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Expanding Access to Local Food: Assessing the Market for the Washtenaw Food Hub's Aggregation and Distribution Services

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Survey Respondents

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Purpose and Structure

The Washtenaw Food Hub is preparing to enter the market for aggregation and distribution services in the local community. In order to understand the level of demand from large-scale consumers of produce in the Ann Arbor area, the Dow Sustainability Fellows team surveyed local restaurants, institutions, and grocery stores.

This report aims to provide external readers an overview of the collaboration between the Food Hub and the Dow Sustainability Fellows team; the methods used; and the lessons learned.

Second, and more importantly, the report seeks to provide insight for the Washtenaw Food Hub as to the demand landscape in Ann Arbor. Insights range from recommendations on specific operational matters to priority areas—for example, the best target customer group— for further consideration. This information will hopefully help guide the Food Hub's efforts when it opens for operation in early 2014.

To fulfill these aims, the report is structured as follows: 1) Introduction to the background and purpose of the collaboration and survey; 2) Methodology used to develop and collect survey results, as well as suggestions for improving survey implementation in the future; 3) Discussion of basic operations and product preferences findings; 4) Characterization and analysis of distinct buyer groups, 5) Final recommendations; 6) Concluding thoughts.

A summary of key findings can be found on the following page.

Summary of Findings

Satisfy the Buyer

Find the added value for buyers: Many restaurants in Ann Arbor are already committed to buying local and have in place a system for purchasing local foods. The Food Hub needs to add a significant additional benefit to entice buyers to switch their buying programs. Possible areas to add value include the Food Hub's role in creating a local and regional food system and offering a lower price.

Convenience is key: Offering convenience, specifically delivery and easy ordering of produce, will be essential to helping the Food Hub enter the aggregation and distribution market. These features are likely a bare minimum for potential customers, not a value-add.

Keep it flexible: The overwhelming majority of survey respondents noted that flexibility in ordering is crucial. The Food Hub must find a way to ensure flexibility in ordering, permitting buyers get produce in the amounts they need when they need it.

Find Your Impact

Look more closely at institutional buyers: Due to the small sample size, we cannot say definitively that institutional buyers are the best customers for the Food Hub. However, because institutional buyers purchase in high volumes, they have the potential to be significant, loyal customers. Moreover, institutions provide the strongest opportunity to impact the local food system. The Food Hub should engage in more research in this area, keeping in mind the benefits that institutional buyers' value and the Food Hub's ability to provide those benefits.

Fill a unique role: While farms that offer a variety of produce are more convenient for buyers, working with multiple specialty farms can be cumbersome. If the Food Hub focused a part of its efforts on aggregating and distributing the goods of specialty farms, it might be able to meet a need and thus earn buyer support while still commanding a high enough price to generate revenue and entice farmers to participate in its aggregation program.

Generate Demand

Educate the consumer: Many buyers know everything there is to know about farms—but a lot don't. Taking the time to educate buyers about what is and is not available seasonally, as well as how seasonality will affect the buyers' operations, will go a long way to increasing sales year round.

Sell the idea: Buyers may be moved to utilize the Food Hub if they feel strongly about its mission. If suppliers are not supportive of the Food Hub, buyers might be unwilling to utilize it. But if suppliers love the Food Hub, it is likely buyers will too.

Create a Washtenaw Grown Brand: A local brand—developed with farmers and community stakeholders input—that identifies food as locally grown and distributed from the Food Hub would help buyers and customers identify local products. It would provide a sense of connection to the local community, while increasing recognition of the Food Hub's name and simplifying its aggregation and distribution process.

INTRODUCTION

Over the past ten years the United States has witnessed a steady rise in consumer demand for local food. In an effort to meet this growing demand, communities across the country are increasingly turning to an aggregation and distribution model known as a food hub. The United States Department of Agriculture (USDA) defines a food hub as "a business or organization that 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."[1] A new business in Washtenaw County is working to fulfill the demand for local food through the food hub model. Founded by Richard Andres, owner of Tantrè Farm, the Washtenaw Food Hub plans to open in early 2014. In order to assist the Washtenaw Food Hub (Food Hub) in its design and decision-making before launch, an interdisciplinary team of graduate students developed and conducted a survey of local produce needs. 16 survey respondents from retail stores, restaurants and institutional buyers provided the responses used for analysis. [2]

BACKGROUND ON NATIONAL DEMAND FOR LOCAL FOOD AND FOOD HUB DEVELOPMENT

Though local food sales still account for a relatively small portion of overall food sales in the United States, market share is increasing and annual sales have surpassed 5 billion dollars. In 2013, there were 8,144 farmers markets in the United States.[3] This represents a 3.6 percent increase from 2012 and a dramatic increase from the roughly 1700 farmers markets in 1994. As of 2007, the Census of Agriculture reported more than 130,000 farms selling directing to local consumer totaling more than 1.2 billion dollars.[4]

Despite increasing sales, The USDA cites a lack of distribution systems and insufficient quantity as major obstacles to meeting the higher demand for local food.[5] As a result, communities are increasingly turning to food hubs to overcome these challenges. Sixty percent of the roughly 160 regional food hubs in the U.S. were started within the last five years. While there are numerous models that fall within the USDA food hub definition, they generally involve aggregation of local and regional food and distribution to retail, wholesale and consumers. In addition, some food hubs serve as incubators for new food businesses and may include commercial kitchen space for rent, storage for supplies, marketing assistance, and business education.

One of the major advantages of the food hubs is that they "are able to respond to changing consumer demand for innovation, quality, and variety more deftly than any single producer or any conventional

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[1] Barham, James, Debra Tropp, Kathleen Enterline, Jeff Farbman, John Fisk, and Stacia Kiraly. Regional Food Hub Resource Guide. 2012. U.S. Department of Agriculture, Agricultural Marketing Service. Washington, D.C. April.

[2] As part of the DOW Sustainability fellowship, Arielle Fleisher, Berry Kennedy, Ben Kobren, Therese Miranda-Blackney, and Liz Och designed a demand survey and then conducted a series of interviews with retail stores, restaurants and institutional buyers throughout Washtenaw County with a primary focus in Ann Arbor. For more information on the methodology, see the methodology section.

[3] National Count of Farmers Market Directory Listing Graph: 1994-2013, http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateS&leftNav=WholesaleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers%20Market%20Growth%5D

[4] USDA, The Role of Food Hubs in Local Food Markets, USDA Rural Development Service Report 73 (January 2013)

[5] *Ibid.*

retail outlet."[6] The food hub fills a void between small-scale direct sales and large-scale conventional producers with modernized and sophisticated distribution systems.

In Washtenaw County, local food production and sales are already strong. A 2013 study by the Office of Community and Economic Development finds that over $710 million is spent on local food production in Ann Arbor alone. In other words, Ann Arbor is almost 38% "self-reliant" on its own food sources.[7] The largest spending on local production by category are on grain farming ($587,000), greenhouses ($304,000), oilseed farming ($290,000) and vegetables & melons ($261,000).[8] The survey conducted for this report focuses solely on this last category, local produce consumption.

The same economic study finds that major gaps exist in the local food system, hindering local production from being even greater.[9] These gaps include some challenges that could be overcome by a local food hub and some that would likely be outside the Food Hub's scope. For example, while the Food Hub would try to create distributional infrastructure that connects farmers and consumers, provide commercial kitchen space and reduce over-emphasis on farmers' markets, it would likely have little to no ability to reduce regulatory or food safety barriers or to solve problems with access to debt, equity or other sources of capital. The purpose of this survey is to help prioritize the needs of local produce consumers and distributors in order to design Food Hub programs to be as effective as possible.

Background on the Washtenaw Food Hub

The Washtenaw Food Hub is a cooperatively organized limited liability corporation formed by successful organic growers, local food advocates, and professionals supporting the development of an environmentally and economically sustainable regional food system.

The Food Hub is set on a restored historic 16-acre farm within 3 miles of downtown Ann Arbor and will aggregate locally-grown fruits and vegetables, making them available to wholesale, retail and institutional customers in the Washtenaw County area. The property contains the basic infrastructure necessary to support Food Hub operations: a former feed store building with a front retail area, storage areas, large loading docks, and a 50-space parking area. The property also contains six free-standing storage structures, a farmhouse, limited farmland, and a pond. Additionally, the Food Hub received a $200,000 grant in 2012 that is being used to update the infrastructure including new storage and aggregation facilities and a commercial kitchen space.

The Food Hub is managed by a team that includes Richard Andres, owner of Tantrè Farm, Deb Lentz, co-owner of Tantrè Farm, Kim Bayer, writer and well-known advocate for local food in Ann Arbor and, and Maris Laporter, local community advocate and volunteer.

