EXPLORING COMMON MEASURES FOR FOOD HUBS

Documenting Impact, Sharing Stories, Connecting with Stakeholders

Wallace Center at Winrock International
Yellow Wood Associates
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DRAFT
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Introduction
How do food hubs fulfill their missions, tell their stories, and improve their practices to generate greater impacts over time? How might a set of common measures help food hubs and the food hub community target impacts more effectively and communicate more effectively about what they achieve and the potential to achieve even more? This study, supported by the Wallace Center and the National Good Food Network is an exploration of measurement and “common measures” for food hubs with the goal of exploring these questions.

About the Study
The National Good Food Network Food Hub Collaboration supported by the Wallace Center at Winrock International selected nine food hubs as “study hubs” with the intent that the lessons learned from working closely with these hubs would be shared with the larger food hub community. The nine “study hubs” represent a range of business models, legal structures, ages and scales from across the country. Study hubs included:

- ALBA, Salinas, CA
- Cherry Capital Foods, Travers City, MI
- Common Market, Philadelphia, PA
- Farm Fresh Rhode Island, Providence, RI
- Firsthand Foods, Durham, NC
- Grasshoppers Distribution, Louisville, KY (no longer in business)
- Idaho’s Bounty Co-op, Hailey, ID
- Jack and Jake’s, New Orleans, LA
- Local Food Hub, Charlottesville, VA

Seven of the study hubs participated in on-site workshops that engaged staff and stakeholders to identify what matters most to the hub and its partners and develop strategies and measures for making progress towards those goals. In addition, all nine study hubs participated in an exploration of “common measures”. The Wallace Center conceived of “common measures” as a way to illustrate contributions food hubs make individually and collectively and to help the movement tell a compelling story. This report introduces four “common measures” selected by the Wallace Center for research purposes. The report describes the relationship of the “common measures” to food hub missions, provides a brief rationale for each measure, summarizes evidence of impact from food hubs related to each measure, highlights related measurement practices of a specific food hub, summarizes secondary
data that could be used to create a context for measures at the level of individual food hubs, and offers suggestions for measures that incorporate primary and secondary data. The report ends with a series of questions designed to stimulate discussion among the food hub movement regarding the utility and feasibility of common measures.

To learn more about the study hubs go to: http://www.ngfn.org/resources/food-hubs/study-hubs

Common Measures

This report discusses four common measures that were selected by the Food Hub Collaboration at the Wallace Center to measure progress of food hubs in four key areas:

1. Increased economic activity and market-access for small- and mid-sized producers;
2. Greater food access to underserved communities;
3. Increased articulation and understanding of the impact of food hubs in achieving health-related outcomes;
4. Investment by federal and private sources into food hub development.

When the Wallace Center selected these four common measures, they were seeking to provide information about food hubs to interested parties, including policy-makers and funders, who are not actually operating food hubs. They chose to highlight three areas that they felt corresponded to the missions of many hubs (serving underserved communities, increasing market access for small and mid-sized producers, and achieving health-related outcomes) and one area (sources of investment) that would help illustrate the range of stakeholders in food hub development and how this may change over the life of a food hub.

The purpose of the report is to summarize findings with respect to this common set of measures and raise questions regarding the utility of common measures in illustrating the contributions food hubs make individually and collectively to a few broadly shared socio-economic goals. It begins by taking a look at the relationship of study hub mission statements to the identified common measures, then explores the status of measures in use by study hubs and compares this to data from the National Food Hub Survey.

The National Food Hub Survey was conducted in 2013 by Michigan State University’s Center for Regional Food Systems and the Wallace Center at Winrock International to characterize the variety of food hub models and get a sense of their social and economic impacts, as well as establish the basis for monitoring trends over time. Questions pertaining to each of the four “common measures” were intentionally developed for and included in the National Food Hub Survey. Researchers hope the survey will help to shape the national understanding of food hubs, gain exposure for food hubs and inform new relationships. The on-line survey was sent to 222 food hubs, identified by members of the National Good Food Network in February of 2013. 125 surveys were returned and 107 were used in the analysis. Data from the National Food Hub Survey presented in this report is from the publication, Findings of the 2013 National Food Hub Survey. Data provided by the study hubs for the survey was also used with their permission. Appendix A of this document shows the questions from the National Food Hub Survey that are relevant to the common measures.
For each common measure, this report shares data from secondary data sources that could help to frame or contextualize food hub impacts. Secondary data provides a context for data at the level of the individual food hub, and the food hub community as whole, that can help demonstrate the contributions of food hubs as well as the potential for expanding impacts over time. For example, it is one thing to know the value of product a food hub has moved into schools and another to understand that in relation to the overall value of food purchased for use in the schools. The framing data is drawn from a variety of secondary data sources. \(^3\) *Charting Growth: Developing Indicators and Measures of Good Food* is another good source for identifying relevant framing for food hub-related measures of progress. \(^4\) *Charting Growth* was developed with a focus on indicators that have reliable publically available data to show trends in “good food” over the last 25 years. The suggested measures in this report combine data from individual food hubs with relevant secondary data that is publically available.

Definitions for key terms in the proposed common measures are suggested throughout the report. Definitions are integral to ensuring that people understand and agree on exactly what is being measured. Definitions will have to be revisited if the food hub movement decides that common measures matter. In conclusion, we suggest discussion questions for the food hub community as a whole about the value and utility of common measures.
Common Measures and Study Hub Mission Statements
The four “common measures” proposed by the Wallace Center were:

1. Increased economic activity and market-access for small- and mid-sized producers;
2. Greater food access to underserved communities;
3. Increased articulation and understanding of the impact of food hubs in achieving health-related outcomes;
4. Investment by federal and private sources into food hub development.

Table 1 below shows which study hubs have mission or value statements related to the first three common measures. No study hubs had mission or value statements related to the fourth common measure.

