

KANSAS CITY FOOD HUB FEASIBILITY STUDY

BNIM + KANSAS CITY FOOD HUB WORKING GROUP

CONTENTS

Project Background	3
Study Methodology	7
Summary of Findings	8
Summary of Strategic Recommendations	11
Characteristics of Regional Food Production	13
Characteristics of Local Food Purchasing in the Kansas City Region	19
Network Model Analysis	23
Economic Impact	25
Market Analysis	27
Strategic Recommendations	31
Next Steps	35
Appendix	36

ABOUT THIS DOCUMENT

This document contains the results of a yearlong feasibility study that determined the viability of a Kansas City Regional Food Hub to support increased regional production and purchasing of local food.

The aim of this document is to inform producers, buyers, and organizations in the Kansas City region of key research findings, in order to advance development of a healthier regional food system. The region is geographically defined by a 250 mile radius from Kansas City, Missouri.

The full feasibility study report, completed by New Venture Advisors, contains proprietary information to be viewed only by parties responsible for implementing the the Food Hub. To learn more about that report and next steps for Regional Food Hub development, contact the Greater Kansas City Food Policy Coalition.

KANSAS CITY FOOD HUB FEASIBILITY STUDY

This feasibility study is a project of the Greater Kansas City Food Hub Working Group, a coalition of organizations working to create a healthier regional food system, including:

- KC Healthy Kids, Greater Kansas City Food Policy Coalition
- Lincoln University Cooperative Extension
- University of Missouri Extension
- K-State Research and Extension
- Supply Chain Networking
- Fresh Food Express
- KC Food Circle
- Good Natured Family Farms
- City of Kansas City, Missouri
- Door to Door Organics
- After the Harvest
- Independence, Missouri School District
- Cultivate KC



The consultant team conducting this study included:

B N I M



Funders for this study included:





PROJECT BACKGROUND

The Greater Kansas City Food Policy Coalition (GKCFPC) was established in 2009 to strengthen the local food system, recognizing that a healthy food system is critical to increasing healthy eating. With almost 700 current participants, the GKCFPC advocates for a healthy, equitable food system and is advancing two policy initiatives -- the Food Deserts Initiative (to increase access to healthy, local food for over 66,000 residents of Wyandotte County, Kansas and Jackson County, Missouri) and the Institutional Purchasing of Locally Grown Foods Initiative (to increase purchasing of locally-produced food by institutions, such as hospitals and schools, throughout the nine county metropolitan region).

In November 2011, the Greater Kansas City Food Policy Coalition, in cooperation with leading partner organizations and key stakeholders, established the KC Food Hub Working Group as a multidisciplinary coalition of organizations and local food advocates. The KC Food Hub Working Group aims to develop aggregation and distribution infrastructure in the region to advance the Institutional Purchasing Initiative. Additionally, members are working on a myriad of local food system issues, including urban farming, farm-to-school, healthy food access, and expanding local specialty crop production.

In July 2013, the working group launched a feasibility assessment for the Greater Kansas City Food Hub, which would increase healthy food access by establishing and improving regional food distribution infrastructure, supporting increased production and effective systems for institutional purchasing of local foods, and working with community and institutional partners to distribute healthy food to the Kansas City community.

Specifically, the working group's mission for the Greater Kansas City Food Hub is to:

- Provide an aggregation point for local producers, spurring increased production of fresh produce
- Provide small to medium sized producers a market through which they can receive competitive prices
- Enable regional institutions such as hospitals and schools to consistently and reliably secure local food
- Support increased regional food security and healthy eating

In doing so, the food hub would bring the following benefits to the region:

- Increase viability of family farms in the Kansas City region by providing them with the cooperative ability to negotiate prices and the opportunity to scale up production by accessing new markets
- Increase supply of locally produced, healthy food in institutions such as hospitals and schools
- New, consistent sources of fresh, locally grown produce for organizations improving food access and health within low-income populations
- Coordination strategies among food hub efforts across the region that maximize their collective success
- Identify opportunities for policy advocacy initiatives to address regional production distribution and purchasing barriers

The working group spearheaded this yearlong food hub feasibility study to determine the viability of and optimal strategy for the development of a regional food hub that will strengthen the local food system, expand production of fresh fruits and vegetables, and improve access of locally produced food across the metropolitan area, through institutional settings such as hospitals, schools, mobile markets and food banks.

STUDY FUNDING

The study received funding from the Health Care Foundation of Greater Kansas City, the Kansas Health Foundation, and Beans & Greens. Funding was received through the working group's project administrator and fiscal agent, KC Healthy Kids, whose mission is to reduce childhood obesity through healthy eating and active living.

PROJECT PARTNERS

The Greater Kansas City Food Hub Working Group served as the Steering Committee and main decision-making body for the project. The core team responsible for executing the feasibility study included consultants from BNIM, New Venture Advisors and Family Farmed. BNIM is an innovative leader in designing high performance environments. Through an integrated process of collaborative discovery, BNIM creates transformative, living design that leads to vital and healthy organizations and communities. Since 1970, BNIM has been providing community-driven holistic design and planning solutions at every scale. New Venture Advisors is a Chicago-based consulting firm with expertise in the assessment, design, launch and development of businesses in the local food and sustainable agriculture arena. Since 2009, New Venture Advisors has worked on more than 20 food hub ventures and food systems projects across North America. FamilyFarmed.org is a non-profit organization that is committed to expanding the production, marketing and distribution of locally grown and responsibly produced food, in order to enhance the social, economic, and environmental health of our communities.

Regional partners across Kansas and Missouri were engaged throughout the study to help drive enterprise objectives and structure. These partners included current or future food hubs, organizations conducting their own food system assessment, and healthy food

access nonprofits. Organizations included:

- Douglas County (KS) Food Policy Council
- Beans & Greens
- Brown County (KS) Healthy Foods Coalition
- Goode Acres Food Hub
- Hardesty Renaissance Complex
- MU Extension's Farm to School Project
- Kansas Farmers Union
- Kansas Rural Center

Several organizations are operating or have plans to operate food hubs in the region and therefore serve as important partners. Others are conducting parallel local food system studies or are providing education and technical assistance in support of food hub development. Finally, some are focused on healthy food access and are interested in working with the food hub as a sourcing partner.

The Douglas County Food Policy Council recently completed a parallel, in-depth food hub feasibility study that details the market demand for local food in sixteen Northeast Kansas counties including Wyandotte, Johnson, Douglas, Leavenworth, Jefferson, Atchison, Brown, Nemaha, Doniphan, Shawnee, Franklin, Osage, Miami, Jackson, Pottawatomie, and Wabaunsee. The Greater Kansas Food Hub Feasibility Study focused on supply within 250 miles of Kansas City, and encompassed all sixteen counties that were part of Douglas County's research. Project Teams for the two studies worked closely together, coordinating efforts on both qualitative and quantitative primary research in order to minimize data requests to growers and buyers, and to ensure that consistent information was collected for both studies. The teams will collaborate on next steps, and work to build food hubs that work together to collectively support the growth of local food systems in Kansas and Missouri.



**OPPORTUNITY
IDENTIFICATION**



**FEASIBILITY
ASSESSMENT**



**BUSINESS
PLANNING**



FUNDRAISING



LAUNCH



**STABILIZE
AND GROW**

STUDY METHODOLOGY

The study is part of a stage-gate business planning approach which reduces start-up risk and ensures adequate due diligence is conducted to instill confidence among future stakeholders.

Formal planning is kicked off with an initial environmental assessment, which includes meetings with all stakeholders and potential project partners to shape the focus of the study, assessing the food system landscape and determining potential development models. The outcome of this opportunity identification phase was the clarification of the core objectives and goals of the feasibility study.