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[6] USDA, The Role of Food Hubs in Local Food Markets, USDA Rural Development Service Report 73 (January 2013)
[7] Shuman, Michael. "The 25% Shift: The Economic Benefits of Food Localization for Washtenaw County and Ypsilanti & The Capital Required to Realize Them." Washtenaw County Office of Community and Economic Development. June 2013.
[8] Id.
[9] Id.

Background on the Dow Sustainability Fellows Program

The Dow Chemical Company established the Dow Sustainability Fellows Program at the University of Michigan to support full-time graduate students and postdoctoral scholars who are committed to finding interdisciplinary, actionable, and meaningful sustainability solutions on local-to-global scales. The program aspires to prepare future sustainability leaders to make a positive difference in organizations worldwide.[10]

The Masters and Professional degree program provides 40 students per year with a $20,000 stipend for educational expenses. Each fellow participates in collaborative engagement activities and a substantial interdisciplinary team project. Co-curricular programming consists of monthly seminars and workshops involving a diverse array of sustainability practitioners in addition to other activities.

The program culminates with a sustainability project. Interdisciplinary teams (4-6 fellows each) draft persuasive white papers that develop comprehensive stances or analyses of options on a particular sustainability challenge of the team's choosing. The demand market analysis outlined in this paper satisfies the fellowship sustainability project.

Methodology

The methodology for this survey consisted of four stages:

1. Project scoping and stakeholder interviews
2. Comprehensive literature review of food hub feasibility studies and surveys
3. Development and implementation of a survey administered either in person or online to ascertain potential demand for the Food Hub's aggregation and distribution services and to identify the extent of opportunities and challenges for the Food Hub
4. A comprehensive review of market and trends data for local food in Michigan

In order to stay organized and progress diligently through the research, the team developed the following workplan.

TABLE 1: WORKPLAN

Task		Due Date
Background Research	Other food hubs; context for local food in Washtenaw County	*Ongoing Fall 2013*

[10] Dow Sustainability Fellowship Website http://sustainability.umich.edu/education/dow/masters-professional

Survey Database	Identify and collect contact information for: • Institutional Buyers • Retail Food Services • Retailers Determine interview type Assign interview s	*September 2013*
Survey Development	Develop and revise survey	*September 2013*
Survey Implementation	Implementation	*October 1- November 30*
Survey Analysis	Analyze and Synthesize Results	*December 2013*
Final Report		*December 2013*

Project Scoping and Stakeholder Interviews

The study team held a series of scoping sessions with Food Hub co-founders Kim Bayer and Richard Andres for the purpose of a) understanding Food Hub operations and b) understanding Food Hub information needs. The scoping process included a visit to the site and several iterations of project proposals to refine the scope and prioritize objectives. The project was designed to be complementary to a simultaneous study of food supply completed by a second Dow Fellows team. The two projects together will give an end-to-end picture of food production and consumption in Washtenaw County and how the Food Hub can facilitate the local market.

Literature Review: Food Hub Studies and Local Food Context

In order to develop a comprehensive demand survey that included questions about topics relevant to the Washtenaw Food Hub, the Dow Fellows team collected and examined food hub feasibility studies from across the United States. The team also interviewed two food hub experts to better understand the food hub landscape (See Table 2 for a full list of this research).

To put the results of the survey in context, the team primarily relied on information and analyses from the "The 25% Shift: The Economic Benefits of Food Localization for Washtenaw County and Ypsilanti & The Capital Required to Realize Them" study produced by the Washtenaw County Office of Community and Economic Development.[11]

TABLE 2: FOOD HUB RESEARCH

Study / Survey	Location
Common Market Study	Philadelphia, Pennsylvania
Grand Traverse Regional Market Feasibility Study	Grand Traverse County, Michigan
Building Successful Food Hubs: A Business Planning Guide for Aggregating and Processing Local Food in Illinois	Illinois, statewide (Illinois Department of Commerce and Economic Opportunity)
Southern Wisconsin Food Hub Feasibility Study	Dane County Planning and Development Department

[11] See supra note 7.

Hope Collaborative Food Survey	Oakland, California
Southern Wisconsin Food Hub Buyer Survey	Wisconsin
Central Minnesota Food Hub Buyer Survey	Minnesota
Interview	
Gregory Heller, Consultant, Econsult Solution, and Project Lead for the Baltimore Food Hub	Baltimore, Maryland
Sabrina Wu, Project Director, Hope Collaborative	Oakland, California

SURVEY DEVELOPMENT AND IMPLEMENTATION

The Washtenaw Food Hub demand survey was modeled off the buyer survey of the HOPE Collaborative, a community collaborative working towards policy and systems change in Oakland, CA, the Southern Wisconsin Food Hub Buyer Survey and the Central Minnesota Food Hub Buyer Survey. The survey was reviewed by Lesli Hoey, Assistant Professor, Urban and Regional Planning, Taubman College of Architecture and Urban Planning, University of Michigan, and Kim Bayer and Daniel Vernia, both of whom are on the Washtenaw Food Hub Board.

Prospective buyers for the Food Hub were identified and categorized by the following types: 1) institutional buyers, 2) retail food service, and 3) retailers. The institutional buyers' category was subdivided into schools and universities, hospitals, and government institutions, and the retailers' category into food co-ops, local grocery stores and small, medium and large markets. The same survey was used for each category. Prospective buyers were sent an email that included a link to the survey or the option to conduct the interview in person. Interview teams were comprised of 1-2 researchers; if two researchers conducted the in person interviews, one researcher was responsible for note-taking and the other for conducting the interview. Interviews were conducted either in-person or online between October 28, 2013 and November 17, 2013.

The survey was designed to ascertain the following information from buyers in the Ann Arbor area:

- Descriptions of local food buying program, if existent
- Purchasing processes, including factors involved in purchasing decisions such as safety concerns, choosing suppliers, and the mechanics of ordering and product delivery
- Local products used and/or interested in using, including quality and packaging requirements
- Barriers to purchasing locally produced foods
- Interest in and expectations for local food hub

A copy of the survey and its supporting documents can be found in Appendix A: Survey.

SURVEY IMPLEMENTATION

The purpose of this section is to provide an overview of survey implementation and to evaluate how implementation may impact the responses received and conclusions. It includes a) survey response rate b) nature of the respondents and c) study limitations.

Response Rate

Of the 44 businesses or organizations targeted to complete the Food Hub demand survey, 16 completed the survey between October 28 and November 10, 2013. The 36% response rate was lower than anticipated given the demonstrated interest in local food systems in Washtenaw County. There are several possible reasons for non-response. First, a large percentage of the targeted population works in fast-moving, busy organizations with little time for extra tasks. Second, some of the people who did not respond seemed uncertain about how the survey would benefit them. Lastly, some targets working for large institutional buyers lacked appropriate permission to participate.

Nature of Respondents

The majority of survey targets were known supporters or users of local produce. Table 3 shows the distribution of respondents between retail, restaurants and institutional buyers.

TABLE 3: SURVEY RESPONDENTS[12]

Type	# of respondents
Grocery - independent full line store	2
Grocery - corner store	3
Restaurant – group	2
Restaurant – independent	8
Institution - K-12 schools	2
Institution - other academic	1

The Dow Fellows team learned several key lessons from the implementation process that may be useful for any follow-up surveys done with or by the Food Hub:

- Include buyers who do not currently purchase locally. Understanding barriers to local produce purchasing, as well as the lack of motivation to buy locally, are both potentially important.
- Make the purpose of survey and possible benefits gained more clear to survey respondents in order to increase willingness to participate.
- Be introduced to target respondents and ask them to recommend additional people who should be interviewed.

[12] Includes two buyers who checked multiple boxes (Revive/ Refresh: corner store and independent restaurant; and Ypsilanti Food Cooperative, Grocery - independent full line store, Grocery - corner store) and the independent restaurant category includes two food carts. Both K-12 Institutions and the other academic institutions are self-operating.

Limitations

The sample size for surveys is relatively small and not large enough to draw statistically significant inferences. Inaccurate assumptions may result from treating survey results as indicative of the opinions or practices of all potential local produce purchasers in Washtenaw County. Rather, responses can be viewed as an informative sample from which to gain insight into some key interests and concerns regarding local produce purchasing.

In addition, it is possible that those who took the time to fill out the survey were more likely to support the Food Hub or, more generally, to support local food. At the same time it is possible that those who already support the Food Hub did not take the survey because they felt that those running the Food Hub already know they are supporters of their work, resulting in some selection biases in the survey sample.