<table>
<thead>
<tr>
<th>Study Hubs</th>
<th>Food Access</th>
<th>Supporting Farmers</th>
<th>Human Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALBA</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry Capital Foods</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Market</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Farm Fresh Rhode Island</td>
<td></td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Firsthand Foods</td>
<td></td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Grasshoppers Distribution</td>
<td>Y</td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Idaho’s Bounty Co-op</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack &amp; Jake’s</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Local Food Hub</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

Examples of Mission Statements from the Study Hubs Related to the Common Measures

Mission Statements related to Common Measure #1: Market Access
Firsthand Foods’ mission is to help build a sustainable food system that allows small and mid-sized livestock producers to thrive. - Firsthand Foods

Our mission is to advance economic viability, social equity and ecological land management among limited-resource and aspiring farmers. We work to create opportunities for family farms while providing education and demonstration on conservation, habitat restoration, marketing and whole farm planning. - ALBA

Mission Statements related to Common Measures #1 and #2: Market Access and Food Access
Our mission is to strengthen regional farms while making the local bounty accessible to communities and the institutions that serve them. – Common Market
Our mission is to provide high quality, safe and affordable local fresh foods from regional farmers and fishers to schools, universities, hospitals, and underserved communities. – Jack and Jake’s

Local Food Hub is a nonprofit organization working to improve small farm viability and increase community access to local food. – Local Food Hub

Mission Statement related to Common Measure #3 – Health-related Outcomes
Farm Fresh Rhode Island is growing a local food system that values the environment, health and quality of life of RI farmers and eaters. – Farm Fresh Rhode Island

Common Measures and Mission Statements in Context
The 2013 National Food Hub Survey analyzed mission statement language of food hubs looking for nine themes, including three that correspond to the common measures discussed in this report: “food access,” “supporting farmers” and “human health.”

Table 2 shows the percentage of study hubs and all food hubs responding to the national survey that have mission or value statements related to the common measures.

Table 2: Food Hub Mission Statements and Common Measures

<table>
<thead>
<tr>
<th></th>
<th>Food Access</th>
<th>Supporting Farmers</th>
<th>Human Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Study Hubs</td>
<td>44%</td>
<td>88%</td>
<td>11%</td>
</tr>
<tr>
<td>% of Food Hubs⁶</td>
<td>22%</td>
<td>52%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The focus of the study hubs as evidenced by their mission statements is even more heavily weighted toward supporting farmers than is the larger sample of hubs that responded to the national survey. Significantly fewer food hubs are focused on food access and very few have articulated human health as a part of their mission. Even though food hubs may not articulate interest in health outcomes in their mission statements, those that articulate interest in food access may be assuming positive impacts on health. There is ample opportunity to strengthen food hub intentionality with respect to health outcomes.

The four “common measures” may not, in fact, reflect widely shared goals of food hubs. Bearing that in mind, what do we know about the measures study hubs collect and the secondary data that could help food hubs characterize their impacts in these areas?
Common Measure #1: Increased Market Access and Economic Activity for Small and Mid-Sized Producers

How do food hubs help small and mid-sized producers access markets? Both national data on food hubs and responses from the study hubs indicate that food hubs provide services and activities for small and mid-sized producers that improve their market access and/or economic activity. Key questions to explore include what types of services are provided, how best to track the impact of these services, and how best to define “small and mid-sized” producers in this context.

Having viable small and mid-size farms is considered a key component to the development of local and regional food systems that contribute to healthy communities, help stimulate local economies and can support working lands. Many small and mid-size farms lack access to the distribution, processing and marketing infrastructure that can give them increased market access often required to sustain their businesses. USDA, and many others, believes regional food hubs can play an important role in supporting and growing small farms. As we have seen, the majority of food hubs nationwide consider this part of their mission. What is the evidence that they are having an impact in this area?


The 2013 National Food Hub Survey found that 76% of food hubs indicated that most of their producers were small or mid-sized (with 32% reporting all of their producers as small or mid-size). This is echoed by the study hubs, but half of the study hubs reported that all of their products are purchased from small and mid-sized producers. The National Survey found that 60% of food hubs’ total gross sales came from small and mid-sized producers. All study hubs reported that the number of small and mid-sized producers they are purchasing from has increased in the past year, as has the value of their overall purchases from small and mid-sized producers.

In addition to making direct purchases from small and mid-size producers, food hubs often provide services and activities for producers that will improve their market access and/or economic activity. In 2012 the study hubs provided an average of 5.75 such activities or services out of a total of nine that were asked about. Producer services and activities asked about included: Actively help producers find new markets; Marking and promotion services for producers; Branding or labeling products to indicate origin of product or other attributes; Demonstration/Incubator farm; Production and post-harvest handling training; Business management services or guidance; Food safety and/or GAP Training; Liability insurance offered to producers; Transportation services for producers such as picking up product from the farm for distribution. All study hubs reported that they actively help producers find new markets and provide branding or labeling to products to indicate origin of a product or another attribute. Most of the study hubs also provided

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**National Food Hub Survey - What is being measured now?**

- Proportion of food hub producers that are small or mid-size
- Food Hub gross sales from small and mid-size producers
- Change in value of purchases from small and mid-size producers
- Activities to support producers
marketing and promotional services for produces and transportation services, such as picking up product from the farm for distribution. The two services least provided by study hubs were liability insurance for producers and access to a demonstration/incubator farm.

**Telling the Story about Market Access: Firsthand Foods**

*Firsthand Foods*, based in Durham, North Carolina, is an outgrowth of North Carolina Choices, an organization launched in 2003 to help grow the market for the state’s pasture-based pork producers. Firsthand Foods now connects farmers raising beef and pork humanely and on pasture with restaurants, retailers, institutions and individuals. In 2012 Firsthand Foods made purchases of over $335,000 from their producers. Last year Firsthand Foods worked with 37 producers with operations ranging from approximately $20,000 to $150,000 annually.

Firsthand Foods actively pursues new markets for pasture-raised beef and pork products and has tripled the number of its producers in the past three years and continues to expand markets. Firsthand Foods purchases whole animals from producers, works with partners for processing and manages marketing, sales and distribution. All products are sold under the Firsthand Foods brand, but each product is directly linked back to a specific farm and Firsthand Foods promotes producers as part of their brand. “We develop new markets and relieve them of the responsibility of marketing,” says Firsthand Foods co-CEO Jennifer Curtis.