The feasibility study is then conducted to shape the business concept and test its viability before a significant capital investment is made. The crux of the feasibility study is a financial model that analyzes the potential for a for-profit business to earn a satisfactory profit for owners and investors based on a set of reasonable assumptions. These assumptions are derived from primary and secondary research conducted in the study, often borrowing available data from analogous operations.

If the study reveals sufficient evidence that the business can be successful, a business plan is developed that adds further rigor to the assumptions and business model including complete operations, marketing and financial plans. The business plan will identify the funding needed from investors and project the level and timing of investor returns. As funding is secured, the entrepreneurial team can prepare to launch the business.

If a “go” decision emerges from the feasibility study, it is recommended that an entrepreneurial team will be identified

to participate with the Project Team in developing the business plan, and will then independently lead fundraising and launch, potentially with the support of the Project Team.

GROWER AND BUYER SURVEYS were active from December 7, 2013 – January 17, 2014. 197 growers responded to the survey. 139 of these respondents grow fresh fruit and vegetables, while 58 are non-produce growers. Findings and analysis below focuses largely on responses among these 139 fruit and vegetable growers. 121 buyers responded to the survey.

INTERVIEWS WITH HIGH POTENTIAL GROWERS AND BUYERS, as identified through survey results, were conducted by phone or in person in February 2014. The project team conducted four in-depth grower interviews and eight buyer interviews.

A GROWER / BUYER MEETING was held on February 12, 2014. 80 growers, buyers and stakeholders attended this event. Two panels of growers and buyers with experience in wholesale production and purchasing of local shared their experiences, addressing key issues, barriers, and opportunities identified through surveys and interviews. The entire group of attendees participated in dialogue in response to panels and to address key research questions.

GROWER OPERATING MODEL DISCOVERY MEETING was held on May 1, 2014. The local project coordinator and the KC Food Hub Working Group met with 16 growers, facilitating a discovery process to better quantify the interest level and understand the requirements of producers who expressed enthusiasm for a cooperative, grower-led food hub through other primary research activities.

SUMMARY OF FINDINGS

RESEARCH FINDINGS



INDUSTRY OVERVIEW

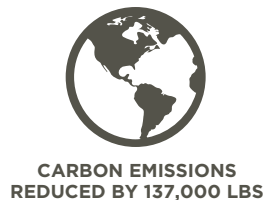
Massive growing market, local is a leading trend

LOCAL MARKET

Large unmet demand for local, existing distributors have limited access to supply



ECONOMIC AND ENVIRONMENTAL IMPACT



SUPPLY AND DEMAND

Interest is high among both growers and buyers; however, there are limitations and challenges with respect to supply that must be considered in shaping the food hub's business model.

Supply

43% (58 total) of specialty produce growers are extremely or very interested in selling to a local food hub, and an additional 39% (51 total) are somewhat interested. Highly interested growers have 215 acres under production and collectively sell approximately 10% of their products through wholesale channels, suggesting that a food hub can help many growers expand their wholesale presence and scale their operations. The 58 interested growers are generally very small, geographically dispersed, and have limited assets to support cooling and delivery. Additionally, the majority of interested growers lack the food safety measures required by buyers.

Demand

58% (46 total) of buyers are extremely or very likely to buy from a food hub. Interested buyers collectively purchase \$38 million in whole produce and \$26 million in processed produce each year.

INDUSTRY ANALYSIS

The U.S. fruit and vegetable wholesale industry reached \$71.2 billion in 2013, growing 1.3% from 2012. The industry is expected to reach \$74.5 billion by 2018. This projected growth is largely driven by health and wellness trends that are leading to increased produce consumption, greater awareness of sourcing and food safety, and an emerging focus on value added products.

Local produce is considered one of the leading trends in the produce industry. According to a national survey among supply chain participants in 2013, local was expected to be the most influential product claim through 2016.

LOCAL MARKET ANALYSIS

Consumers in Greater Kansas City spent \$13.3 billion on food in 2013. Approximately \$2.5 billion of this was spent on fruits and vegetables. Adjusting for crops which can be grown in the region and consumer preferences for local produce, total demand for locally grown fruit and vegetables in Greater Kansas City is approximately \$177 million (\$142 million in wholesale terms).

Due to limited supply of locally grown produce in the region, the total unmet demand for locally grown fruit and vegetables is approximately \$156 million (\$125 million in wholesale terms).

OPERATING MODEL

To determine if a food hub in Greater Kansas City can operate profitably, a financial model simulating a pro forma profit and loss statement (P&L) was developed. The financial model's structure was based on the following operating and business model, and inputs were derived from the surveys and operating data from analogous food hubs.

- The core business is a sales, marketing and aggregation business, buying and selling locally grown whole produce that is moved through a brick and mortar facility located in or around Greater Kansas City.
- The food hub will focus on whole produce to start, and will distribute a mix of conventional and organic products.
- The food hub will therefore have one small refrigerated truck to support inbound distribution. Outbound distribution will be fulfilled by third party logistics providers. The goal is for distribution to be cost-neutral by passing through costs to the customer.
- The food hub will partner with local agencies and support the development of a grower mentor network in order to provide technical assistance to producer. This technical assistance will focus on wholesale success, food safety, and the development of infrastructure to support cooling and distribution. The goals of this assistance are to increase available supply that the food hub has access to, and to help strengthen the local food system.
- Over time, the food hub will work to increase access to locally grown, healthy produce, through partnerships with organizations such as After the Harvest and with a priority around selling to hospitals and schools.



SUMMARY OF STRATEGIC RECOMMENDATIONS

The KC Food Hub Working Group identified the following strategies as critical to filling the gaps in existing regional aggregation and distribution infrastructure. The biggest risk is the food hub's ability to secure and aggregate enough supply, given that interested growers are very small, geographically dispersed and lack cooling infrastructure and food safety certifications. Additionally, the food hub has a strong commitment to both strengthening the local food system and increasing the availability of fresh, locally grown farm products in disadvantaged communities. The research conducted, coupled with the Steering Committee's core priorities, suggest that the following strategies be core to food hub launch and growth.