Nonetheless, there is value to the results and the team is confident that the results, in combination with the robust literature review, highlight important themes for the Food Hub to consider as well as questions to explore as part of next steps.

Discussion of Findings

The section highlights key results from the demand survey and identifies potential implications. It is organized into a) current operations b) product preferences and c) perceived value of a food hub.

Operations

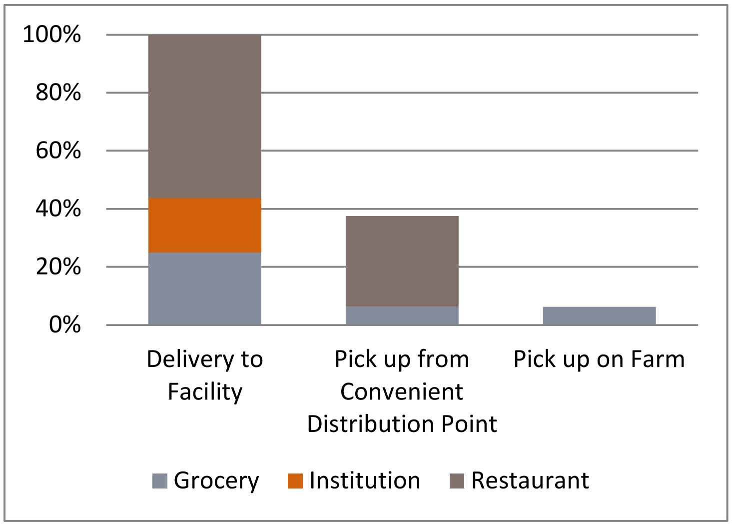
Purchasing Process

Buyers of all kinds expect a high level of convenience in the ordering process. The overwhelming majority of respondents prefer delivery to their location (see Figure 1). One restaurant respondent, who said that “not in a million years” would he purchase produce that isn’t delivered, represents the overall sentiment about the extreme importance of to-the-door delivery.

> *“If [the Food Hub] were set up like an online farmers market, with a list of items available and the price and pack, that would be convenient. E-mailing, calling in or placing online orders are all necessary.”*

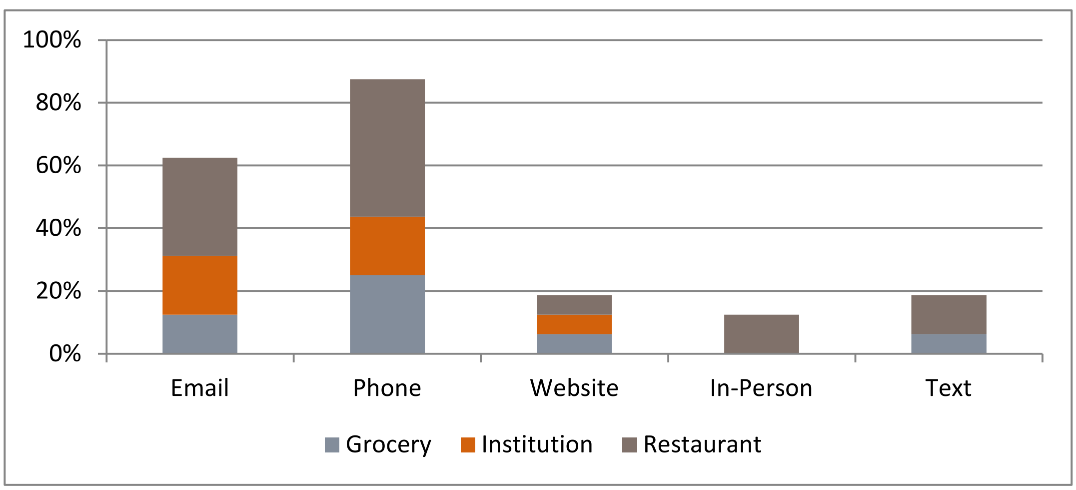
> *“[Our] [c]urrent vendor takes returns and gives credit for future purchases when food does not meet standards or specifications. [The] [f]ood hub would also have to be willing to do this.”*

FIGURE 1: PREFERRED LOCAL PRODUCE DISTRIBUTION METHODS



Respondents want the ability to order via multiple methods, with an emphasis on phone and e-mail (see Figure 2), with the exception of the institutional respondents who all stated that they currently order online and would like to continue to do (though one was open to using the phone). Even small players order multiple times a week.

FIGURE 2: ORDERING METHOD PREFERENCES



Current Suppliers

The majority of respondents purchase produce from only 1-5 vendors. Respondents explained that every additional vendor and distinct ordering process takes up time and energy. This is potentially both positive and negative for the Food Hub. For buyers purchasing from individual local farms, the Food Hub may be able to make purchasing easier. However for buyers already purchasing through distributors, the Food Hub will need to offer added benefits that incentivize buyers to take on another supplier.

On the other hand, most buyers did indicate a willingness to work with local produce suppliers both seasonally and year-round. Only grocery stores, 75% of which said they work only with year-round suppliers, seem to favor year-round supplier relationships.

Figure 3 is a visual representation that shows where survey respondents are currently sourcing their local produce. The size of the name of each supplier is proportional to the frequency with which that supplier was mentioned. As can be seen, the two suppliers used by the largest number of survey respondents are Goetz Family Farm and Frog Holler. Goetz Family Farm is a large farm that offers a CSA, sells directly to restaurants and works multiple farmers' markets in Michigan and northern Ohio. Frog Holler is both a farm and a distributor, started by the same family that owns the local independent grocery, the Produce Station. Frog Holler buys much of its produce from Eastern Market in Detroit.

FIGURE 3: CURRENT SUPPLIERS

Based on the information gathered about ordering processes and supplier choices, we believe that at a minimum the Food Hub must:

- Offer delivery service, preferably daily, but at least 2-3 times a week
- Receive orders daily via phone and e-mail

Ideally, the Food Hub should also:

- Offer 24-48 hour turnaround time between order and delivery
- Provide convenient means of knowing what produce is currently available and in what quantities
- Make a special effort to reach out to large current local suppliers and distributors to explore opportunities for partnerships

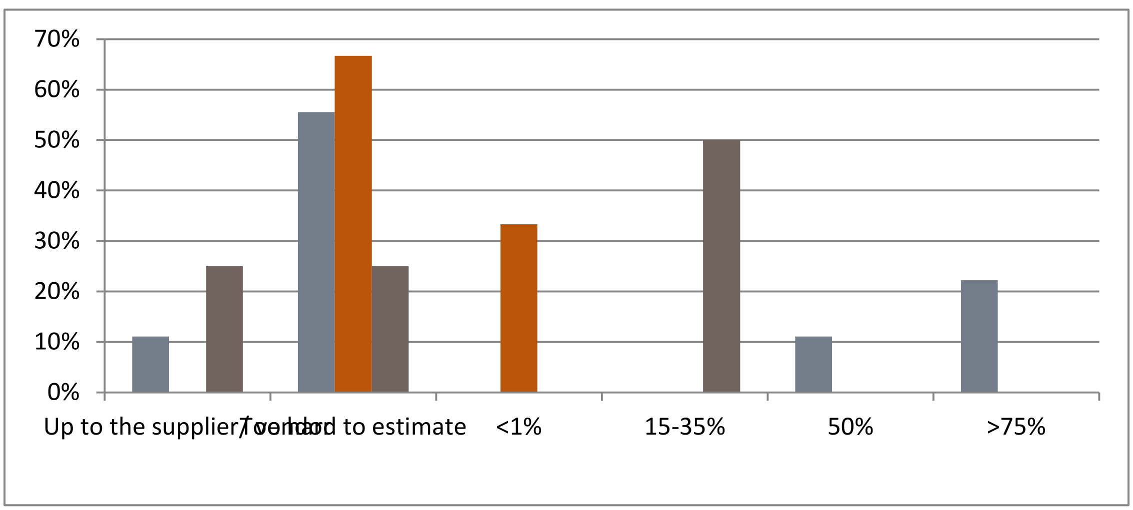
Product Preferences

Local Products

The analysis of desired attributes in local produce is based both on current (actual) purchasing behaviors as well as stated preferences for how respondents would like to purchase in the future. Overall, both current behaviors and stated preferences indicate that, like in the ordering process, buyers prioritize convenience and price over other attributes.

Many buyers found it difficult to estimate the proportion of local produce purchased by their business or organization. Others leave the decision to purchase locally or not up to the distributor they buy the food from. Although the results indicate a relatively small percentage of local produce sourcing, they do not necessarily reflect a lack desire to purchase more locally. See Figure 4 for the percentage of each type of respondent that currently purchase different levels of local produce. Importantly, suppliers who claim they purchase local produce may not be purchasing locally by others' standards. Wide heterogeneity exists in what is perceived as "local" by different buyers, as shown in Figure 5.