To measure progress toward their goal of a vibrant and sustainable regional food system for North Carolina, where “more consumers demonstrate commitment by putting their food dollars toward local food as a key indicator progress,” Firsthand Foods is measuring how much of their customers’ total spending is on local meat. For example, Weaver Street Market, a Firsthand Foods customer, spent a monthly average of $37,000 on meat purchases in 2013 and 81% of those purchases were on local meat. Across twelve retail customers, Firsthand Foods found an average of 70% of meat purchases being made from local producers. And across 16 restaurants served by Firsthand Foods, the food hub found more than $500,000 in spending on local foods in the past year, with 71% of that going to Firsthand Foods and their producers. As Firsthand Foods continues to collect this data (much of which is already being collected as part of North Carolina’s “10% Campaign” which encourages consumers to purchase 10% of their food from local sources) the food hub will be able to measure access to markets and increased economic activity for their producers.
Making Stronger Measures of Market Access

As we have seen, many hubs are working to improve market access, but relatively few are measuring their impact. Measuring market access outcomes could tell us:

- Are more farmers financially stable or viable because of food hubs?
- Does the farm product coming through food hubs represent net increases in production or is it just a redistribution of a set level of production?
- Do the services offered by food hubs actually result in increased access to market for farmers?
- How many farmers, as a proportion of all farmers in a market region, are impacted by food hubs?

Measuring the impact food hubs have on market access and economic activity for small and mid-sized producers requires several key pieces of information. For the individual hub, it is important to know what the baseline market access conditions are for farmers before they work with food hubs and after. This information helps determine whether access and economic activity is truly increasing or there is simply a shift taking place in where the same products are sold. It is also important to know the number, size, and type of the markets that food hubs connect producers to; and the volume and value of the products purchased from small and mid-sized producers by these markets both through hubs and not. Unfortunately, existing data systems do not readily provide the most useful information. A start, for which existing data can be somewhat helpful, is information on the proportion of small to medium sized growers in a given region being served by food hubs. This begins to frame the potential for growth in food hub impact on farmer access.

The table below shows data on the number of small farms, number of small and mid-sized farms, the % of farms that are small and mid-size and the market value of products from small and mid-size farms for the states in which the Study Hubs are located. (All data is from the 2007 Agricultural Census.)

Table 3: Small and Mid-Size Farms in Study Hub States

<table>
<thead>
<tr>
<th></th>
<th>Total Small farms (up to $250k)</th>
<th>small farms as % of all farms</th>
<th>Total small and mid-size (up to $500k)</th>
<th>small and mid-size farms as % of all farms</th>
<th>market value of products from small &amp; mid-size (1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>68,420</td>
<td>84%</td>
<td>72,384</td>
<td>89%</td>
<td>$3,315,104</td>
</tr>
<tr>
<td>ID</td>
<td>22,591</td>
<td>89%</td>
<td>23,658</td>
<td>93%</td>
<td>$854,400</td>
</tr>
<tr>
<td>KY</td>
<td>82,157</td>
<td>96%</td>
<td>83,613</td>
<td>98%</td>
<td>$1,751,403</td>
</tr>
<tr>
<td>LA</td>
<td>27,793</td>
<td>92%</td>
<td>28,580</td>
<td>95%</td>
<td>$639,481</td>
</tr>
<tr>
<td>MI</td>
<td>51,454</td>
<td>92%</td>
<td>53,538</td>
<td>96%</td>
<td>$1,795,129</td>
</tr>
<tr>
<td>PA</td>
<td>58,128</td>
<td>92%</td>
<td>60,889</td>
<td>96%</td>
<td>$2,458,417</td>
</tr>
<tr>
<td>NC</td>
<td>46,441</td>
<td>88%</td>
<td>48,251</td>
<td>91%</td>
<td>$1,381,023</td>
</tr>
<tr>
<td>RI</td>
<td>1,159</td>
<td>95%</td>
<td>1,190</td>
<td>98%</td>
<td>$29,018</td>
</tr>
<tr>
<td>VA</td>
<td>45,027</td>
<td>95%</td>
<td>45,958</td>
<td>97%</td>
<td>$979,585</td>
</tr>
</tbody>
</table>
This data shows us that nearly all farms are small or mid-size according to the USDA definition. That makes this distinction not terribly useful. However, bearing this in mind, it is interesting that food hubs report that only 60% of total gross sales come from small to medium sized producers. What can be learned about the mix of products food hubs have to handle to be able to serve small and medium sized farmers? The data presented above is also available by county which might be more useful to food hubs for understanding impact, but getting a more accurate reading of the size of farms food hubs are working with would also be helpful. Agricultural Census data is available for farms with annual sales as small as $1,000 and goes up in small enough increments to provide usable data. Understanding what proportion of growers of what size in a given state or country or multi-county region that are being served by one or a group of food hubs helps define what scale of operation is realistic and should be a target for growth. Without this context, neither the food hub nor its potential investors or buyers have the information they need to consider opportunities for scaling up to achieve greater impact.

**Suggested Definitions**

**Small and mid-sized producers** – As defined by the USDA Census of Agriculture, small producers are farms and ranches with gross annual sales less than $250,000, mid-size producers are farms and ranches with gross annual sales less than $500,000. The National Food Hub Survey uses the same definitions, though, as evidenced above, this does little to differentiate among farmers.

**Increased economic activity** – Adding additional volume and value of overall purchases from small and mid-sized producers on an annual basis.

**Increased market access** – Adding additional markets for the hub as a whole in terms of number and category of buyer (type of market) and increased volume sold.

**Possible Measures**

Tracking the size of producers that hubs are purchasing from in relation to the total producer population, will provide more detailed data on the impact of food hubs on small and mid-size farmers. Understanding how and how much food hubs are investing specifically in expanding market opportunity and how that is reflected in sales patterns might also be a useful metric.

- What proportion of all small and mid-sized producers in a selected region are selling products through food hubs?
- What proportion of the volume and value of products from small and mid-sized producers is handled by food hubs?
  - Could be by category of product.
- What is the extent of investment by food hubs in improving market access for small and mid-sized producers? What is the penetration of food hubs by market type in a given region?
- What is the level of investment farmers make as a result of their involvement with food hubs?
Common Measure #2: Greater Food Access to Underserved Communities

How do food hubs help underserved communities access food? Many communities and individuals lack access to affordable healthy food. National data show that food hubs support food access for individuals by donating food and accepting benefits like SNAP, WIC, or FMNP. Study hubs also reported developing targeted relationships with institutional and retail markets that serve underserved and vulnerable communities, and participating in programs that multiply the value of benefits. Key questions to explore include the level and type of food access needs in a community and the extent to which food hub activity meets those needs.