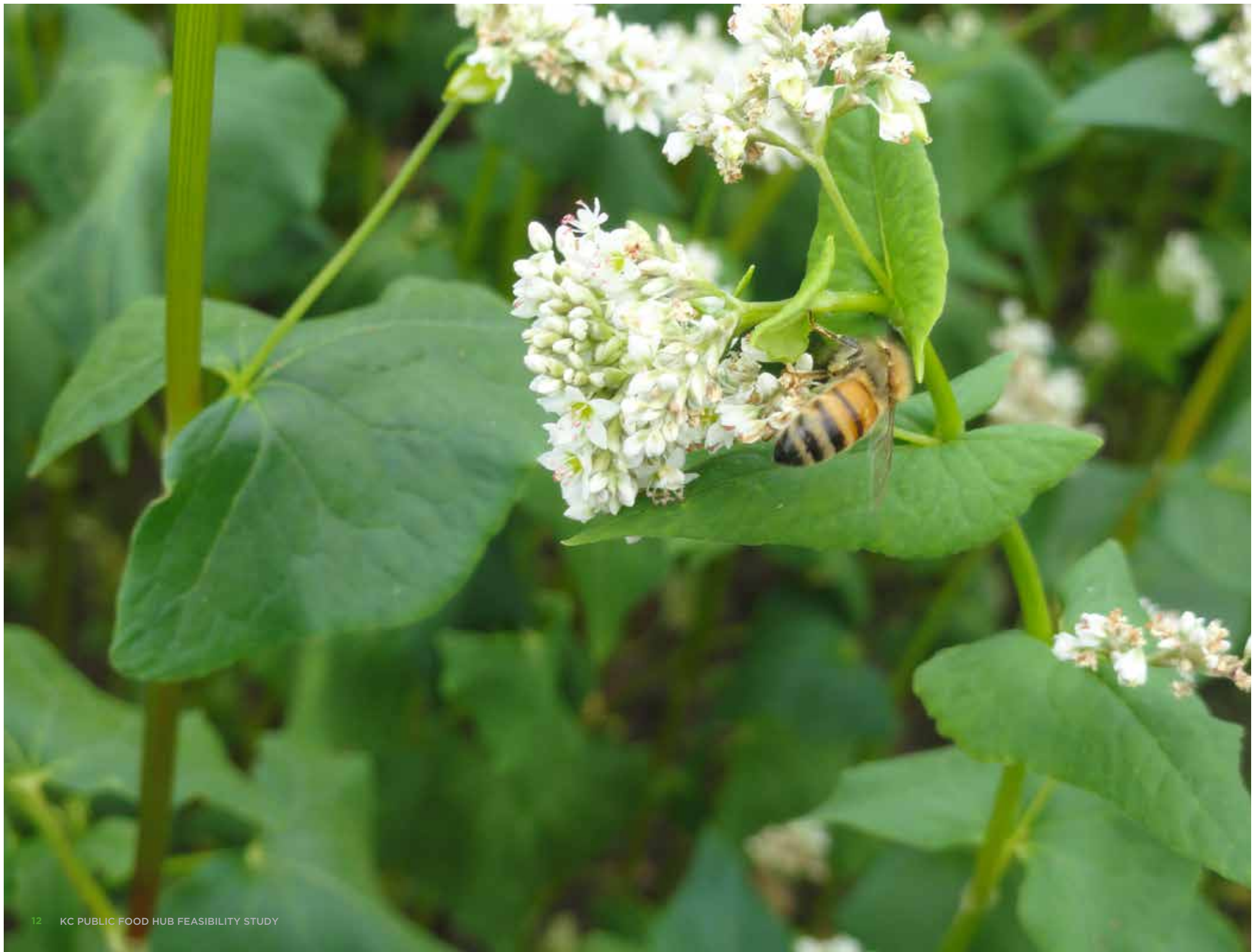
Establish strong partnerships and strategies for providing technical assistance and sub-hub development support. By partnering with extension agencies and other local nonprofits, the food hub can ensure that interested growers are well supported as they work together to organize and launch sub-hubs. Sub-hubs are facilities that nearby growers can use for quick cooling of produce after harvest, aggregation and cold storage. Because so many interested growers lack quick cooling and cold storage infrastructure, these sub-hubs will be critical to the success of the enterprise. Additionally, these partners will organize a group of expert growers who can mentor others in the network with needed food safety and wholesale success support.

Establish a producer-led food hub, in which growers are making day-to-day decisions. Given the effort and investment of resources that so many producers will have to make in order to successfully sell into

the food hub, it is advantageous to engage producers in the food hub's leadership and/or governance. This can be accomplished if the enterprise is a grower-owned cooperative, is a privately held venture operated by growers or through a board of directors that includes a majority of growers.

Collaborate with other intermediaries and partners to strengthen the market. This is a highly interdependent industry, one in which "coopetition" – cooperation with competitors – can expand markets and support prices. Growers who are already selling wholesale and existing aggregators can serve as important suppliers or strategic partners.

Balance the food hub's social mission with a focus on financial sustainability. The KC Food Hub Working Group identified food hub goals around increasing institutional purchasing and improving regional food system health. In support of these goals, the group has laid the foundation for a strong partnership with After the Harvest, a nonprofit that that redirects unmarketable produce to low income populations. Additionally, the buyer survey identified many schools and hospitals that are interested in purchasing from the food hubs. It is important that the food hub management team ensures that their efforts against this broader social mission do not counter their focus on the higher priority goals of financial self-sustainability and increasing local specialty crop production. For example, the food hub should launch operations with a strong, diversified customer base of less price sensitive buyers who are able to pay a premium for local produce, before bringing on a large number of institutional customers. Additionally, the food hub should ensure that a partnership with After the Harvest does not hinder smooth, efficient operations that meet



CHARACTERISTICS OF REGIONAL FOOD PRODUCTION

Results from the producer survey, interviews, Grower/Buyer meeting, and producer discovery meeting are included in this section. Survey results are broken into two groups- first describing characteristics of the full respondent base, and then focusing on producers who were most interested in selling to a Regional Food Hub.

CHARACTERISTICS OF OVERALL RESPONDENT BASE

GROWER TYPE AND LOCATION

197 survey respondents. 139 (71%) of respondents are fruit and/or vegetable growers. Of these 139 respondents, 66 only produce fresh fruits and vegetables. The rest produce a combination of fruits and vegetables, proteins, dairy, grains and/or other.

58 respondents are non-produce growers – 28 produce only proteins and/or dairy, 6 produce only grains, 24 produce a combination of proteins, dairy and/or other products. Other products generally include value added goods such as jams and syrups. Unless otherwise indicated, all of the subsequent analysis is only for respondents who indicated that they are fruit and/or veg growers.

Grower respondents span five states, with the greatest concentration in Kansas and then Missouri. Respondents are up to 250 miles away Kansas City center – over 75% are within 100 miles, and 98% are within 250 miles.

GROWER EXPERIENCE

Grower experience varies greatly. On average, growers have 11.5 years of experience.

FARM SIZE AND TOTAL ACREAGE

65% of respondents cultivate less than 3 acres and 90% of respondents cultivate less than 10 acres. On average, respondents cultivate 4.8 acres. 70% of respondents are open to expanding their acreage if demand warranted the investment.

CROPS

The top crops cited by fruit and vegetable growers include tomatoes, greens, peppers, potatoes, onions, squash, beans, cucumbers, lettuce/cabbage, and berries.

ORGANIC AND SUSTAINABILITY

86% of respondents produce no certified organic output. However, for 75% of respondents, over half of their output is sustainably grown. 63% of respondents grow only sustainable but not certified organic produce.

CUSTOMERS AND SALES OUTLETS

The vast majority of growers are already selling exclusively into local markets - 87% of respondents indicated that over 90% of their output is consumed within 250 miles.

Farmstand, CSA and farmers markets collectively represent over 60% of sales across the respondent base. Wholesale represents only about 5% of sales. This highlights the important role a food hub can play in helping growers expand into new, more financially sustainable and scalable sales channels. Note that because we did not force respondents to ensure their answers added up to 100% across this question, the percentages total to 96% rather than 100%.

TABLE 1: PRODUCER SALES OUTLETS
SALES OUTLET AVERAGE INDICATED PERCENTAGE OF SALES

Farmstand	11%
CSA	11%
Farmers Market	44%
Direct sales to grocery stores	14%
Direct sales to restaurants	9%
Direct sales to institutions	2%
Wholesalers, distributors or food hubs	5%

GROWER BRAND

35% of growers indicate that their farm brand is very or extremely important to generating sales. However, an analysis of open ended feedback and responses to subsequent questions highlights the fact that many of these growers would be open to selling through a food hub without their farm brand associated with their product – and see their brand is important predominantly in direct-to-consumer channels.



GROWER INTEREST AND CONCERNS

OVERALL INTEREST IN A FOOD HUB (Q18)

43% (58) fruit and vegetable growers are very or extremely interested in selling into a food hub. An additional 39% (51) are somewhat interested.

WHOLESALE MARKET BARRIERS

42% of growers are interested in expanding their participation in wholesale markets and 42% would consider expansion if certain barriers were addressed. Growers primary concerns are around (1) resources and investment required to get operation up to speed (2) concerns about pricing and risk of not being able sell products, (3) access to assets to support cooling and distribution.