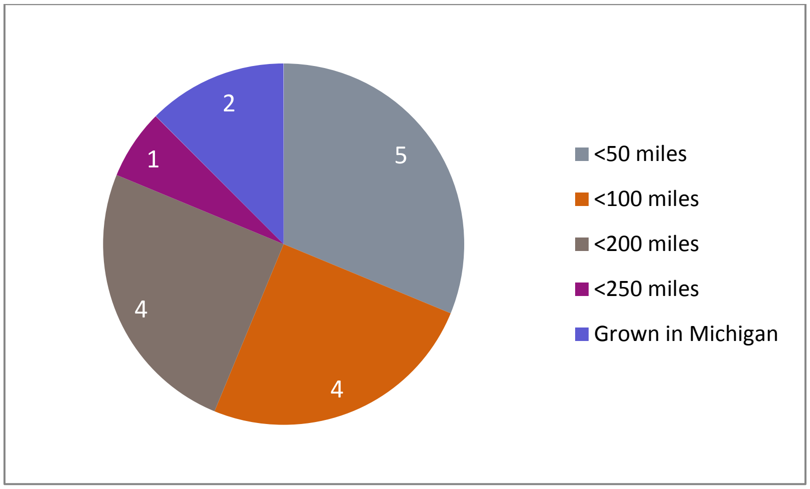
FIGURE 4: LEVELS OF LOCAL PRODUCE PURCHASING



"I love building relationships with local farmers. If you talk to the farmers and buy in season, it's not any more expensive than buying through a distributor and often it can even be cheaper."

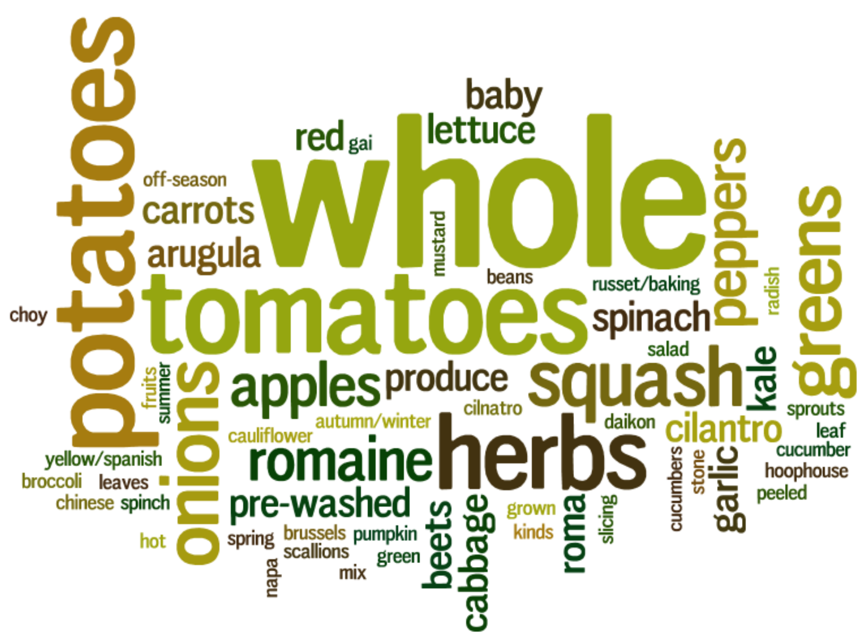
"Our local program is the heart and soul of our business."

FIGURE 5: DEFINITION OF LOCAL



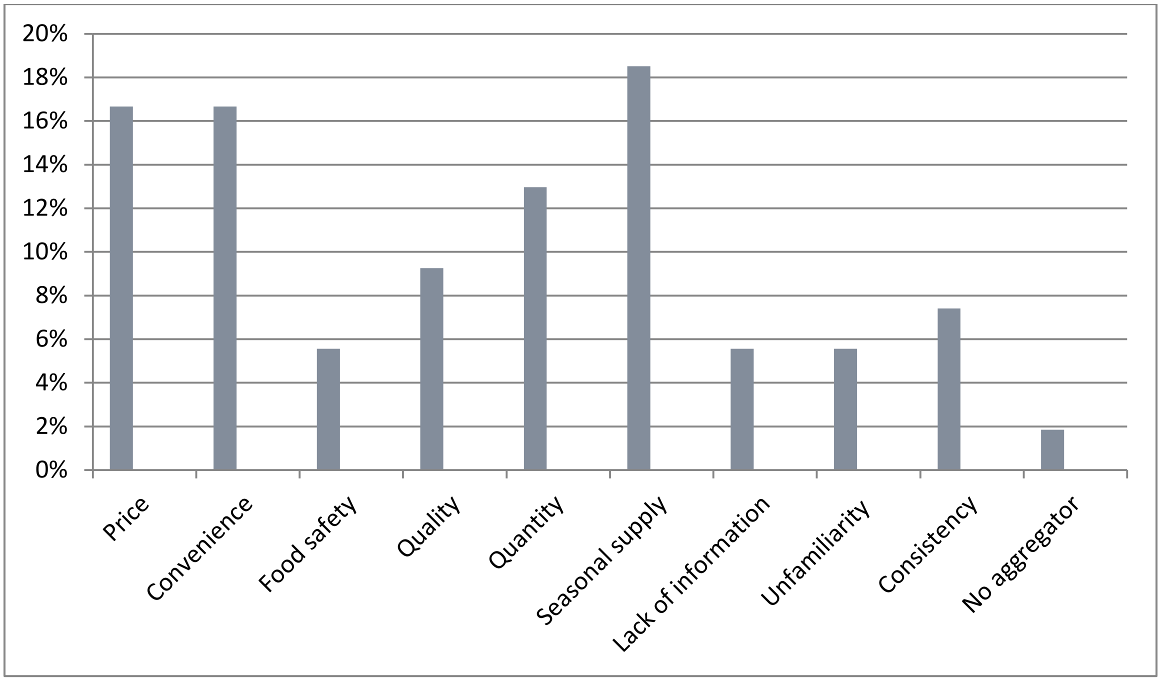
The types of produce that respondents purchase or want to purchase locally are represented visually in Figure 6. However it is difficult to draw conclusions about what customers would buy if more variety of local produce were introduced because answers are most likely based on current perceptions of what is grown, or feasible to grow, locally.

FIGURE 6: DESIRED TYPES OF LOCAL PRODUCE



There are multiple barriers to purchasing local produce that may explain part of the current levels of local produce purchasing. The most often mentioned barrier was seasonal supply, followed by price, convenience and quantity. The majority of institutional respondents were also concerned about produce size and quality consistency. See Figure 7 for perceived barriers to purchasing local produce.

FIGURE 7: PERCEIVED BARRIERS TO PURCHASING LOCAL PRODUCE



Barriers to local purchasing can be seen to indirectly imply desired attributes in local produce—e.g. competitive price. In addition, the Dow Fellows team asked several questions that reflect a broader range of valued food characteristics. For example, when asked how important it was to know the farm the produce came from, 75% of respondents did not think that transparency was necessary.