Food insecurity in the United States is prevalent and well documented as are the benefits of access to healthy food. USDA estimates that 23.5 million people live in food deserts (with more than half of those being low-income) with an additional 2.3 million people living in low-income rural areas that are more than 10 miles from a supermarket7 and others have documented that even with access many people can’t afford fresh fruits and vegetables8. A recent report by PolicyLink, Access to Healthy Food and Why It Matters, had three primary findings9:

- Accessing healthy food is still a challenge for many families, particularly those living in low-income neighborhoods, communities of color, and rural areas.
- Living closer to healthy food retail is among the factors associated with better eating habits and decreased risk for obesity and diet-related diseases.
- Healthy food retail stimulates economic activity.

Current Practices in Measuring Greater Food Access to Underserved Communities

Many food hubs accept SNAP, WIC or FMNP benefits or facilitate the use of those benefits at area farmers markets.10 Many participants in these programs live in underserved communities and accepting these benefits helps to make fresh and locally produced foods available to them as subsidized farm shares or double the value of federal benefits like SNAP when they are used to purchase food through the food hub or a farmers’ market. The National Food Hub Survey collects data on whether food hubs accept SNAP, WIC or FMNP benefits, operate a mobile market, subsidize farm share, donate food to local food pantries/banks (all indicators of food access). The survey also asks hubs if they have evidence that their activities are resulting in increased access.

Eighty eight percent of the Study Hubs reported that they make food donations and 38% accept SNAP benefits. In response to the question of whether they have evidence of impact, the study hubs answered, “Yes.” ALBA sells organic produce through a fresh fruit and vegetable grant to Pajaro Valley Unified School District, a low income school district. Cherry Capital Foods donates food to agencies that
are providing services to these communities and Farm Fresh Rhode Island offers a farm to food pantry program as well as the “Fresh Bucks/Bonus Bucks” program in which participants using SNAP benefits at farmers markets get $2 free to spend for every $5 of SNAP benefits.

**Telling the Story about Food Access: Common Market**

Common Market, based in Philadelphia, PA, launched in 2008 as a non-profit corporation with a dual mission of supporting the viability of sustainable family farms and increasing access to fresh and healthy food for all people (including the most vulnerable). Today Common Market aggregates and distributes food to institutional and retail customers in Pennsylvania, New Jersey, Delaware and Maryland. In 2013 Common Market served 212 customers and purchased products from 75 farmers and local producers.

Common Market uses a range of data collection tools and analysis to demonstrate impact and fulfillment of mission. This includes: farmer and customer interviews and surveys; analysis of sales data and organizational finances; and modeling to determine the number of “meal equivalents” sold to institutions serving low-income populations.

To determine their impact on underserved or vulnerable populations, Common Market identifies their institutional and retail customers that serve these communities, and then tracks the food going to these customers using a sophisticated sales inventory system that tracks each item in pounds, cases and cost for each customer and producer. In 2012 Common Market worked with Social Impact Consulting, a group sponsored by the Wharton School of Business at the University of Pennsylvania to help them measure impact in this area. This group helped Common Market determine the number of “meal equivalents” going to underserved populations based on existing measures of low-income populations, volume of food delivered by Common Market and a caloric equation for each type of food.

Based on data from Common Markets 2012 Evaluation Report, the organization served 25 schools that were identified as TCLI - a US Department of Education designation for schools with a high concentration of students from low-income families. These schools received 10,310 meal equivalents. They also served six hospitals that participate in the Safety Net Association of Pennsylvania (SNAP) or Hospital Alliance of New Jersey (HANJ). These hospitals received 52,476 meal equivalents. And in 2012 Common Market served three retailers that both accept and redeem Supplemental Nutrition Assistance Program (SNAP) benefits and participate in the Pennsylvania Fresh Food Financing Initiative (FFFI). These retailers provided 32,962 meal equivalents with Common Market products.

The data helps Common Market to understand impacts and areas for growth, for example working with hospitals provides the opportunity to provide fresh and healthy food to a large underserved population through a single customer. As Common Market expands they are always balancing, “Where is there growth for sales and where is there growth for mission?” All Common Market customers pay the same
price for a product, but some customers, primarily those serving vulnerable populations, receive additional technical assistance from Common Market to support their local purchasing programs.

Making Stronger Measures of Food Access

Measuring food access outcomes should tell us how many additional consumers in underserved communities have the choice to consume fresh, healthy food as a direct result of food hub activities.

Measuring the impact food hubs have on food access for underserved communities requires two key pieces of information: the amount of need in the communities a food hub works with, and the proportion of the food hub’s total distribution that reaches those underserved communities. When this information is combined, it paints a picture of food hub impact in relation to total need, and quantifies the opportunity to expand impacts over time.

Data from the National Food Hub Survey will tell us if Hubs accept SNAP, WIC or FMNP benefits, operate a mobile market, subsidize farm shares or donate food. And the National Food Hub Survey will tell us if the hub has evidence that their activities are resulting in increased action.

However, this information does not provide a measure of the significance of food hubs, individually or collectively, in addressing food access in the communities. That would require a framing measure that suggests the size of the problem and the extent to which food hubs are able to address it currently and in the future. Ideally if we were going to measure the impact of a food hub on access to food we would not only be able to answer the question, What proportion of food going through food hubs is going to underserved communities?, but also, To what extent is the food going through food hubs addressing the healthy food needs of underserved populations? This data would be framed by the percentage of underserved communities being impacted by a food hub or food hubs collectively.

To understand the impact food hubs are having on food access to underserved communities, we need to have an understanding of the size and location of these communities. The Table 4 provides data for the states in which study hubs are located for four framing measures: 1) the percent of the population living in food deserts (food deserts are defined by the USDA as urban neighborhoods and rural towns without ready access to fresh, healthy and affordable food); 2) the percent of the population that is food insecure (defined by USDA as households that were uncertain of having, or unable to acquire, enough food to meet the needs of all their members because they had insufficient money or other resources for food); 3) the percent of the population participating in SNAP (food stamps); and 4) the value in dollars of SNAP benefits for the enrolled population.
Table 4: Food Deserts, Food Insecure Population and SNAP participation in Study Hub States