TABLE 2: WHOLESALE MARKET BARRIERS (PRODUCERS)
BARRIER EXTREMELY/VERY SIGNIFICANT

Concerns about fair pricing	50%
Lack of commitment from buyers	46%
Delivery cost or limitations in current delivery range	45%
Risk of not selling what you grow	44%
Cost of equipment, systems, raw materials and/or labor required	43%
Difficulties finding and/or negotiating with buyers	43%
Cost, time and/or labor to get GAP certified. GAP stands for USDA's Good Agricultural Practices	43%
Access to postharvest handling facilities (cooling, washing, grading, packing)	36%
Lack of processing capacity	36%
Availability of labor	34%
Concerns about meeting food safety requirements	33%
Concerns about cash flow management	33%
Local, state or national policy and legislation	32%
Affordability of land	32%
Liability insurance costs	27%
I am better off selling into other channels	25%
Availability of suitable land	22%
Knowledge about post-harvest handling (cooling, washing, grading, packing)	20%
Management skill required to run a larger operation	19%
Lack of adequate slaughterhouse capacity	18%
Satisfied with the way things are	17%
Knowledge about what to grow	16%
Knowledge about how to successfully grow certain specialty crops	13%

CHARACTERISTICS OF MOST INTERESTED GROWERS

- Experience: Interested growers have an average of 9.8 years of experience farming.
- Acreage: Interested growers have a total of 215 acres under production, the majority of which is currently sold at farmers markets. 67% of these growers have less than 3 acres. An additional 25% have 3-10 acres. Only 5 interested respondents have over 10 acres, none have over 20. 78% of these respondents are open to expanding acreage, and have an additional 200 acres that they could potentially expand into overtime.
- Organic/sustainability: 88% of these respondents have no certified organic output. For 72% of respondents, over 75% of output is sustainably grown, but not certified
- Current sales channels: This group has a higher percentage of sales into wholesale channels as compared to the overall population. Approximately 10% of their sales are through wholesale channels. Over 25% is to grocery stores, restaurants and institutions; and almost 65% is through CSAs, farmstands and farmers markets.
- Brand: 39% of these respondents feel that their brand is very or extremely important to end customer sales.

DESIRED FOOD HUB FEATURES

Growers are most interested in a food hub with the following features:

- (1) supports the local food system and food access,
- (2) provides access to assets to support cooling and cold storage,
- (3) provides financial support for food safety protocols, and
- (4) maintains full traceability.

CROPS

Growers are interested in selling the following top 10 crops: Tomatoes, Kale and greens, Peppers, Potatoes, Onions, Berries, Lettuce, Apples, Corn, Green Beans.

DESIRED RELATIONSHIP WITH FOOD HUB

Interested growers prefer the food hub to make direct purchases from their farm, and to engage in pre-season planning. Many are interested in a co-op model, and about a quarter of respondents indicated interest in operating and/or helping to manage the hub. Preferred pricing strategies vary.

SEASON EXTENSION

48% of interested growers employ season extension strategies. The majority have less than 0.25 acres under high tunnels or green houses.

- 43% do not employ season extension strategies but are interested in doing so if it would improve profitability.
- Currently, the cost of investment and limited sales outlets are the major barriers respondents stated hindering them from increased investment in season extension.

FOOD SAFETY

48% of interested growers have a food safety plan and 7.3% have GAP certification.

- 71% of these respondents would pursue GAP certification if there were reliable demand.

SECONDS AND GLEANING

Interested growers estimate that 16% of harvest is left in the field or graded out, and that they are able to move about 35% of this product.

- This suggests that approximately 22 of the 215 acres of fruits and vegetables cultivated by interested growers do not currently have an outlet and could be available as seconds.
- 50% of interested producers are very/extremely interested in donating their seconds to the food hub for distribution to 501c3 organizations.

ASSETS

Only 32% of interested growers have access to quick cooling (on-farm, or off-farm). 6% have access to refrigerated trucks.

OVERALL FOOD HUB CONCERNS

Respondents cited the following as the top concerns:

- Fair, consistent pricing that allows growers to improve financial sustainability
- Limitations in current supply
- Risk of increasing supply / production without a contract
- Potential that middle men will skim too much of the profit without the value add
- Skepticism around initiatives that are perceived to be government funded



GROWER INTERVIEW INSIGHTS

The following insights emerged from grower interviews, as well as the grower/buyer panel.

Logistics support: Distribution logistics are a major challenge for some growers and a point of concern for buyers. A food hub that can deliver directly to buyers is critical, either by using their own fleet or outsourcing to a third party. Again, this came up in the survey responses but the discussion helped illustrate the struggles these buyers currently face coordinating distribution in their direct-to-farm relationships.

Cooperative model: There was strong interest among growers in a cooperative model, because a co-op would be reinvesting in the grower community and would address concerns that a food hub may place downward pressure on prices.

Importance of buyer commitment: Almost all growers referenced concerns about buyers ultimately not purchasing the product to which they initially commit, because they are unable to accurately predict their end-customers' needs. These growers would be making investments to dedicate new acreage to the food hub, and therefore may seek some volume guarantee from a food hub. This commitment may ultimately be more important than the pricing structure.

DISCOVERY PROCESS INSIGHTS

In May 2014, KC Food Hub Working Group facilitated a discovery process to better quantify the interest level and understand the requirements of producers who expressed enthusiasm for a cooperative, grower-led food hub. 16 producers participated and the following insights emerged.

Producers identified the following key benefits most critical for a food hub to deliver.

Increase production: Allow for growers to scale up production and invest in knowledge and equipment that enables them to produce more vegetables efficiently and profitably. Important to focus on marketable products that can be sold at high volumes.

Save time and energy: Producers spend too much time at farmers markets, which is exhausting and inefficient. Also interested in opportunities to access shared labor.

Additional markets for product: The food hub should allow growers to move more product to additional and better local markets, diversify revenue streams, reach more interested customers, and identify markets for winter.

Support small farms: The food hub should be grower-oriented rather than serving as another middle man, with growers receiving maximum possible profits.

Support local food system: The food hub should provide easier access to local food for communities, especially schools.

Producers identified the following as critical food hub features and services.

Marketing, aggregation, storage, distribution: Aggregation, refrigerated storage and distribution are critical due to low acreage among individual growers who are interested. Ability to aggregate organics should be an option. Traceability and farm identity are essential. There is interest in providing a market for seconds as well.

Network cooling infrastructure: Given lack of cooling infrastructure on most farms, sub-hubs and other strategies to provide centralized cooling services to clusters of growers is extremely important. Many growers were interested in providing these as paid services on their own farms.

Crop planning and buyer commitment: It is critical for the food hub to help growers minimize the risk they are taking on when they make investments that enable them to sell into the hub. Growers strongly emphasized the need for pre-season crop planning, to ensure that the right crops are being planted at appropriate volumes and to help secure buyer commitment to product types and volumes.

Software: There is interest in the food hub employing a system to support communication within the network of farmers and buyers: The website would enable traceability, coordinated crop planning, and inventory management.

Grower cooperation: It is important that the food hub is facilitating grower collaboration around crop planning, liability insurance and seasonal extension.

Build grower capacity: Growers are interested in a food hub that helps build their knowledge of wholesale success, organic certification and practices, and food safety and GAP certification.



CHARACTERISTICS OF LOCAL FOOD PURCHASING IN THE KANSAS CITY REGION

BUYER CHARACTERISTICS AND REQUIREMENTS

BUYER TYPES

121 buyer respondents in total. Of these, 28% are ed-related institutions, 14% are restaurants, 12% are retailers / grocery stores, 10% are wholesale distributors, and 7% are hospitals.