Other Product Attributes

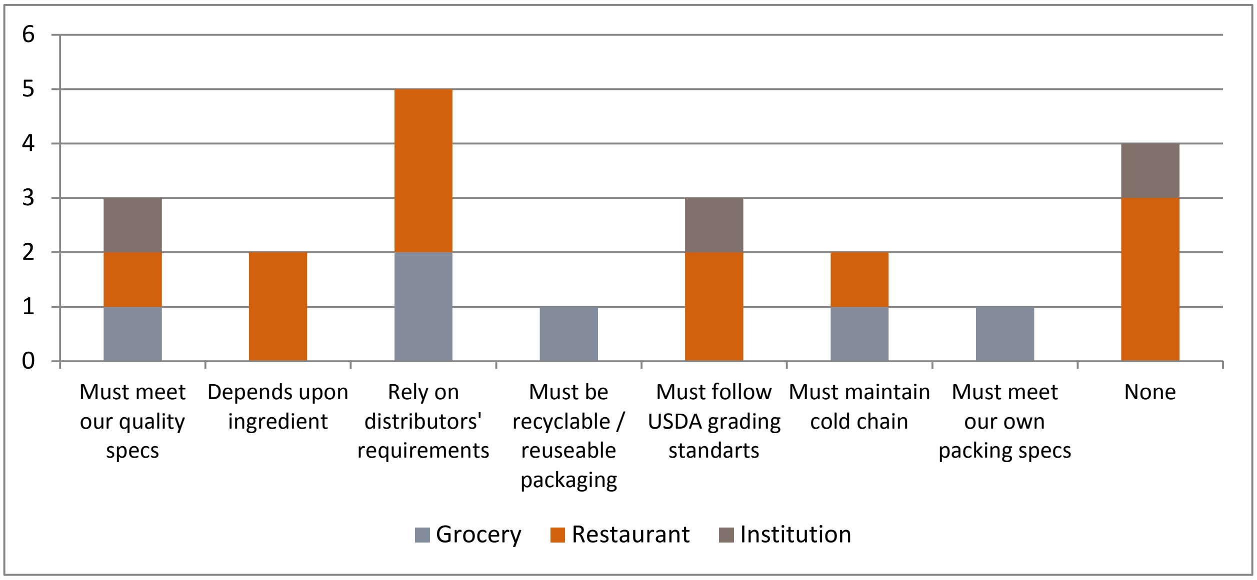
Organic: Almost one-third of respondents, or 5 out of 16, do not focus on organic or leave the decision about organic up to their supplier. Because a large proportion of those that do purchase organic produce are unable to estimate what percentage organic they buy, the survey gives little clear information about the importance of organic certifications. It could be argued that not knowing the percent sourced organically is an indication of caring about organic, but it is more likely due to lack of tracking about what is being purchased.

Pre-Cut: In contrast to the ambiguity about the importance of organic, it is clear that purchasing pre-cut produce is not a priority for business or institutional customers. Reasons given for not purchasing pre-cut produce include reduce shelf life and lack of control over how the produce is cut.

Packaging

The survey results did not signal any one packaging feature that purchasers would prefer. Half of the restaurants surveyed either rely on distributer's requirements or have no preference for packaging features for their produce. Grocery stores generally were more likely to have specific packaging requirements, and the Food Hub should consider discussing specific packaging needs with potential customers. See Figure 8 for survey results regarding packaging.

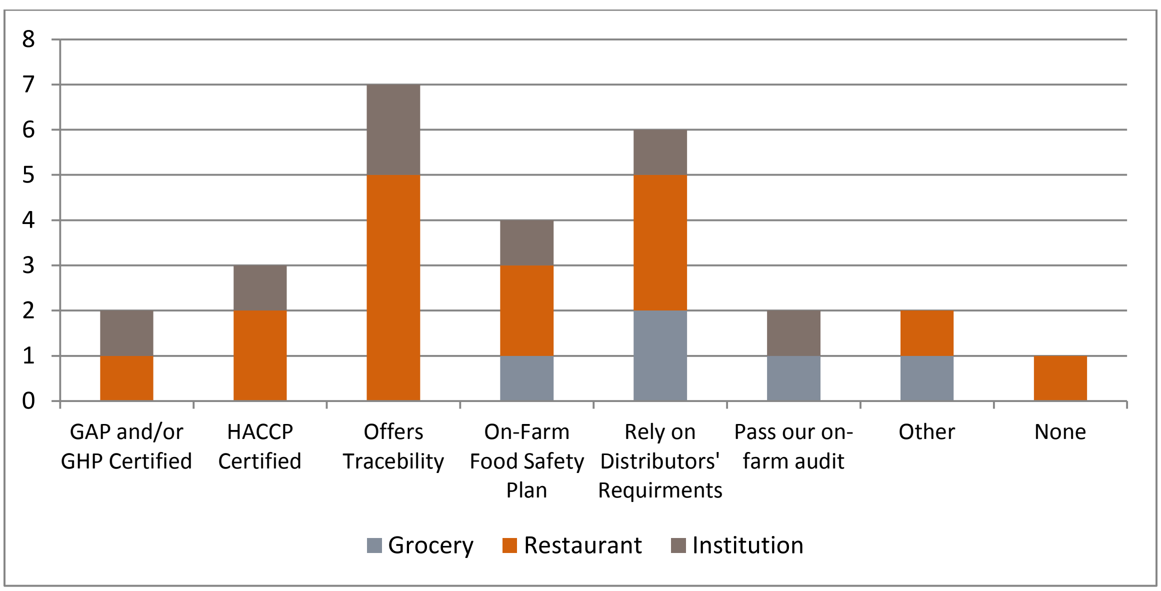
FIGURE 8: PACKAGING FEATURES



Certifications

The survey results similarly did not produce a clear consensus on the certifications preferred by potential purchasers. The data collected is represented in Figure 9, but the Dow Fellows team recommends that the Food Hub follow up with purchasers regarding certifications.

FIGURE 9: CERTIFICATIONS



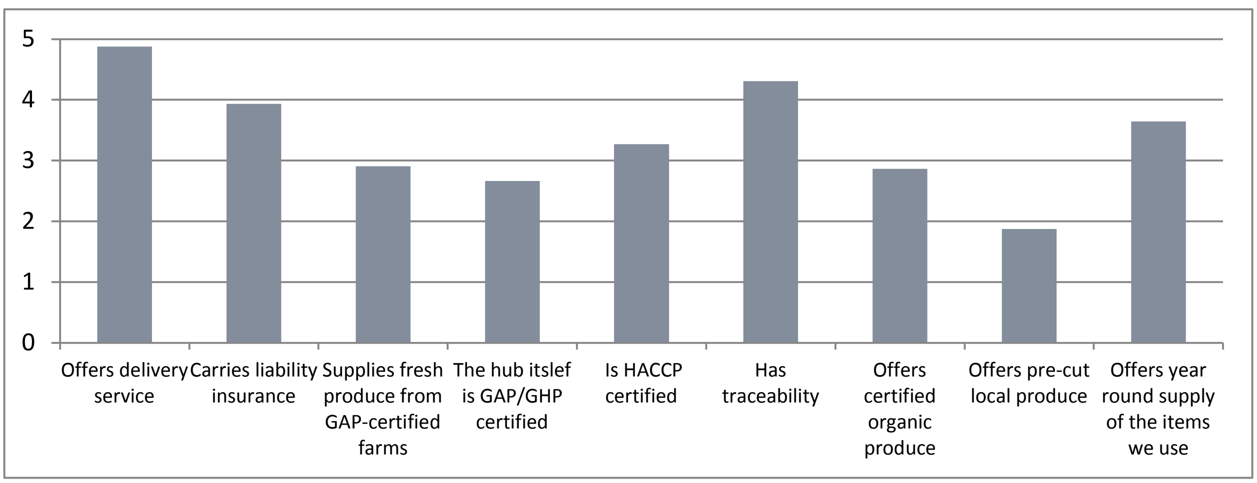
Product Ordering Preferences

Purchase Size and Frequency: Finally, weekly purchase size varied widely, with all but three respondents saying that purchases fell somewhere between $100 and $10,000 a week. However, because 7 out of 16 respondents replied that quantity is a barrier to local produce purchasing, it may be the case that there is greater demand for large weekly volumes than reflected by the distribution of current orders. It is important to note that total weekly purchase size does not reflect average purchase size. All grocery respondents order daily and all restaurant respondents order multiple times per week. This means that the actual per-order size is much smaller than the weekly average, increasing time and complexity of packing and delivery. The only exceptions to frequent ordering are institutions, which order larger volumes on a weekly or monthly basis.

Purchasing Flexibility: Regardless of purchase size or frequency, purchasing flexibility is considered crucial. Over 75% of respondents consider it extremely important. However, different respondents indicated varying definitions of flexibility. Some emphasized ability to order any amount, without a minimum or maximum. Others wanted the ability to order or change orders last minute. Smaller businesses wanted to be able to purchase very small quantities at a time to reduce storage requirements.

A summary of perceived importance of various food hub practices or desired produce attributes is captured in Figure 8. Respondents were asked to rate the importance of each feature on a scale of 1 to 5, with 1 being least important and 5 being most important.

FIGURE 10: IMPORTANCE OF FEATURES



In most cases, the importance ratings reflected values expressed in other parts of the survey. For example, the most important feature, “offers delivery service,” is consistent with the large number of people who stated that they prefer delivery.

Interestingly, however, some statements of importance did not match either current practices or stated preferences from other questions. For example, while most buyers did not consider it important to be able to tie produce purchased to the farm it came from, traceability was one of the features considered most important by respondents. This could be due to a definition of traceability at the point of arrival to the Food Hub, rather than at time of delivery, but it is a question worth further exploration.

Similarly, although none of the respondents expressed a desire to purchase pre-cut produce, some did give offering pre-cut produce a moderate importance rating. Discrepancies like this one may reflect the difference between respondents answering for themselves and respondents answering with what their perceptions of what would be generally desirable to the market.

