAIR= \$695
CSA Earnings							
Food Hub Commission + membership earnings	\$91,615	\$71,070	\$75,000	\$102,825	\$98,311	\$107,634	\$112,679
Total CSA Earnings	91,615	71,070	75,000	102,825	98,311	\$107,634	\$112,679
Total CSA Personnel	59,591	70,491	66,942	70,285	84,053	102,945	105,313
Total Improvements	610	862	129	548	105	108	110
Total Vehicles	1,465	0	1,759	8,102	13,427	8,000	8,184
Total Expenses for Travel	4,028	1,743	2,883	5,604	4,925	5,048	5,174
Total Other	17,350	19,724	22,290	25,039	25,909	26,557	27,221
Indirect Expense	7,416	8,152	8,446	11,671	31,149	36,056	37,465
Total Expenses	90,460	100,972	102,449	121,249	159,568	178,713	183,466
Retained Earnings (I)	1,155	-29,902	-27,449	-18,424	-61,257	-71,079	-70,787
Funding from Grants covering Marketing and Low-Income Initiatives	0	30,000	41,574	45,874	54,716	68,202	
Tufts Donation Account	13,921	15,000	15,000	15,000	15,000	15,000	15,000
Net Gain/Loss	15,076	15,098	29,125	42,450	8,459	12,123	-55,787

Plans for 2016

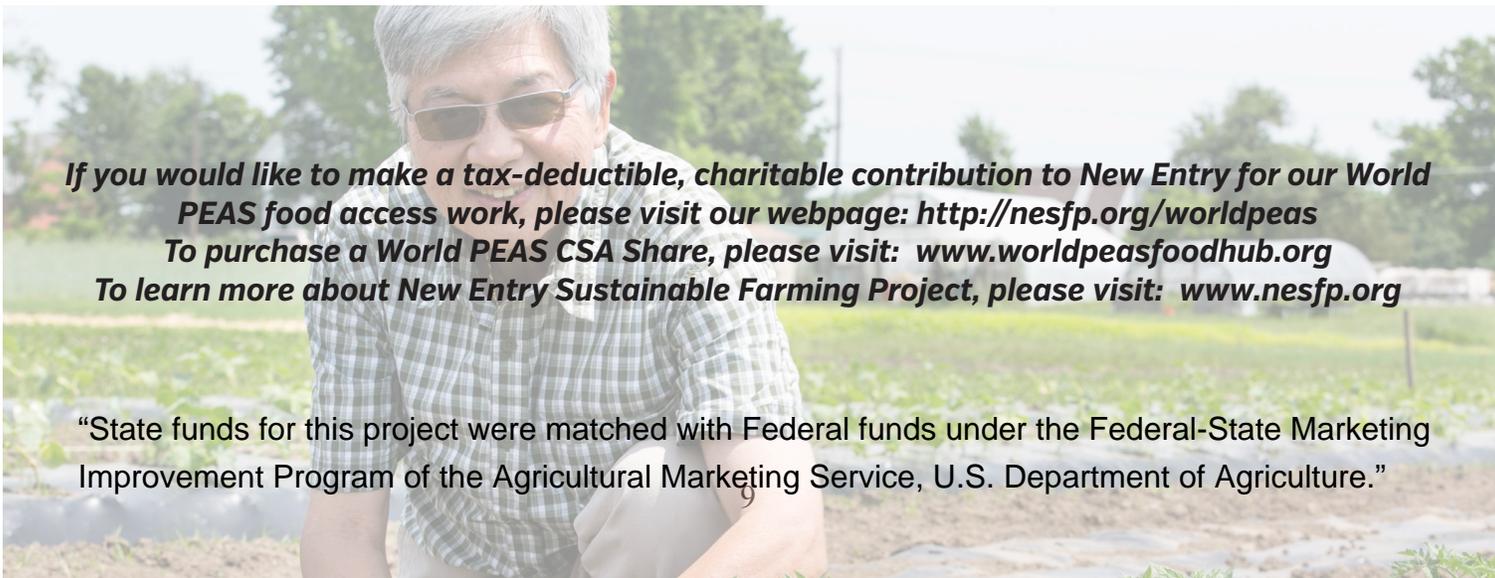
As we increase our food access work, World PEAS will continue to focus on the CSA program. We hope that more strategic marketing efforts will increase the number of shareholders in 2016. World PEAS will also be offering a new share option in the coming year. Our new Specialty Share will feature a wide variety of multicultural produce grown by New Entry's Cambodian and African farmers. The items included in this share will be grown organically and locally, unlike the majority of multicultural produce sold in Asian and African grocers. As with all World PEAS' products, beginning farmers will receive 79% of every sale. We hope that this Specialty Share will help boost our shareholder numbers as it provides high quality, organic, locally grown niche products directly to customers.

World PEAS will continue to expand our work with low-income food access partners and expand our restaurant and dining hall accounts. The market for farm-to-institution sales has increased by over 220% since 2013, and we expect it to become an increasingly important part of our food hub sales in coming years. Though New Entry's original mission was to support beginning farmers, serving low-income, food-insecure communities has become an equally important aspect of our mission-based organization. Ensuring that all neighborhoods have access to fresh, healthy food is critical in fostering a sustainable local food system.

Added staff capacity from three Americorps VISTA positions will relieve duties previously relegated to the World PEAS Food Hub Coordinator and allow more focused communication with food access partners, cluster coordinators, shareholders, and farmers. World PEAS will also be hiring a new full-time Food Hub Manager and second part-time driver who will be essential in providing staff capacity to cover our expected growth in 2016.

New Entry Sustainable Farming Project has been selected as a recipient of the Urban Agriculture Grant Program, distributed by Massachusetts Department of Agricultural Resources. This grant will allow World PEAS to purchase new infrastructure such as a walk-in cooler, replacing a refrigerated box unit for our delivery truck, and pack tables to improve the functioning of the Food Hub in 2016. These improvements are much needed as World PEAS has outgrown much of the original infrastructure purchased in 2005. Damage to one of our existing trucks prevented World PEAS from optimizing our transportation capacity.

The World PEAS Food Hub looks forward to addressing the challenges and opportunities presented in 2015. We thank all of our CSA shareholders, community partners, institutional customers, share packers and farmers for a wonderful 2015 season. With your help and generosity, we look forward to a fun, engaging, and bountiful season in 2016!



***If you would like to make a tax-deductible, charitable contribution to New Entry for our World PEAS food access work, please visit our webpage: <http://nesfp.org/worldpeas>
To purchase a World PEAS CSA Share, please visit: www.worldpeasfoodhub.org
To learn more about New Entry Sustainable Farming Project, please visit: www.nesfp.org***

“State funds for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, U.S. Department of Agriculture.”