BUYER LOCATION

The majority of buyers are located in and around Greater Kansas City, with smaller buyer clusters in Lawrence, Emporia and Manhattan.

LOCAL PROGRAM

71% of buyers currently purchase or use locally produced farm products. The definition that buyers have for local varies drastically. For 30%, it is within a 100 mile radius. For 75%, it is within a 200 mile radius.

FLEXIBILITY WITHIN LOCAL PROGRAM

17% of buyers are “very” flexible when it comes to volume and pricing for local products. 71% (50) of buyers are “somewhat” flexible when it comes to volume and pricing for local products.

FOOD SAFETY

Buyers vary when it comes to their food safety requirements.

TABLE 4: FOOD SAFETY REQUIREMENTS (BUYERS)
FOOD SAFETY REQUIREMENT RESPONSE PERCENT

Must offer traceability	34.40%
We depend on our distributors’ requirements	33.30%
Must have on-farm food safety plan	26.70%
Must be GAP and/or GHP certified	23.30%
Must be HACCP certified	22.20%
None	16.70%
Must pass our on-farm audit	14.40%

30% (26) of buyers require liability insurance with them directly named, and 39% (34) depend on their distributors’ requirements. Liability insurance requirements tend to either be \$1M, \$2M or \$5M in total.

PACKING STANDARDS

45% of buyers have packing standards that are driven by the USDA, 42% require vendors to meet their own quality and packing specifications, and 33% simply rely on their distributors’ standards.

LOW INCOME CUSTOMERS

Respondents were asked to provide information on the total percentage of their business that is oriented towards low income customers. 35% of total business among buyers is oriented towards low income consumers. This number varies drastically based on the buyer and buyer type – and is heavily skewed towards ed-related institutions, for which an average of 71% of their total business is oriented towards low income consumers.

TABLE 5: PERCENTAGE OF BUSINESS ORIENTED TO LOW-INCOME CUSTOMERS (BUYERS)

PERCENTAGE ORIENTED TOWARDS LOW-INCOME CUSTOMERS	RESPONSE PERCENT (TOTAL)
0%	24.00%
<10%	24.00%
10-20%	5.30%
20-30%	6.70%
30-40%	1.30%
40-50%	4.00%
50-60%	5.30%
60-70%	4.00%
70-80%	0.00%
80-90%	0.00%
90-100%	25.30%
WEIGHTED AVERAGE ACROSS ALL PERCENTAGES	35%

PURCHASING VOLUME

On average, buyers spend \$78,000 per year on fresh and \$45,000 per year on processed produce.

- Buyers range significantly in size – with 20% purchasing less than \$10,000 of fresh produce / year and 18% purchasing over \$1 million.

LOCAL PURCHASE VOLUME

Though 71% of buyers indicate having a local program (as outlined above), only approximately 17% of buyers' total collective purchases are local. 57% of buyers indicate that less than 10% of their produce purchases are local, while only 5% indicate that over 90% is local.

ORGANIC PURCHASE VOLUME

30% of buyers purchase no organic products. An additional 41% purchase only up to only 10% of their products as organic. 10% of respondents purchase over 80% of their products as organic. The question did not specify certified versus non-certified organic.

SECONDS

50% of buyers purchase no seconds. An additional 37% purchase up to only 10% of their product as seconds.

- For 97% of all buyer respondents, less than 30% of purchases are seconds.

INTEREST LEVEL

58% are very or extremely likely to purchase directly or indirectly from a food hub.

- An additional 38% are somewhat likely to purchase directly or indirectly from a food hub.

CHARACTERISTICS OF MOST INTERESTED BUYERS

- *Buyer type*: 26% are education-related institutions, 17% are restaurants, 11% are independent grocery stores, 7% are grocery chains, 7% are broadline distributors, and 7% are hospitals.
- *Local program*: 87% have a local program in place already. 7.5% consider local to be under 50 miles, 17.5% consider it to be within 100 miles, 20% consider it to be within 150 miles, 25% consider it to be within 200 miles, and 12.5% consider it to be within 250 miles.

- *Organic purchases:* 21% purchase no organic products, and 41% purchase less than 10% organic products. 12% purchase 90-100% of their products as organic.
- *Purchasing volume:* Interested buyers purchase a total of \$38 million of whole produce each year, with an average annual purchasing volume of \$840,000. Interested buyers purchase a total of \$26 million of processed produce each year, and an average annual purchasing volume of \$609,000.

CROP TYPES

The top ten whole produce products desired by interested buyers include apples (29), tomatoes (26), potatoes, peppers, onions, carrots, zucchini, squash, lettuce, greens, and spinach.

REQUIRED FOOD HUB FEATURES

Interested buyers require

- (1) comprehensive food safety and adherence to regulations – in the form of traceability protocols, on farm food safety plans, alignment with farm labor requirements and adequate liability insurance,
- (2) delivery of orders direct to facility,
- (3) year round consistent supply, and
- (4) local ownership.

BUYER INTERVIEW INSIGHTS

The following insights emerged from buyer interviews, as well as the grower/buyer panel.

Food safety and traceability: Food safety is of the utmost importance to all buyers. However, buyers do vary when it comes to the strictness of their standards. Sales into school systems and Door to Door Organics do not require GAP certification, and these

buyers may have more flexibility when it comes to surface level quality and consistency. On the other hand, sales into Sysco and similar buyers who can serve as tremendous volume buyers for the food hub do require both GAP certification and visual consistency. Traceability (generally back to the field), is absolutely critical to almost all buyers.

One-stop shop for buyers: A hub can play an important role serving as more of a one-stop shop for buyers who may currently be working directly with several different growers. This insight emerged from survey analysis as well. It is important that growers understand how the food hub – in serving as a one-stop shop – would not become an unnecessary middleman or competitor, but would actually enable buyers to purchase at a higher volume and more consistently thereby expanding their local food purchases.

Cooperation with existing aggregators: Additionally, several growers such as Avery's and Goode Acres, expressed concern about an influx of new food hubs that would not account for their existing work aggregating produce and selling into wholesale markets. It became clear that a new food hub should appropriately work with these players, working with them as sub-hubs rather than competing against them for access to supply and to regional buyers.

Pricing: Despite customers who are pushing for local, it is difficult for these buyers to offer a significant price premium for local produce. Institutions like schools are subject to strict budgets and federal pricing structures (with a small degree of flexibility for local). For other buyers, the issue is that local crops are available at the same time, creating a product glut that makes a price premium untenable in the market. Pricing for buyers will largely be driven by the market.

NETWORK MODEL ANALYSIS

Based on conversations with regional partners, including producers and other organizations initiating food hub projects, the project team evaluated the opportunity for a network food hub model. A network food hub model could leverage assets for cooling, storage, and distribution to maximize efficiency and regional collaboration. Primary research explored the potential development of “sub-hubs”, or facilities located within clusters of producers where growers can cool and aggregate their products. Infrastructure might include mobile cooling units to be shared amongst growers for on-farm cooling. Growers and buyers who have excess capacity in their on-farm cooling equipment could serve as sub-hubs for area growers.

As outlined above, only 32% of the most interested growers have access to cooling infrastructure to quickly bring down the temperature of their crops after harvest. Quick cooling of crops is critical to maintaining and delivering products that are high quality have long shelf lives. Because of these infrastructure limitations, many growers will likely have to either invest in their own coolers, or access coolers near their operation. The following figure maps interested growers based on their existing assets – on farm cooling, trucks for delivery, both or none.

27% buyer survey respondents were interested in providing the food hub or local farms with access to their coolers as a paid service. This high interest among growers in providing network infrastructure support was further reinforced in the discovery process, described below. 26% of grower respondent were open to providing neighboring farms with access to their coolers as a paid service, of which 19 actually own cooling infrastructure on their property. The following map illustrates where these growers and buyers are located in comparison to interested growers with no cooling infrastructure.