The results have several implications about motivations for and barriers to purchasing local produce.

- Buying locally is not the most important criteria for many produce purchasers. Although local is a positive benefit, few purchasers seem willing to trade off other attributes in order to purchase more produce locally. The same seems to hold true for purchasing organic produce.
- There is little interest from restaurants and institutional buyers in purchasing pre-cut produce. This may not hold true at the retail level, and pre-cut produce for retail sale is something to look into in the future.
- Purchasing decisions often come down to price and convenience. Even barriers stated under different names, such as quantity or seasonality, are, at their core, issues of convenience. The Food Hub must make purchasing easy, enjoyable and affordable.
- A key part of convenience is flexibility. Flexibility—in purchase size, frequency, delivery options, ordering options—are all very important to food businesses.
- There is a wide range in the size of purchasers, as well in the definitions of local they use.

VALUE OF A FOOD HUB

Overall, respondents indicated that they believe a Food Hub would add a high level of value to Washtenaw County (See Figure 11). However, less than half of the respondents were either very or extremely interested in working with a Food Hub (See Figure 12), and less than half says they are likely or very likely to influence their distributors to purchase through the Food Hub (See Figure 13).

FIGURE 11: PERCEIVED VALUE OF WORKING WITH FOOD HUB

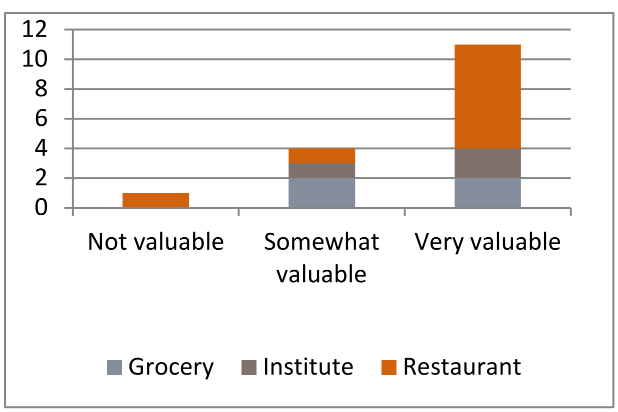


FIGURE 12: INTEREST IN WORKING WITH FOOD HUB

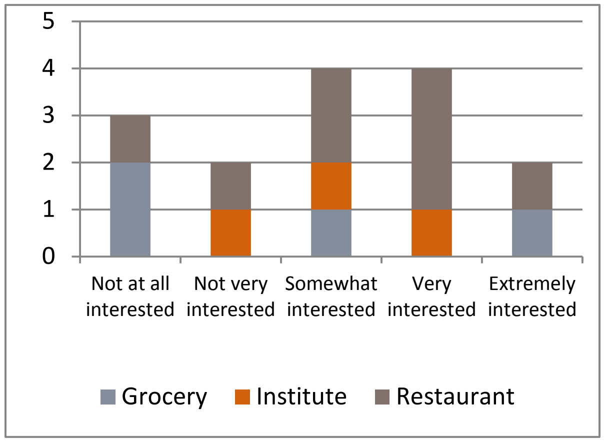
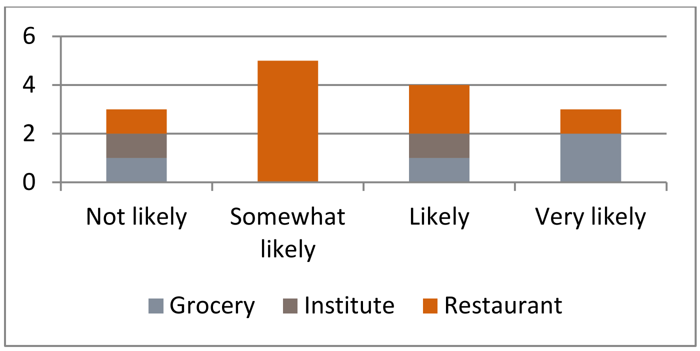


FIGURE 13: LIKELIHOOD OF PURCHASING FROM OR INFLUENCING SUPPLIERS TO PURCHASE FROM FOOD HUB



The discrepancy between perceived Food Hub value and likelihood of working with the Food Hub may be caused by several factors. First, respondents may have felt reluctant to make any sort of commitment, even in an anonymous survey. Second, many of the businesses and organizations surveyed already have systems for procuring local produce that they are satisfied with and longstanding relationships with suppliers and distributors. Thus, they could see value in the Food Hub for bringing other businesses that do not currently purchase locally into the local food ecosystem. It will be important for the Food Hub to create a strategy that expands access to local food buyers and adds value to business already purchasing local food rather than just facilitating local food purchasing for buyers that already exist.

Implications for Choosing a Target Customer Group

This section aggregates the findings from the previous section by customer type—restaurant, retail or institution—and examines how trends across these types may influence the customer group the Food Hub could prioritize. Table 4 presents an overview of buying habit trends and it is followed by a discussion of the potential implications of these trends for the operations of the Food Hub.

TABLE 4: CUSTOMER CHARACTERISTICS

	Grocery	Restaurant	Institution
Ordering process	No clear trends	Order multiple times a week; email and phone common	Online ordering is common
Perceived barriers to local food	Convenience; quality; seasonal supply	Price; seasonal supply; convenience; quantity	Price; quantity; seasonal supply; consistency of produce size and taste
# of Produce Suppliers (Range / Median)	1-100 / 10.5	1-15 / 4	3-4 / 3
Weekly Produce Order	Independent full line: $1-5k Produce specialist: $10-50k	Ranges from $1-10k	N/A

The needs for the three customer groups (grocery, restaurant, and institution) are distinct, meaning that the Food Hub will likely experience the most success with its aggregation and distribution services if it selects a single group to focus on, at least initially. This recommendation aligns with best practices for launching a new product or service: companies that focus on meeting the needs of a single segment very well rather than pursuing a mass market approach tend to be more successful because they are able to provide a tangible and differentiated benefit to their customers. As the Food Hub moves forward, key questions to consider before choosing a segment include:

- What type of ordering infrastructure can the Food Hub realistically set up and maintain?
- Is the Food Hub better positioned to fill many small orders or a few large orders?
- How much will the supply of produce fluctuate with the seasons?
- Can the Food Hub sell at a lower price than existing players in the market?

Scenario Analysis

This section paints a picture of what the Food Hub might look like based on which customer group is selected as the primary target.

Grocery stores: If the Food Hub chooses to serve grocery stores, there will be a few large buyers of produce in the local area. It will be important for the Food Hub to be able to offer the same level of convenience as other major suppliers. The quality of produce is extremely important and grocery buyers worry about seasonality of supply because an inability to supply off-season produce means shoppers may choose to take their business to another store. Lastly, the price that produce from the Food Hub can command is expected to be lower because grocery stores operate at lower margins and price-points than other potential buyers.

Institutions: If the Food Hub chooses to serve institutions, volume and consistency of supply will be the most important features. In addition, the Food Hub will likely need to offer online ordering because the majority of institutions are used to ordering via that form of interface and are unlikely to change their habits in order to work with the Food Hub. Again, orders will likely be large and from a few key customers, which can potentially create risk if one of the institutions changes their sourcing policy unexpectedly. However, many institutions in the Washtenaw area are looking to increase local purchasing and they can provide a steady volume of purchases that fluctuate in a predictable pattern. Again, cost will be a significant challenge: creating value and minimizing costs are important components of institutions operating practices and the Food Hub will need to understand how to overcome these hurdles if it chooses to move forward with institutional buyers.

Restaurants: If the Food Hub chooses to focus primarily on restaurants, it will serve many customers in smaller volume orders. Quality will be important, but variations in taste and shape may be more acceptable because many chefs are willing to work with some variation in order to source high-quality produce from local farms. However, many of the restaurants surveyed already have strong local purchasing relationships with local farmers. Therefore, marketing strategies and relationships will be highly important in this market. The Food Hub may want to consider partnering with a distributor who is already well-established in the community such as Frog Holler.

FINAL RECOMMENDATIONS

The Washtenaw Food Hub has the potential to the make a major shift in the way food is distributed and aggregated in Washtenaw County. Moreover, the Food Hub has the potential to be a major contributor to the conversation happening in the County and around the country about the significance of local and regional food as an economic driver.

The survey results and conversations the Dow Fellows team had with potential buyers provide us with confidence that the Food Hub will be a strong, important addition to the food landscape in the County. At the same time, the analysis and conversations also revealed certain conditions that could be impediments to the Food Hub's success if not meaningfully addressed. To that end, the team compiled a list of eight recommendations for the Washtenaw Food Hub that we feel are integral to its success.