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Population that is Low-Income, Low Access (Food Desert)</th>
<th>% of Population that is food insecure</th>
<th>% of Population participated in SNAP</th>
<th>$ value of SNAP benefits for enrolled population (in billions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>5%</td>
<td>16.2%</td>
<td>10%</td>
<td>$7.1</td>
</tr>
<tr>
<td>Idaho</td>
<td>16%</td>
<td>13.7%</td>
<td>15%</td>
<td>$0.4</td>
</tr>
<tr>
<td>Kentucky</td>
<td>21%</td>
<td>16.4%</td>
<td>19%</td>
<td>$1.3</td>
</tr>
<tr>
<td>Louisiana</td>
<td>21%</td>
<td>14.1%</td>
<td>21%</td>
<td>$1.5</td>
</tr>
<tr>
<td>Michigan</td>
<td>13%</td>
<td>14.2%</td>
<td>18%</td>
<td>$3.0</td>
</tr>
<tr>
<td>North Carolina</td>
<td>10%</td>
<td>17.1%</td>
<td>10%</td>
<td>$1.4</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>10%</td>
<td>12.5%</td>
<td>14%</td>
<td>$2.8</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>7%</td>
<td>15.5%</td>
<td>16%</td>
<td>$0.29</td>
</tr>
<tr>
<td>Virginia</td>
<td>11%</td>
<td>9.1%</td>
<td>11%</td>
<td>$1.4</td>
</tr>
</tbody>
</table>

These metrics use three different definitions to identify underserved communities that food hubs could be targeting as well as the value of SNAP benefits. Because most Food Hubs do not serve an entire state it would be necessary to identify the underserved population at a smaller scale. Much of the data presented in the table above is available at the county or zip code level. This data becomes the frame in which data collected by food hubs is contextualized. For example if a food hub is collecting 2% of all SNAP benefits at area farmers’ markets we know the size and scale of their impact on one underserved community and the potential for expanded impact. Providing this kind of framing information to hubs could be a role for the Wallace Center.

**Suggested Definitions**

**Underserved Communities** – There are many different ways to define underserved communities.

The Wallace Center defines underserved communities as those in both urban and rural areas which are historically disadvantaged or excluded from mainstream networks of support. USDA defines underserved communities as those which are low income; have high incidence of a diet-related disease, including obesity, as compared to the national average; have a high rate of hunger or food insecurity; and have severe or persistent poverty. USDA identifies low-income as a census tract with a poverty rate of 20% or median annual income less than or equal to 90% of the state-wide median and low-access when a significant number of people in a census tract is far (more than 1 mile in urban areas and 10 miles in rural areas) from a grocery store.

**Food Access** – the choice to consume fresh, healthy food

**Greater** – more people have the choice to consume fresh, healthy food

**Possible Measures**

- What proportion of food going through food hubs is going to underserved communities?
Study hubs could track the proportion of their food going to food deserts by looking at their distribution by zip code/census tract. Food hubs could also measure the quantity of food being purchased with SNAP, WIC, or FMNP benefits, the quantity of food being purchased through mobile markets or subsidized farm shares, the quantity of food going to schools and retail outlets in underserved neighborhoods and the quantity being donated. Looking at these quantities against the total volume of food moving through the food hub will show the proportion of food going to underserved communities.

- **What proportion of the healthy food needs of underserved populations (in a particular geography) is being met by one or more food hubs?**
  - Data from the first measure could be combined with secondary data to develop this measure.

- **What are the baseline access patterns in underserved communities and how have these changed because of food hubs?**
  - Data on food insecurity at the zipcode level could be used to establish baselines for the geographies in which food hubs are working to increase food access.
Common Measure #3 Increased articulation and understanding of the impact of food hubs in achieving health-related outcomes

How do food hub activities contribute to improved health-related outcomes? National data indicates that food hubs participate in farmers markets and K-12 farm to school programs, which have been linked to improved health-related outcomes. Study hubs also provide nutrition education and participate in fruit and vegetable prescription programs. Key questions to explore for this measure include which specific health-related outcomes should be tracked, and how to quantify the impact of food hub activities on those outcomes.

While it has long been known that food and diet have an impact on health, at this time there are relatively few studies showing a direct correlation between increased access to healthy food and changes in health parameters. There is data available that links participation in three types of programs to improved health related outcomes: Farmers Markets; K-12 Farm to School Programs; and Fruit and Vegetable Prescription programs. These three programs were chosen as the area of focus for the measure due to this existing data. It will be important to revisit how this measure is framed as new data regarding the impact of diet on health continues to emerge.

Current Practices in Measuring Articulation and Understanding of the Impact of Food Hubs in Achieving Health-related Outcomes

Wholesome Wave, a non-profit that creates partnerships across the U.S. to increase access to fresh, locally grown food, has been able to collect data correlating improved health outcomes with access to healthy foods. The Wholesome Wave Fruit and Vegetable Prescription program, working with health centers to enroll overweight and obese children, provides free/subsidized fruits and vegetables. 2012 data from the program showed that 55% of participants reported an increase in fruit and vegetable consumption and 37.8% of child participants decreased BMI. 53% of enrolled families came to the farmers market (where prescriptions could be filled) 8 or more times during the season.

The National Food Hub Survey collects data on how much of a Food Hubs’ gross dollar sales came from Farmers’ Markets and K-12 food service. Just one study hub reported sales to K-12 school food services but five of the study hubs indicated there was opportunity for expansion into this market.

Telling the Story about Health-related Outcomes: Farm Fresh Rhode Island

Farm Fresh Rhode Island, located in Pawtucket, Rhode Island was 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. This non-profit food hub provides a wide range of programs and services to work towards their mission including aggregation and distribution of locally produced food to restaurants, retailers, hospitals and schools, CSA programs for individuals, farmers’ market support and management, food and nutrition education, local food marketing and producer support.

With their Healthy Food Healthy Families program, Farm Fresh Rhode Island provides nutrition education and other tools to help low-income families shop for and cook affordable fresh foods. The
program is available in English and Spanish at six Rhode Island farmers markets and one community
center, and provides families with free samples, games, recipes and financial incentives for continued
participation. In 2013, this program served 400 low-income families and found that 93% of participants
increased their fruit and vegetable consumption as a result of participating in the program.

Farm Fresh Rhode Island also works with a local health center and two area farmers’ markets to
implement Wholesome Wave’s Fruit and Vegetable Prescription Program, which uses clinical data to
understand the impact of fruit and vegetable incentives and nutrition counseling on patient health.