Secondary research was also conducted to identify companies that may have infrastructure that could be used by nearby growers for quick cooling and cold storage. These companies were identified using Capital IQ and included large producers, food manufacturers and distributors whose company descriptions indicated that they have warehousing and cold storage.

Existing growers, buyers and infrastructure partners can play an important role helping small scale growers who lack the equipment required for on-farm cooling and cold storage successfully sell into a food hub. However, connecting growers to potential sub-hubs and structuring the financial and operational relationship between these players can be complex and cumbersome, and likely will require central support from the Greater Kansas City Food Hub or another agency.

Additionally, despite the existing facilities that can serve as sub-hubs, there are still many individual farms that are not located close to an already identified potential sub-hub partner. For these farms, a more basic sub-hub model can be explored that consists of a reefer truck parked near producers, for growers to use for cooling and storage. This truck can be driven to the food hub at set days and times throughout the week.



ECONOMIC IMPACT

A Greater Kansas City Food Hub would bring about significant positive economic and social impacts. According to the survey about 20% of annual buyer volume is currently local, so the hub could replace a significant amount of out-of-region imports with locally-produced food. Based on the scale of the facility in the base case, the following benefits could be realized:

- *Jobs:* In steady state the food hub employs 3 full-time, 1 part-time, and 2.9 full-time equivalent hourly employees and pays \$292,396 in wages and benefits. Indirect employment will also result from the enterprise. According to a 2010 University of Wisconsin-Madison study, 2.2 jobs are created for every \$100,000 in local food sales. At the projected \$2.15 million capacity grossed up to \$2.9 million retail, the facility could create 63 jobs in the local economy.
- *Economic Multiplier:* At a 2.6x multiplier, incremental local food volume on a retail sales basis would inject an additional \$5.7 million into the local economy.





FIGURE 3: FIVE STAGES OF A FOOD-BASED SUPPLY CHAIN AND (FIGURE 4, BELOW) MIDDLE OF FOOD SUPPLY CHAIN

MARKET ANALYSIS

INDUSTRY ANALYSIS

OVERVIEW

The five stages of the conventional supply chain for whole produce in the U.S. includes production, post-harvest, distribution, sales outlets and consumption.

In direct-to-consumer supply chains – like farmers' markets and Community Supported Agriculture (CSA), or in the case of a Grower-Shipper – the producer takes on the responsibility of post-harvest handling, distribution and either creates a sales outlet or delivers their product directly to a sales outlet.

97% of all food travels through a more conventional supply chain, in which these middle steps (highlighted in black in Figure 1) are handled by separate parties who specialize in safely transporting large quantities from the producer to the end consumer.

Post-harvest includes the steps immediately following harvest that have a direct impact on the quality level of the product at the point of sale. Post-harvest tasks might include cooling, washing, grading, sorting and packing, and vary based on the crop type.

Distribution refers to the movement of product from the post-harvest stage to sales channels. This can be done directly by a sales outlet – such as a self-distributing retailer. However, the majority of fruit and vegetables are moved by third party wholesalers who are responsible for the aggregation, marketing and delivery of product into sales outlets. Wholesalers may or may not take possession of products – those that do not take possession are considered brokers.

Sales Outlets are the public-facing portion of the supply chain and include restaurants, grocery stores and other food retailers, and institutions such as schools and hospitals with a foodservice component. Here, products are sold directly to consumers or are used in the production of meals and other products for sale.

PRODUCTION AND POST-HARVEST DOMESTIC

The majority of agriculture in the U.S. consists of 5 crops – corn, soybeans, wheat, rice and cotton – which are commonly referred to as commodity crops. Fresh fruits and vegetables are classified as specialty crops. In 2012, the annual cash receipts for fruits and vegetables totaled \$41.7 billion, a 1.8% increase from 2010. The specialty crop segment represents 11% of the \$395 billion total annual farm receipts for all agriculture in the U.S. (including proteins).

The economic forecast for crop production in the U.S., including specialty crops, is expected to decline in 2014, retreating back to pre-2011 levels. Specialty crop farm businesses are predicted to experience a 24% decrease in farm income in 2014, driven by price declines (after price increases in 2011-2013) and a forecasted increase of 4.5% in labor expenses.

IMPORTS

Over 44% of U.S. fresh fruit consumption and 16% of fresh vegetable consumption come from imports. The rapid growth in the volume and variety of fresh fruit and vegetable imports has been driven by the North American Free Trade Agreement (NAFTA) and World Trade Organization (WTO), rising consumer incomes and increased produce consumption, consolidation and industrialization of farms in developing countries that have low labor costs, and technology advancements that have allowed importing countries to improve their agricultural yields.

The vegetables and fruit most commonly imported include bananas, grapes, tropical fruit (such as kiwis, papayas and mangos), tomatoes, peppers and cucumbers. Vegetable trade is concentrated within NAFTA (Canada and Mexico) and Asia, while fruit trade is more dispersed, with the majority of product coming from banana producing countries such as Costa Rica, Ecuador, Mexico and Guatemala.

While the increase in imports since NAFTA and WTO took effect in the mid-1990's has led to an expansion in the variety and volume of fresh produce consumption in the U.S., the trend has hurt U.S. family farms who are often unable to compete on prices due to their size and cannot supply year-round product due to their climate. WTO mandated the elimination of price supports that previously helped small farmers weather year-over-year volatility. The influx of imports and elimination of these government policies contributed to approximately 170,000 family farms (21% of total family farms) going out of business in the first ten years after NAFTA and WTO took effect.

Trade is sensitive to changes in exchange rates with imports gaining strength along with the dollar (a stronger dollar makes imports cheaper for consumers) and exports making up ground when the dollar depreciates. Fluctuating exchange ranges, along with weather patterns in the U.S. and importing countries, leads to significant volatility in both the value and volume of imports and exports in a given year.

DISTRIBUTION

Distribution is generally done by wholesalers or brokers. Wholesalers take title to goods, whereas brokers facilitate sales without handling the product directly.

WHOLESALE

Self-distributing grocery and food service retailers (such as Kroger or Safeway), merchant wholesalers (such as Sysco) and contract food service providers (such as Compass) collectively account for 80% of total wholesale food sales. Within the U.S. fruit and vegetable industry, wholesale revenues reached \$71.2 billion in 2013, which represents a 1.3% increase from 2012. Even with the increasing threat of wholesale bypass from major retailers in the industry, revenue is expected to grow through 2018 at a rate of 1.1% per year to \$75.1 billion. This projected growth is largely attributable to an increase in demand for whole and processed produce and a decrease in wholesaler input costs that allows for more competitive pricing.

TABLE 8: FRUIT & VEGETABLE WHOLESALE SALES TRENDS

	2013 SALES	2008-2013 CAGR	2018 PROJECTED SALES	2013-2018 CAGR
Vegetables	\$42.7 billion	0.1%	\$45.1 billion	1.1%
Fruits	\$28.5 billion	1.3%	\$29.4 billion	0.6%
TOTAL	\$71.2 billion	0.5%	\$74.5 billion	1.1%

Vegetable and fruit wholesale is concentrated in the West, Southeast and Mid-Atlantic regions of the U.S., which collectively account for 68% of the industry's establishments. The West region accounts for an estimated 29% of produce wholesale businesses - California alone is home to 22% of the industry's total. The Plains region (North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa and Missouri) is home to an estimated 3% of wholesale fruit and vegetable establishments, with Kansas & Missouri accounted for 1.1% of this region.