SATISFY THE BUYERS:

FIND THE ADDED VALUE FOR BUYERS

Many restaurants and retail organizations in Ann Arbor are already committed to buying local. While some restaurants source a few ingredients locally, others are creating their menus specific to local food offerings. While this suggests there is a great demand for local food, it also points to the fact that these restaurants already have in place a system for purchasing local foods. The majority of buyers surveyed receive harvest lists from farms and use either email or text message to place their orders, which they then pick up at the farmers market or have delivered to their restaurant. The current system provides ease, convenience, and relationship building. A key piece of this process is the relationships many of these restaurants have with farms. Whether it's a desire to support a newer farm or a longstanding friendship with a farmer, these relationships matter and are factored into the buyers buying decisions. How then does the Food Hub penetrate this already developed system? What would make a buyer purchase from the Hub instead of the farmer directly?

The Food Hub needs to add a significant benefit to entice buyers to switch their buying programs. Below are two options the Food Hub should consider to make purchasing more appealing than the current system:

- **Price**: Buyers are buying retail price at the farmers market and might be willing to shift if they could purchase goods for wholesale prices through the Food Hub. In time, the business relationship will likely shift from a focus on price to trust and simplicity. But during the beginning stages, competitive pricing is key.
- **Local story**: Buyers care about local food—it tastes better, their customers want it—and might be willing to utilize the services of the Food Hub if they understand the Food Hub's role within the local food system and if the Food Hub has the support of key stakeholders in the Washtenaw area. The Food Hub should take the time and spend the resources to educate and inform the community about its story.

Convenience is key

Survey results indicate that while buyers are not interested in pre-cut fruits and vegetables, convenience in the form of delivery and easy ordering matters. While it would be ideal if the Food Hub could offer an online ordering system, at a minimum, it should offer ordering via email and phone. In addition, buyers enjoy the convenience of being able to either pick up their produce order at the farmers market or have it delivered directly to them. At the very least the Food Hub needs to match the current system i.e. make order pick-up available for those who choose this method and deliver orders for those who prefer delivery and/or are less eager to travel to the Food Hub to gather their order.

Keep it flexible

Of the buyers we surveyed, the overwhelming majority noted that flexibility in ordering is crucial. It is not surprising then these buyers also tend towards daily ordering. As one survey respondent noted, bringing in exactly what is needed keeps the produce fresh, lowers waste, and, perhaps, most importantly, is economically advantageous. The Food Hub must find a way to ensure flexibility in ordering, permitting buyers get produce in the amounts they need when they need it.

The desire among buyers to "make changes on the fly," as one respondent noted, made them reluctant to participate in pre-season crop planning. They saw value in the idea, but were apprehensive to participate if it meant that they were beholden to what they thought they needed. When thinking of how they are going to coordinate produce availability, the Food Hub should remember that buyers need and want flexibility.

FIND YOUR IMPACT

Look more closely at institutional purchasing

Due to the small sample size, we cannot say definitively that institutional buyers are the best customers for the Food Hub. However, higher volume customers have the potential to be significant customers for the Food Hub. The orders of high-end restaurants are small, though not insignificant, but they are not enough all by themselves to necessarily warrant the large undertaking of aggregation and distribution of produce by the Food Hub. The fact that the City of Ann Arbor is about to pass a local food procurement ordinance and the University of Michigan has committed to sourcing 20% of its food locally by 2025—and has a vocal, growing student body clamoring for local food—is suggestive of the potential market opportunity provided by institutions and provides a compelling reason for the Food Hub to engage in more research in his area.

Moreover, a primary aim of the Food Hub is to support sustainable farming and make an impact in the local food system. Institutions provide the strongest opportunity to do this. Given the enormous scale of their budgets, institutions are uniquely positioned to use purchasing power to address the shortcoming of the food system.[13] Whereas consumer behavior is fragmented, institutions have the potential to be long term, steady and loyal customers for producers of sustainable foods.[14] Knowing that there is an institutional demand to be met, farmers have an incentive to adjust their practices and potentially scale up their operations.[15] In such a scenario, the Food Hub would play an integral role as the middleman. Even if farms did not scale up, the Food Hub's potential role as aggregator means that it could provide institutions with higher volumes of produce aggregated from many farms, thus allowing small and medium farms to penetrate this market without having to grow or change their practices. However, for either scenario to work, the Food Hub would have to institute numerous food safety requirements.

Fill a unique role

When asked which farms they typically source from, buyers mentioned farms that sell a variety of produce, which is more convenient and time-efficient. Few, however, mentioned specialty farms that might focus on certain fruits or vegetables such as apples or blueberries or nuts. This is likely because even if these farms offer desired products, working with multiple specialty farms can be cumbersome for buyers, and thus they might avoid or not prioritize purchasing from these farms. If the Food Hub focused a part of its efforts on aggregating and distributing the goods of specialty farms, it might be able to meet a specific need while also earning supplier support.

GENERATE DEMAND

Educate the buyer

Many buyers know everything there is to know about farms—but a lot don't. While buyers marked seasonality as a barrier to purchasing from the Food Hub, it is possible that buyers do not know what produce is in fact available in a particular month and stop buying based on this assumption. Plenty of produce is still available come the wintertime and the better informed buyer is a better buyer.

[13] Sonnino, Roberta, and Susannah McWilliam. "Food Waste, Catering Practices and Public Procurement." *Food Policy* 36.6 (2011): 823.

[14] Friedmann, Harriet. "Scaling Up: Bringing Public Institutions and Food Service Corporations into the Project for a Local, Sustainable Food System in Ontario." *Agriculture and Human Values* 24.3 (2007): 389

[15] Food NYC: A Blueprint for a Sustainable Food System. 2010. Retrieved November 25, 2013 from http://www.mbpo.org/uploads/policy_reports/mbp/FoodNYC.pdf

Sell the Idea

The Ann Arbor area is unique because of the large share of restaurateurs and residents who care about local food. The success of restaurants like Grange that focus on local products and the success of the University of Michigan Sustainable Foods Program, which includes the establishment of the Campus Farm, speak to the value of "local" in the Washtenaw Area. Buyers may be moved to utilize the Food Hub if they feel strongly about its mission. Further, it is also highly important that the farmers from whom buyers currently source believe in the mission of the Food Hub and use it to aggregate and distribute their products. As noted, the relationships buyers have with farmers matter and drive many purchasing decisions. If farmers are not supportive of the Hub, buyers might be unwilling to utilize it. But if farmers love the Food Hub, it is likely buyers will too.

Create a Washtenaw Grown Brand

Survey results confirm that creating one brand for all local products is a helpful idea. Buyers noted that they typically brand produce as "local" and do not tend to list every farm from whom they source from (the exception is if they are featuring an item from a farm for a specific dish). This works in the favor of the Food Hub as the aggregation and distribution process could make it difficult to maintain the identity of all the farms involved in the Food Hub. A local brand—so long as it is developed with farmers and community input—that identifies food that is locally grown is sufficient for customers and produce buyers and works to the advantage of the Food Hub.

Concluding Thoughts

The Dow Fellows team is proud to have worked with the Washtenaw Food Hub to develop and implement this survey. We hope the insights gained through the survey and literature review prove useful to the Food Hub team as they prepare to open for operation.

It is an ongoing challenge to balance the standardization and convenience measures needed for growth and large-scale accessibility of local food with the high social and environmental quality standards that set local food apart in the first place. We are excited to see how the Washtenaw Food Hub plays a part in meeting the demands of this challenge, and we believe that Washtenaw County produce purchasers and consumers will be better off for its efforts.

Finally, we would like to conclude with an additional thank you to the Dow Fellowship Program at the University of Michigan and the inspiring team at the Washtenaw Food Hub who made this project possible.

APPENDIX A: SURVEY

Washtenaw County Food Hub: Demand Survey

Washtenaw County is about to open a Food Hub that will feature commercial kitchen spaces and systems to aggregate locally-grown fruits and vegetables for customers in the Washtenaw County area. In order to meet the needs of wholesale, retail and institutional customers, the following survey assesses interest in the food hub among potential purchasers and their requirements with regard to insurance, ordering specifics, and season needs, among other topics.

The survey will take approximately 15 minutes to complete. Your answers are integral to the creation of a Washtenaw County Food Hub that supports local farmers and enhances the regional economy while meeting the varied and complex needs of purchasers.

The Washtenaw Food Hub is a cooperatively organized LLC formed by successful organic growers and local food advocates. The planning team includes Richard Andres (founder of Tantre Farm), Deb Lentz, Kim Bayer and Maris Laporter. For more information, please see washtenawfoodhub.com.