While data collected for the Fruit and Vegetable Prescription Program is aggregated and analyzed by
Wholesome Wave, Farm Fresh manages its own data collection and analysis process for Healthy Foods,
Healthy Families, seeking insight both on internal program processes and participant outcomes. Data is
used to better understand who is succeeding in the program, who isn’t, and why – all information that
informs future improvement to program design. “We use it [data] to track our own progress, to make
sure we are doing the things we say we are going to do,” says Sheri Griffin, Co-Executive Director. Last
year, the organization was contacted by a PhD student at the Harvard School of Public Health, who
offered to build a custom database for data management and analysis. This collaboration has provided
Farm Fresh with a much more robust analysis system, helping them track retention, identify people who
stay in the program, and understand what participant characteristics are associated with the health
behaviors they are striving for. The data has also helped them to develop several strategies to address
low retention rates at certain markets. This is a great example of using measurement to improve
practice.

Making Stronger Measures of Health-related Outcomes

Measuring the impact of food hubs on health-related outcomes requires us to define specific health-
related outcomes and identify which food hub activities can be associated with improvements in those
outcomes.

Obesity and diabetes are both diet-related diseases that are impacting Americans at an increasing rate.
A 2010 study of Obesity and Diabetes, the Built Environment and the ‘Local’ Food Economy found that
the percentage of farms in a county with direct sales had an inverse impact on the rate of obesity and
diabetes as did the existence of a farm to school program in the county (e.g., More direct sales or a farm
to school program = decrease in the rate of diabetes and obesity). Counties with a farm to school
program have on average a 1.09% lower obesity rate and 0.27% lower diabetes rate. The same study
found that for every additional farmers market per 1,000 people the diabetes rate decreases by 0.73%.17

The table below shows the prevalence of obesity and adults with diabetes in the study hub states (and
the country as a whole) in 1997 and 2007.
Table 5: Prevalence of Obesity and Diabetes in Study Hub States

<table>
<thead>
<tr>
<th></th>
<th>% of Population that is Obese</th>
<th>% of Adults with Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>16.5%</td>
<td>26.3%</td>
</tr>
<tr>
<td>California</td>
<td>16.0%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Idaho</td>
<td>16.3%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>21.8%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>19.6%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Michigan</td>
<td>19.3%</td>
<td>28.2%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>18.3%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>17.5%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>13.8%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Virginia</td>
<td>16.4%</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

This data shows that more than a quarter of the population in study hub states is obese and the rate of increase for both obesity and diabetes has been significant.

Suggested Definitions

Health-related outcomes – we propose starting with impacts on diabetes and obesity
Impact of food hubs – we propose proportion of food going to outlets that have been proven to impact diabetes and obesity

Possible Measures

One way to better understand the impact of food hubs in achieving health-related outcomes would be to track the proportion of food going through food hubs that is going to outlets that have been proven to positively impact health: K-12 schools; farmers markets; and fruit and vegetable prescription programs.

The National Food Hub Survey found that 35% of food hubs are selling products to K-12 schools and that these sales make up an average of 11% of their sales. 18% of food hubs are selling through farmers’ markets with those sales making up 32% of their gross sales.

- What proportion of healthy food going through food hubs is going to outlets that have been proven to positively impact health?
  - Quantity/Proportion of food going to K-12 schools
  - Quantity/Proportion of food going to farmers markets
  - Quantity/Proportion of food being distributed through Fruit and Vegetable Prescription Programs
Common Measure #4: Increased Investment by Private and Federal Sources in Food Hub Development

While there have been food hubs in the United States for more than 20 years, the country has seen a huge increase in the past five years with more than half of food hubs being in operation for five years or less. Food hubs require investment not only to get started but also for infrastructure, operations and marketing. While many food hubs have a goal to be financially sustainable (with revenue exceeding costs), investment by private and federal sources into food hubs has been and remains essential to their success. Federal funding was a primary revenue source to begin food hub operations for 22% of hubs. However, perhaps contrary to popular belief, the 2013 National Food Hub Survey found that federal government funding made up 1% of food hub revenue sources in 2012, another 1% came from foundation grants, and both state funding and private investment made up less than 1% of revenue sources. The substantial majority of revenue, 86%, came from income from services provided by the Hub. Only 17% of food hubs indicated they were highly dependent on grant funding and 32% were somewhat dependent on outside funding. It is not clear if those hubs that are highly dependent on grant funding are engaged in activities, such as nutrition education, that will never pay for themselves, or if there are other reasons for their dependency, such as being at a very early stage in their life cycle. State funding was not included in this common measure.

Understanding Investments in Food Hub Development

Understanding investments can help to answer questions such as:

- What are the options for creating viable, economically self-sufficient food hubs?
- How can funding and financing be blended most effectively?
- What are the activities of food hubs that may require (and deserve) ongoing subsidy and how can these be accounted for most effectively without undermining the profitability of the core business?

To better understand private and public investments in food hub development, the table below shows the level of private and federal investment (these are just two of many forms of investment received by food hubs in fiscal year 2012) based on the operational structure, distribution model and stage of development for each of the study hubs.

<table>
<thead>
<tr>
<th>Study Hub Name</th>
<th>Operational Structure / Prime Motivation</th>
<th>Years in Operation</th>
<th>Stage of Development</th>
<th>Federal Investment as % of total income</th>
<th>Private Investment as % of total income</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALBA</td>
<td>Non-profit</td>
<td>12</td>
<td>Developed</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Cherry Capital Foods</td>
<td>Consumer Cooperative</td>
<td>7</td>
<td>Developing</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Common Market</td>
<td>Non-profit</td>
<td>6</td>
<td>Developing</td>
<td>0%</td>
<td>19%</td>
</tr>
</tbody>
</table>
This table shows that about half of the food hubs are structured as non-profit organizations, one is a cooperative and the others are structured as for profit entities. ALBA has been in operation for 12 years while Jack and Jake’s and Firsthand Foods have been operating for less than five years. The study hubs represent all three stages of development and the stage of development corresponds to the number of years in operation.

Interestingly, approximately half the study hubs did not rely at all on federal investment in 2012 and approximately the same number did not rely on private investment. Four of the study hubs (Common Market, Firsthand Foods, Grasshoppers Distribution and Local Food Hub) received significant foundation funding, ranging from 7.5% to 19% of their overall income in fiscal year 2012). Hubs may have received public and/or private investment in previous years. Diversified sources of investment are not guarantee of success. Two of the study hubs did identify access to capital as a main barrier to growth. Since this study began, Grasshoppers Distribution has gone out of business. This sample is too small to see any meaningful patterns with respect to funding patterns over the life cycle of food hubs.

**Suggested Definitions**

**Investment** - Amount and source of dollars received by food hub to support its operations, programs, infrastructure, etc.