BROKERS

Brokers represent approximately 20% of wholesale food sales. Brokers facilitate sales between buyers and sellers, rather than purchasing goods to sell them at a profit. Brokers can also simply facilitate the meeting of buyers and producers – as in the case of produce auctions – where they provide the infrastructure for sales and earn their income as a percentage of sales. Brokers are small in comparison to the more consolidated wholesalers, but often have more accessibility to a region's local producers, making them desirable partners to sales outlets whose customers demand regional food, such as local-focused grocery stores like Whole Foods Market.

SALES OUTLETS

Sales outlets largely consist of supermarkets and grocery stores (with 40% of the market); restaurants and other foodservice providers (37%); and institutions with foodservice components such as schools and hospitals (17%).

The U.S. fruit and vegetable retail industry reached an estimated \$103 billion in annual sales in 2013, a compound annual growth rate (CAGR) of 2.6% since 2008 at inflation-adjusted prices. Recent growth is largely driven by the increase in demand for fresh, whole fruits and vegetables and fresh cut salads. The industry is expected to reach \$117 billion at real prices by 2018.

INDUSTRY TRENDS

Consumers are more aware than ever of their health, eating habits, and the source of their foods. *“As a result, today's consumers are seeking out healthy food with greater urgency.”* - David Browne, Senior Analyst, Mintel Food and Drink U.S. Report. This awareness and urgency is driven by research about the various health benefits from consuming fresh vegetables and fruit, increasing awareness of

TABLE 9: FRUIT & VEGETABLE RETAIL SALES TRENDS

	2013 ESTIMATED SALES (000)	2008- 2013 CAGR	2018 PROJECTED SALES (000)	2013- 2018 CAGR
Fresh Vegetables	\$68.2 billion	2.6%	\$76.4 billion	2.3%
Fresh Fruit	\$34.6 billion	2.8%	\$40.5 billion	3.2%
TOTAL	\$102.8 billion	2.6%	\$116.9 billion	2.6%

food safety and food origin, and industry and government programs promoting healthy eating options. Consumer awareness quickly shifts to consumer buying patterns, or demands, and the buyers of wholesale food recognize they need to be agile and responsive to these consumer trends.

TABLE 10: MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD IN KANSAS CITY METRO AREA, 2012 (\$1,000)

STATE/ COUNTY	ACRES OF VEGETABLES AND MELONS HARVESTED FOR SALEMARKET	VALUE OF VEGETABLES & MELONS SOLD IN GKC	ACRES OF FRUITS & NUTS (INC BERRIES) HARVESTED FOR SALE	MARKET VALUE OF FRUIT & NUTS (INC BERRIES) SOLD IN GKC
KANSAS				
Franklin	20	70	12	104
Johnson	101	(D)	48	133
Leavenworth	214	542	47	(D)
Linn	4	26	17	90
Miami	63	(D)	86	(D)
Wyandotte	70	376	25	(D)
MISSOURI				
Bates	84	(D)	(D)	(D)
Caldwell	3	(D)	(D)	(D)
Cass	46	309	90	(D)
Clay	(D)	634	(D)	(D)
Clinton	20	70	(D)	(D)
Jackson	100	512	78	(D)
Lafayette	15	(D)	880	7,047
Platte	139	(D)	(D)	(D)
Ray	(D)	(D)	15	(D)



STRATEGIC RECOMMENDATIONS

The results from the study suggest that a Greater Kansas City Food Hub buying and selling locally sourced produce to area distributors, grocery stores and other buyers can be operated as a financially-sustainable enterprise. There is high interest among both growers and buyers in working with the food hub – with 58 growers and 46 buyers indicating that they are very or extremely likely to work with a food hub. Interest among growers extends beyond selling to the food hub to actively supporting the food hub as members of a grower-owned cooperative.

There is sufficient demand in the market – the 46 interested buyers collectively purchase \$38 million in whole produce and \$26 million in processed produce annually. There is also strong interest among a subset of growers in not only selling into a food hub, but also in serving as owners of a grower-owned cooperative food hub.

There are, however, limitations and challenges with respect to supply that must be considered in shaping the food hub's business model. The 58 interested growers are generally very small, geographically dispersed, and have limited assets to support cooling and delivery. Additionally, the majority of interested growers lack the food safety measures required by buyers.

Based on the study results, a food hub would be financially self-sustaining and achieve the profitability described in the full feasibility study report if several important conditions are met:

- Additional supply is identified, beyond what is available from the base case of interested grower respondents. Additional supply can be PRODUCED if growers are provided with the right technical assistance.
- Growers are provided with support for cooling and aggregating their produce. Many interested growers lack onsite cooling and storage facilities, have limited understanding of produce handling

required for wholesale, and are too small to consider investing in these capabilities on their own.

- Growers are provided with support for the implementation of farm food safety plans and GAP certification. This is a requirement for several of the largest and most promising buyers, but only 48% of growers have an on-farm food safety plan and 7% are GAP certified. However, 71% would pursue GAP certification if demand warranted it.

Achieving these conditions will require a combination of

- (1) close, strategic partnerships with nonprofits and extension agencies that can facilitate technical assistance provided by a network of expert growers, and
- (2) a highly capable operator and management team, who understand grower needs and concerns, and have expertise in sales and distribution.

National trends clearly indicate strong demand for farm-identified local produce, and this is generally validated by respondents to the study survey and through qualitative research. Many of the area's large distributors and institutional buyers have expressed high interest in purchasing local produce from the food hub. Additionally, a large number of growers are interested, not only in selling into the food hub but also in helping to launch and/or run the operation.

Supply limitations – including availability of supply, ability to aggregate supply across a dispersed and fragmented grower base, and alignment between grower food safety protocols and buyer requirements – is the food hub's primary business risk.

As the project moves into the business planning phase, the following core strategies should be considered as part of the launch and growth plan, to best position the food hub for success.

Establish a producer-led food hub, in which growers are making day-to-day decisions. Given the effort and investment of resources that so many producers will have to make in order to successfully begin selling into the food hub, a food hub that is led by producers is critical. This management and decision making structure will ensure that the business practices (i.e. gross margin, compensation to grower experts, etc) are satisfactory to suppliers while still allowing the food hub to be financially viable. A food hub can be a grower-owned cooperative or a privately held venture that is operated by growers or that has a board of directors that includes a majority of growers. This may require a producer network coordinator that can facilitate network development and technical assistance partnerships.

Establish strong partnerships and strategies for providing technical assistance and sub-hub development support. Research identified opportunities for the development of sub-hubs within clusters of interested growers, and evaluated the cost of establishing a basic reefer truck sub-hub. By partnering with extension agencies and other local nonprofits, the Food Hub can ensure that interested growers are well supported as they work together to organize and launch these sub-hubs, and can help growers secure funding needed to get sub-hubs off the ground. Additionally, these partners can organize a group of expert growers who can provide food safety and wholesale success support to potential suppliers. The Food Hub's leadership team must allocate time, particularly in the off season, to focus on these efforts and the food hub should be ready to compensate expert growers up to \$10,000 for their service.

Sales and marketing is always a critical skills set for the management team of food hubs to have, given that sales is one of a hub's core value propositions. However, the leadership of the Greater Kansas City Food Hub must also have a deep understanding of the grower landscape in the area and be able to successfully partner with extension agencies and other local nonprofits.

Balance the food hub's social mission with a focus on financial sustainability. The KC Food Hub Working Group identified food hub goals around increasing institutional purchasing and improving regional food system health. In support of these goals, the group has laid the foundation for a strong partnership with After the Harvest, a nonprofit that that redirects unmarketable produce to low income populations. Additionally, the buyer survey identified many schools and hospitals that are interested in purchasing from the food hubs. It is important that the Food Hub's efforts against this broader social mission do not counter its focus on the higher priority goals of financial self-sustainability and increasing local specialty crop production. For example, the Food Hub should launch operations with a strong, diversified customer base of less price sensitive buyers who are able to pay a premium for local produce, as it brings on institutional customers over time. Additionally, the Food Hub should ensure that a partnership with After the Harvest does not hinder smooth, efficient operations that meet buyer and grower requirements.