Your responses are not binding in any way. In addition, we assure absolute confidentially of all your answers and contact information. Your contact information will remain private unless you indicate that you would like to partner with the Food Hub.

We would like to credit the HOPE Collaborative, whose survey provided much of the basis for this survey questions, as well as the demand surveys in the Common Market, Southern Wisconsin, and Central Minnesota Feasibility Studies.

Thank you again for your participation.

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1. Please describe your organization (check all that apply)

Grocery - chain
Grocery - independent full line store
Grocery - corner store
Distributor - broadline
Distributor - specialty produce
Restaurant – group
Restaurant - independent
Institution – healthcare

Institution – governmental
Institution – corporate
Institution - K-12 schools
Institution - other academic
If you marked institution, please indicate if you are self-operating or the name your contractor: ____
Other:____

Local Program

2. What is your ordering process?

3. Do you buy/ use local produce?
Yes
No

If yes, please describe your local program (e.g. its importance to your customers or mission, how you promote it, customer education). If no, why not?

4. How does your organization define “local”?
< 50 miles
<100 miles
<150 miles
<200 miles
<250 miles
250+ miles
Other: ____
Comments: ____

5. For locally produced items, how important is it to maintain the identity of farms producing them as opposed to branding them under the brand of the local food hub?
- Important. Why?
- Not Important. Why?

6. What do you see as barriers to purchasing more locally produced foods? *Check all that apply:*
- Price
- Convenience
- Food safety certification
- Quality
- Quantity
- Seasonal supply

- Lack of information
- Unfamiliarity with local purchasers
- Consistency of produce size, taste
- Other: ____

Suppliers

7. How many suppliers do currently work with?

Comments / Names of Principal Suppliers:

8. Do you work with your local produce suppliers seasonally, year round or both?
- Will source from suppliers seasonally
- Must maintain year-round relationship
- Either seasonal or year-round

Purchases (please provide your best estimates for the following questions)

9. What is the average value of your weekly produce order?
<$100
$100-$500
$500-$1,000
$1,000-$5,000
$5,000-$10,000
$10,000-$50,000
>$50,000

10. What percentage of your annual fresh fruits and vegetables purchases is local?
If known, please enter an approximate whole number estimate under "other"
- It is up to the supplier/vendor
- Too hard to estimate
- Other:

11. What percentage of your annual fresh fruit and vegetables purchases in organic?
If known, please enter an approximate whole number estimate under "other"
- It is up to the supplier/vendor
- Too hard to estimate
- Other:

12. What percentage of your annual fresh fruit and vegetable purchases is pre-cut?
If known, please enter an approximate whole number estimate under "other"
- It is up to the supplier/vendor
- Too hard to estimate
- Other:

13. How often are items ordered?
- Daily

- 2-4 times per week
- Weekly
- Bi-Weekly
- Monthly

14. How important is flexibility in order size?

15. What is your preferred method for placing orders?
- E-mail
- Phone
- Website
- In-Person
- Other

__**Sourcing and Safety Requirements**__

16. What of the following sourcing requirements are relevant to you in terms of *food safety*? Choose all that apply.
Must pass our on-farm audit
Must have on-farm food safety plan
Must be GAP and/or GHP certified
Must be HACCP certified
Must offer traceability
We depend on our distributor's standards
Other: ____

17. What of the following sourcing requirements are relevant to you in terms of *packing standards*? Choose all that apply.
None
Must follow USDA grading standards
Must meet our own packing specifications
Must meet our quality specifications
Must maintain cold chain
Must be recyclable or reusable packaging
We depend on our distributors' requirements
Other: ____

__**Washtenaw Food Hub:**__

18. Do you see any value in a food hub serving southeast Michigan that aggregates, stores, markets and possibly processes and distributes locally grown-fruits and vegetables?
Not valuable
Somewhat valuable
Very valuable

Why or why not?

19. How likely is your organization to buy or influences your suppliers to buy from a food hub?
Not likely
Somewhat likely
Very likely
Why or why not?

20. What are the top fresh fruit and vegetable products you're interested in getting from local sources?
E.g. apples, potatoes. Please indicate whether you purchase whole, pre-cut or both, and how many cases you buy weekly of each. (E.g. 30 cases mixed greens, pre cut; 5 cases broccoli, whole)

21. What kind of delivery would you accept for local produce? Check all that apply.
- Delivery to your facility
- Pick-up from a convenient distribution point
- Pick-up from farm
- Other: ____________________

22. As a means of securing a local supply, how interested are you in participating in per-season crop planning to formally arrange products, quantities, packaging, and timing of delivers (choose one)?
Not at all interested
Not very interested
Somewhat interested
Very interested
Extremely interested

23. How important are the following features of a food hub serving Washtenaw County?
1= not important, 5= extremely important; if you do not know or leave this up to your suppliers, leave the answer blank
1 2 3 4 5 Offers delivery service
1 2 3 4 5 Carries liability insurance
1 2 3 4 5 Is supplying fresh produce from GAP-certified farms
1 2 3 4 5 The hub itself Is GAP and/or GHP certified
1 2 3 4 5 Is HACCP certified
1 2 3 4 5 Has traceability
1 2 3 4 5 Offers certified organic produce
1 2 3 4 5 Offers pre-cut local produce
1 2 3 4 5 Offers year-round supply of the items we use
1 2 3 4 5 Sources from farms with food safety plans
1 2 3 4 5 Other:
____

24. Description of Other Important Features
Please enter the other important attributes you would like to see in a food hub

25. Additional General Comments or Suggestions

APPENDIX A: INFORMED CONSENT

INFORMED CONSENT Washtenaw County Food Hub: Demand Survey

Background and purpose: The Washtenaw Food Hub (WFH) is a cooperatively organized limited liability organization formed by successful organic growers, local food advocates and professionals supporting the development of an environmentally and economically sustainable food system. The WFH designed the survey with the goal of assessing interest in the food hub among potential purchasers and their requirements with regard to insurance, ordering specifics, and season needs, among other topics.

Survey responses will assist the WFH in further developing its mission and in fostering relationships between potential buyers, growers, and producers in the area. The study is being administered by Masters Students at the University of Michigan, and supervised by Dr. Lesli Hoey, Assistant Professor of Urban and Regional Planning at the University of Michigan.

What will be done: You are being invited to complete a survey, which will take approximately 15 minutes to complete. The survey includes questions about buyer ordering and purchasing needs.

Risks and benefits: Your answers are integral to the creation of a Washtenaw County Food Hub that is able support local farmers and enhance the regional economy while meeting the varied and complex needs of purchasers. This information will be used to help inform future activities of the WFH and the regional food system.

We do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. No risk or discomforts are anticipated from taking part in the study. There is no compensation for participating, other than receiving a summary of the study's findings.

Taking part is voluntary: Taking part in this study is completely voluntary. You may refuse to participate before the study begins, discontinue at any time, or skip any questions that may make you feel uncomfortable, with no penalty to you.

Confidentiality: Your answers and contact information will remain private unless you indicate that you would like to partner with the Food Hub. By indicating you would like to partner with the Food Hub, your answers may be attributed to you in the final report and your contact information will be shared with the Food Hub Board Members. Otherwise, your answers will only be available in an aggregate report of answers across all respondents and the researchers will not share your contact information with the Food Hub Board Members.

Contact information: If you have questions about this study, please contact Arielle Fleisher at alfleish@umich.edu.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature __________________ Date _________ Your Name (printed)_________________________

Please sign below if you are willing to have this interview recorded on audio tape. You may still participate in this study if you are not willing to have the interview recorded.

Your Signature __________________ Date _________ Your Name (printed)_________________________

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Signature of person obtaining consent _____________ Date __________ Name (printed) ______________

The researchers will keep this consent form for three years after the end of the study. The study was determined to not need IRB Approval.

APPENDIX A: CONACT INFORMATION

Washtenaw County Food Hub: Demand Survey
Contact Information

Your contact information will remain private unless you indicate otherwise. *Please indicate if you would like to receive a copy of the final report and/or if you would like to be contacted in the future by Food Hub Board Members.*

__ I would like to receive a copy of the Washtenaw County Food Hub Market Analysis Final Report

__ I would like to be contacted in the future about ways to stay involved with the Washtenaw County Food Hub

__ I would prefer to not be contacted in the future

Name: ____

Position: ____

Organization/ Company: ____

Address: ____

City:________________________________ State: ______________ Zip Code: __________________

Phone: _____________________________________ Email: _________________________________

Thank you for participating in the survey! We really appreciate your comments!!