**Stages of development** - Start-up/nascent, Developing/emerging, Mature/developed

**Food hub development** - Food hub increased capacity

**Possible Measures**

- Sources of investment a food hub receives in relation to its years in operation and operational structure.
  - What is the age of the food hub?
  - What is the food hub’s operational structure?
  - What are the sources and relative amounts of investment?
  - What have the funds been used for?
• What are the profitable versus non-profitable aspects of food hub missions and to what extent is external subsidy really required? What is the role of internal subsidy (using business profits from those with the ability to pay to offset costs for those less able to pay)?
• Food hub self-sufficiency ratio.
  o A self-sufficiency ratio equals total earned income divided by total expense.

Discussion
This report raises more questions than it answers. The first question, perhaps, is, What value might there be to a set of common measures that help food hubs learn from one another, tell their collective as well as individual stories, and improve practice to achieve greater impacts over time? The case studies in this report illustrate the value some hubs are finding in measuring progress toward their goals and the ways in which having real information is helping them improve their practice and their impacts. However, not all hubs have the same missions or operate within comparable markets or geographies.

The second question may be, What value might there be to policy-makers and funders from a set of common measures that track the impact, and opportunities for impact, of food hubs?

Note: Measurement Capacity and Tracking Mission-Related Outcomes
Measurement can provide data that can improve the operations and resource allocation decisions of food hubs and help hubs tell their stories and attract partners. However, creating systems to collect, track, analyze, and interpret data takes some effort. The effort need not be overwhelming if measures are carefully selected to answer the most pressing questions. Several study hubs have successfully partnered with graduate level students with expertise in data collection and analysis to enhance their own measurement capacity. Another study hub that identified data collection as important for successful accomplishment and tracking of their mission has hired additional staff to focus on data collection and measurement.

Questions for the Study
• If there is value in “common measures,” are these the right ones?
• Are we actually talking about standard measures, or rather about measures that get at similar information but are customized to each hub as appropriate?
• Who will make the determination about which common measures are the right ones and how will it be made?
• What is the value to the food hub movement of stronger framing measures? Of shared definitions of key terms? Of redefining terms like “small to medium sized farmer” to better reflect the diversity of scale of farm that food hubs engage? Of framing measures that reveal the relatively small scale of many food hub activities but also the potential for increasing scale and impact, possible through new and innovative partnerships?
• What is the role of the Wallace Center in this work? Many food hubs with which we’ve worked expressed interest in knowing more about the data that is already available. This report contains some of the information, but more work could be done to help hubs identify and use data that is already being collected by others.
Questions for Individual Food Hubs

- If you had this information today, how might it matter?
- Would it stimulate investment?
- Would having this information help you to tell your story?
- Would it change what you do and who you partner with?
- Would it change your idea of the potential to scale up?
- What would you have to do differently to measure this for your food hub?
- Would you need assistance in setting up appropriate data collection protocols?
- Who would have the responsibility for data collection?

We hope this work will stimulate discussion within the food hub community about the role of measurement in building a movement, improving communications and decision-making, and achieving meaningful outcomes at scale.
Appendix A: Relevant Questions from the 2013 National Food Hub Survey

Increased economic activity and market-access for small- and mid-sized producers

How many producers/suppliers did your hub purchase or procure products from during the 2012 calendar year?

Please indicate how many of your hub's producers are small or mid-sized producers (generally-speaking, farms and ranches with gross annual sales less than $500,000).

- All of our products are purchased/procured from small and mid-sized producers
- Most of our products are purchased/procured from small and mid-sized producers
- Some of our products are purchased/procured from small and mid-sized producers
- Few of our products are purchased/procured from small and mid-sized producers
- None of our products are purchased/procured from small and mid-sized producers

Has the number of small and mid-sized producers from which you purchase or procure from increased, decreased or stayed basically the same over the life of the food hub?

- Increased
- Decreased
- Stayed basically the same

What was the approximate total value of your overall purchases from small and mid-sized producers in calendar year 2012?

Has the approximate total value of your overall purchases from small and mid-sized producers increased, decreased, or stayed the same over the life of the food hub?

- Increased
- Decreased
- Stayed basically the same
Please indicate how many of your hub's producers/suppliers have changed their enterprises in the following ways since working with your food hub:

<table>
<thead>
<tr>
<th>Service/Change</th>
<th>All producers/suppliers (1)</th>
<th>Most producers/suppliers (2)</th>
<th>Some producers/suppliers (3)</th>
<th>Few producers/suppliers (4)</th>
<th>No producers/suppliers (5)</th>
<th>Unsure (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversified their product offerings</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Adopted more sustainable production methods</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hired additional people</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Increased their financial literacy and/or business acumen</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Increased acreage</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Became GAP certified</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Extended their growing season</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Producer Services/Activities: Please select the following services or activities your hub offers to its producers.

- Actively help producers find new markets
- Marketing and promotional services for producers
- Branding or labeling products to indicate origin of product or other attributes
- Demonstration/Incubator farm
- Production and post-harvest handling training
- Business management services or guidance
- Food safety and/or GAP Training
- Liability insurance that you offer producers
- Transportation services for producers such as picking up product from the farm for distribution
- Others (please specify below) ____________________________________
Greater food access to underserved communities

Community Services/Activities: Please select the following services or activities your hub offers to the community.

- Accepting SNAP benefits
- Accepting WIC or FMNP benefits
- Matching programs for SNAP benefits
- Transportation services for consumers to access your operation
- Operating a mobile market
- Subsidized farm shares
- Food donation to local food pantries/banks
- Others (please specify below) ____________________

Do you have any evidence that food access to underserved communities has increased as a result of activities or services related to your food hub since its inception?

- Yes
- No

Please briefly describe this evidence using program name(s), pounds donated or distributed, specific geographic area served, and/or other relevant details.
**Increased articulation and understanding of the impact of food hubs in achieving health-related outcomes.**

To what extent would you say that your food hub's mission is related to improving human health in your community or region?

- [ ] Not related
- [ ] Somewhat related
- [ ] Strongly Related

Please briefly describe how you are engaged in improving human health in your community or region.