Collaborate with other intermediaries and partners to strengthen the market. This is a highly interdependent industry, one in which “coopetition” – cooperation with competitors – can expand markets and support prices. Cooperation has already been a guiding principle of the feasibility study.

There are approximately twenty fruit and vegetable distributors in Kansas City and surrounding counties. Given the food hub’s operational focus on

- (1) the sale of farm-identified locally grown products,
- (2) being producer-led,
- (3) helping to grow the local food system by supporting growers with wholesale success and food safety certifications, and
- (4) serving low income consumers,

the hub’s closest competitors would be nearby food hubs that have a broad wholesale business and producers selling directly into the wholesale market. However, it is common practice for competing intermediaries to work collaboratively, often trading with each other to find markets and fill orders, so many of these businesses can be thought of as “coopetition” – potential suppliers, buyers, logistics providers, partners sharing assets such as coolers, strategic collaborators as well as competitors. If development of the food hub is advanced, it is recommended that the operator reconnect with these existing competitors to explore opportunities for collaboration.

Additionally, the core Project Team has worked closely with strategic partners, including the Douglas County Food Coalition and their parallel food hub feasibility study. Continued engagement with Douglas County, with a focus on collectively building food hub businesses that work to grow the local food system rather than introduce unnecessary competition, should be a key strategy moving forward.



NEXT STEPS

A decision to move forward directs the project into business planning. In this phase the project will be taken to the next level of commitment: an entity established, an operator chosen, a site identified, occupancy costs for the facility confirmed, supplier quotes received, operating agreements with partners negotiated, a sample price list vetted by growers and buyers, salaries for staff and workers actualized, etc. The completed plan will include a more robust financial model expanded into projections through breakeven.

On July 24, 2014, the Steering Committee made “go” decision on the food hub, moving the project into the next phase of planning and launch. The following two processes will be executed in parallel: (1) first phase implementation of the food hub, and (2) business planning. The feasibility study generated strong enthusiasm and forward momentum amongst producers toward the realization of the food hub. A group of producers interested in leading implementation convened as part of the Discovery Process in May 2014, and helped to shape operating model recommendations. This momentum must be maintained to create a cohesive network that will guide operations, and to solidify producer commitment to and trust in the food hub. Conducting the two phases of work in parallel will build on the foundations laid with producers to date, while simultaneously ensuring the thoughtful development of the hub’s strategic plans for operation, marketing, and financing.

First phase implementation should include:

- *Producer Network Development.* Mobilizing and developing the network of regional producers to direct business planning efforts and food hub operations, engaging regional stakeholders interested in food hub implementation, and developing partnerships with regional extension agencies, mentor growers, as well as food system nonprofits to provide technical assistance. Organizing the network of producers into a business entity with the goal of preparing them to sell into the food hub in 2015.
- *Operator Selection.* Developing and issuing a Request for Information (RFI) and working with the producer network to select an operator or operating team.

Business planning adds further rigor to the feasibility study assumptions and business model, including complete operations, marketing and financial plans. It identifies the funding needed from investors and lenders and projects the level and timing of investor returns. Business planning should include:

- *Project Initiation.* Identifying stakeholders, defining their roles and finalizing work plan
- *Due Diligence.* Conducting additional primary and secondary research with the goal of securing anchor growers and buyers, site selection and facility planning, and engagement of key stakeholders such as partner agencies who will provide technical assistance.
- *Business Plan Development.* Finalizing the business strategy, updating any financial and capacity models with new information and data, developing detailed pro forma financials to understand timeline to breakeven and fundraising needs and writing the business plan.

APPENDIX: WORKS CITED

Fisher, M., Hamm, M., Pirog, R., Fisk, J., Farbman, J., & Kiraly, S. (September 2013). *Findings of the 2013 National Food Hub Survey*. Arlington, Virginia: Michigan State Center for Sustainable Food Systems & The Wallace Center at Winrock International.

Huang, S., & Huang, K. (2007). *Increased U.S. Imports of Fresh Fruit and Vegetables*. Washington, D.C.: USDA Economic Research Service.

Institutional Food Marketing Coalition. (2010). *2010 Program Report*. Madison: Dane County Department of Planning and Development.

Martinez, S. (2014, May 23). *Food Marketing in the US: Food Wholesaling*. Retrieved from USDA Economic Research Service: http://www.ers.usda.gov/topics/food-markets-prices/retailing-wholesaling.aspx#.U9fwvldX_E

Massachusetts Institute of Technology. (2014, March 24). *Living Wage Calculator*. Retrieved June 2014, from <http://livingwage.mit.edu/>

Meter, K. (2008, October). *Local Food as Economic Development*. Retrieved June 30, 2010, from Crossroads Resource Center: <http://www.crcworks.org/lfcd.pdf>

New Venture Advisors. (2013, April 3). *Local Food MarketSizer* (R). Retrieved from New Venture Advisors: <http://newventureadvisors.net>

Public Citizen. (2014, June). *Food Imports to United States Soar under WTO-NAFTA Model, Threatening American Farmers and Safety*. Retrieved from [www.citizen.org](http://www.citizen.org/documents/food-under-NAFTA-WTO.pdf): <http://www.citizen.org/documents/food-under-NAFTA-WTO.pdf>

Tanner, R. (2012). *The State of the Specialty Food Industry and The NASFT*. New York: National Association for the Specialty Food Trade.

The Diesel Technology Forum. (2010, October 25). *Fact Sheet on EPA's Proposed Medium and Heavy Duty Greenhouse Gas and Fuel Efficiency Standards*. Retrieved August 24, 2011, from Diesel Technology Forum: <http://www.dieselforum.org/index.cfm?objectId=72AC9B9E-95EC-11E0-B620000C296BA163>

U.S. Bureau of Labor Statistics. (2012). *Consumer Expenditure Survey, 2011*. Washington: U.S. Department of Labor.

U.S. Environmental Protection Agency. (2005, February). *Emission Facts: Average Carbon Dioxide Emissions Resulting from Gasoline and Diesel Fuel*. Retrieved August 24, 2011, from Office of Transportation and Air Quality: <http://www.epa.gov/oms/climate/420f05001.pdf>

USDA Agricultural Marketing Service. (2014, April 28). *Working List of Food Hubs*. Retrieved July 4, 2014, from <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STE LPRDC5091437>

USDA Economic Research Service. (2014, February 11). *2014 Farm Sector Income Forecast*. Retrieved June 28, 2014, from http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/2014-farm-sector-income-forecast.aspx#.U8f8y_IdX_F

USDA Economic Research Service. (2014, February 11). *Farm Business Income*. Retrieved June 29, 2014, from http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/farm-business-income.aspx#.U8f-yvldX_G

USDA Economic Research Service. (2014, February 11). *U.S. and State-Level Farm Income and Wealth Statistics (Includes the U.S. Farm Income Forecast for 2014)*. Retrieved June 28, 2014, from [http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/us-and-state-level-farm-income-and-wealth-statistics-\(includes-the-us-farm-income-forecast-for-2014\).aspx#.U8f7MPlDX_F](http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/us-and-state-level-farm-income-and-wealth-statistics-(includes-the-us-farm-income-forecast-for-2014).aspx#.U8f7MPlDX_F)

Woods, T., Velandia, M., Holcomb, R., Dunning, R., & Bendfeldt, E. (2013, 4th Quarter). *Local Food Systems Marts and Supply Chains*. Choices Magazine.