How much of your hub's total, gross dollar sales for the 2012 calendar year came from sales to the following categories of customers? (Please estimate if the exact amount is not known.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large supermarkets or supercenters</td>
<td></td>
</tr>
<tr>
<td>Corner stores, bodegas or small independent grocery stores</td>
<td></td>
</tr>
<tr>
<td>Food cooperatives</td>
<td></td>
</tr>
<tr>
<td>Buying clubs</td>
<td></td>
</tr>
<tr>
<td>On-line store</td>
<td></td>
</tr>
<tr>
<td>Your own storefront retail</td>
<td></td>
</tr>
<tr>
<td>CSA</td>
<td></td>
</tr>
<tr>
<td>Farmers markets</td>
<td></td>
</tr>
<tr>
<td>Mobile retail units</td>
<td></td>
</tr>
<tr>
<td>Restaurants, caterers or bakeries</td>
<td></td>
</tr>
<tr>
<td>Distributors</td>
<td></td>
</tr>
<tr>
<td>Food processors</td>
<td></td>
</tr>
<tr>
<td>Pre-K food service</td>
<td></td>
</tr>
<tr>
<td><strong>K - 12 school food service</strong></td>
<td></td>
</tr>
<tr>
<td>Colleges/Universities</td>
<td></td>
</tr>
<tr>
<td>Hospitals</td>
<td></td>
</tr>
<tr>
<td>Others (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

Please indicate if you perceive opportunities for expansion of your food hub's business with the following categories of customers.
<table>
<thead>
<tr>
<th></th>
<th>Many opportunities (1)</th>
<th>Some opportunities (2)</th>
<th>Few opportunities (3)</th>
<th>No opportunities (4)</th>
<th>Unsure (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large retail grocery stores</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Corner stores, bodegas or small independent grocery stores</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Convenience stores or gas stations</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Food cooperatives or buying clubs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>On-line store</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your own storefront retail</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>CSA</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Farmers markets</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Mobile retail units</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Restaurants, caterers or bakeries</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Distributors</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Food processors</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Pre-K food service</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>K - 12 school food service</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Colleges/Universities</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hospitals</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Others (please specify)</td>
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Investment by federal and private sources into food hub development

What is the legal status of your organization?

- Non-Profit
- Producer Cooperative
- Consumer Cooperative
- Producer-Consumer Cooperative
- S Corp
- C Corp
- B Corp
- LLC
- L3C
- Publicly Owned
- No Formal Legal Structure
- Other (please specify) ____________________

How were funds secured to begin the operation of your food hub? (Please select all that apply.)

- Income from other programs of the organization
- Business loans
- Federal government funding
- State government funding
- Local government funding
- Foundation grants
- In-kind support
- Donations from organizations
- Donations from individuals
- Infrastructure provided by a government entity
- Membership fees
- Bank loans
- Private investors
- Organization’s and/or founder’s own capital
- Others (please specify below) ____________________

How were your food hub operations funded during the 2012 calendar year?

- Income from services and/or operations provided by the food hub
- Renting space to other businesses
- Membership fees
- Income from other programs of the organization
- Federal government funding
- State government funding
- Local government funding
- Foundation grants
- In-kind support
____ Donations from businesses/organizations
____ Donations from individuals
____ Infrastructure provided by a government entity
____ Bank loans
____ Private investors
____ Others (please specify)

How dependent is your food hub on grant funding from public and/or private sources to carry out core food hub functions (aggregation, distribution, marketing of local food products)?

- Highly dependent – we could not carry out these core functions without considerable grant funding.
- Somewhat dependent – we could carry out these core functions without grant funding but would need to scale back certain aspects of our operation (e.g., not working with certain producers or not service a particular market/customer base)
- Not at all dependent – we do not require any grant funding to carry out these core functions.

(Optional) Please use this space to tell us more about your hub’s level of reliance on grant funding from public and/or private sources.

What are or would be the main barriers for growth? (Please select all that apply.) If possible, please try to associate an estimated cost for different elements in the space below each selection.

- Increasing warehouse/storage space
- Securing more product supply
- Increasing truck/delivery capacity
- Increase availability of processing infrastructure
- Securing capital
- Business development assistance
- Increasing staff
- Consumer education
- Other (please explain)
- No Barriers
NOTES

1 Yellow Wood Associates worked with seven of the Study Hubs (ALBA, Cherry Capital Foods, Firsthand Foods, Grasshoppers Distribution, Idaho’s Bounty, Jack and Jake’s and Local Food Hub) to implement in-person workshops with these hubs and their stakeholders to review and clarify internal and external goals and develop measures of progress towards those goals.


8 http://www.policylink.org/site/apps/nlnet/content2.aspx?c=1kIXLbMNJeR&b=5136581&ct=13399931

9 http://www.policylink.org/site/apps/nlnet/content2.aspx?c=1kIXLbMNJeR&b=5136581&ct=13399931

10 SNAP is the Supplemental Nutritional Assistance Program (formerly food stamps); WIC is a supplemental nutrition program for Women, Infants and Children; FMNP is the WIC Farmers’ Market Nutrition Program.

11 Based on ERS data by census tract. Population that is low-income and has low access to healthy food (1 mile for urban, 10 miles for rural) http://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx#.UfAkM6zHbWA


13 Calculated based on average monthly benefit per person x number of people participating x 12 months. Average monthly benefit per person by state: http://www.fns.usda.gov/pd/18SNAPavg$PP.htm

14 The UNC Gillings School of Public received money in the spring of 2013 to study public health impact of local food system. http://www2.sph.unc.edu/accelerate/linking_local_sustainable_farming_and_health_8502_9209.html

15 This program is being implemented at health centers and hospitals in seven states and the District of Columbia (CA, CT, DC, MA, ME, NM, RI, TX). http://wholesomewave.org/fvrx/


20 Diamond and Barham distinguish four different distribution models – retail-driven, non-profit-driven, producer-driven, and consumer-driven – and three different stages of development – start-up/nascent, developing/emerging, and mature/developed. (Diamond and Barham, 2012) According to LeBlanc, 2012, in the non-profit sector, start-up/nascent food hubs tend to be in the concept stage or have less than two years in operation, have limited paid staff, if any, may not have a formal office space, and some operate with an established non-profit as the fiscal agent. Developing/emerging food hubs tend to benefit from additional programs and staffing offered through a larger and more developed organization with full-time staff, office space and other assets. Developing/emerging food hubs
benefit from being able to draw on expertise within the organization, and the food hub program is typically developed as a way to further the organization's general mission or expand existing services or programs. Mature/developed food hubs show characteristics of financial stability, program stability, and a self-sustaining business model. (LeBlanc, 2012)