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Food Hub Development in Iowa

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Food Hub Development in Iowa

Abstract

This 25-page report is from the first coordinated study of food hub development in Iowa. Two surveys of food hub managers and local food coordinators identified 31 food hubs or centers of food hub-related activity that serve Iowa markets. Work was funded by a grant from Ag Ventures Alliance and the USDA's Sustainable Agriculture Research and Education (SARE) program with support from the Leopold Center.

Disciplines

Agricultural and Resource Economics | Agricultural Economics | Economics

In 2014, Ag Ventures Alliance, a business development group formed to support farmers, funded work to research food hub activity in Iowa.

A steering committee was formed to guide the process. Two surveys were conducted: one of food hub managers and the other for regional food systems leaders throughout the state. The committee and project leaders used survey information to create a set of recommendations for supporting the work of Iowa's food hubs.

This document shares key results from those surveys.

Food Hub Development in Iowa

Lessons learned from a
study of food hub
managers and regional
food coordinators

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Corry Bregendahl
Leopold Center for Sustainable
Agriculture

February 2015



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This report also can be accessed on the Leopold Center for Sustainable Agriculture website:
www.leopold.iastate.edu/food-hubs

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Executive Summary

Local and regional food system development has been linked to solutions that address some of the nation's most pressing social problems, including economic and community development, obesity prevention, family farm preservation, food security, and environmental protection. However, access to local foods is not readily available to all. Often, families with high incomes enjoy the easiest access to local foods. New movements are seeking to change this situation and are supporting food hubs as a way to expand local food availability. Food hubs are viewed as a critical link in bringing local foods from the farm to the table *for everyone*. These hubs operate by facilitating or performing the aggregation, distribution and sales of locally produced food to high-volume, mainstream outlets such as grocery stores, restaurants, and institutions.

In 2014, Ag Ventures Alliance, a membership-based, pro-business alliance of agricultural investors based in North Central Iowa, awarded a \$10,000 grant to better understand food hub activity occurring in Iowa and develop recommendations to support those efforts more effectively. An additional \$5000 was provided by the USDA's Iowa Sustainable Agriculture Research and Education Professional Development Program.

A steering committee was formed to guide the process, with representation from farmers, food hub managers, the U.S. Department of Agriculture (USDA), the Iowa Department of Agriculture and Land Stewardship (IDALS), university researchers and grassroots local food systems leaders. The committee chose to study the issue in part by conducting two surveys: one of Iowa food hub managers and the other of a network of regional food coordinators. The committee then used the survey information to generate a set of recommendations for supporting the work of Iowa's food hubs.

The surveys were the first coordinated, systematic attempt to understand the state of food hub development and emerging food hub activity in Iowa. This report summarizes the findings. Highlights include:

Number of Food Hubs in Iowa

- **Estimates of food hubs in Iowa are low.** The USDA listed only six for the state in April 2014. Our team initially identified an additional 10 for an interim total of 16. However, an additional 15 food hub-related groups or activities were identified by responding food hub managers and regional food coordinators, for **a total of 31 food hubs or centers of food hub-related activities in Iowa**. This latter group includes organizations and efforts that take on food hub-related activity such as aggregation or delivery but may not self-identify as a food hub. Food hub activity is concentrated around the population centers of Des Moines, Iowa City, Cedar Rapids, and Cedar Falls/Waterloo, as well as in Northeast Iowa and Southeast Iowa, near Fairfield.

- Study results are based primarily on responses from 13 of the 16 food hubs we initially identified and contacted, and secondarily on responses from 11 of 13 regional food coordinators who were surveyed.

Financial Performance

- **Total gross revenue of food hubs** (from those who provided the requested information; n=9 out of the 16 contacted) **was \$4.5 million in 2013**. The average gross revenue of those same food hubs was \$451,975 in 2013. However, the median shows that half of food hubs in Iowa had sales of less than \$114,000 and half had sales above that level in 2013, indicating that the average is skewed by a few hubs with high sales.
- **Responding food hubs employ a total of 58 people**, although only four hold full-time, year-round jobs. In addition, **they sell products from a total of 459 farmers**. Iowa food hubs are supporting jobs both within the hubs and on farms, although we did not establish whether these jobs are quality jobs that pay a living wage.
- **Half of responding food hub managers (54 percent) said food hub sales were meeting or exceeding their expectations.**
- **Sixty-two percent of food hubs in Iowa (n=13) said they were profitable in 2013**. However, given the exploratory nature of the survey, we left the definition of “profitable” open to respondent interpretation.
- Participating food hubs in Iowa used **13 different types of financial resources to begin operations**, indicating the broad and varied support for food hubs. They relied most heavily on membership fees (46 percent of hubs) and the organization or founder’s own capital (38 percent) to start food hubs.
- **Once started, participating food hubs relied most heavily on the income from the services they provide, with 85 percent of food hubs generating income from services, followed by bank loans (31 percent)**. The fact that food hubs in Iowa have been able to secure bank loans indicates that **food hubs have sound business plans and banks are becoming increasingly aware of the economic promise of food hubs**.

Structure and Operations

- **The primary goal of Iowa food hubs centered on service to farmers, especially small or beginning farmers**. Environmental goals of land stewardship and agricultural diversity as well as goals of improving food access to low-income or vulnerable families were the least common aims of participating food hubs.
- Food hubs in Iowa may not follow a typical business model. **About half of participating Iowa food hubs are for-profits (54 percent)**, a quarter are cooperatives (23 percent), and 15 percent of food hubs represented in our study were non-profits. The remaining food hubs (8 percent) were informally organized.
- Food hubs are usually seen as serving primarily wholesale markets. However, **only 38 percent (n=11) of responding Iowa food hubs are selling exclusively through wholesale channels**. This is higher than food hubs

around the nation, where 29 percent sell exclusively to businesses¹. Roughly one-third of participating Iowa food hubs (31 percent) and food hubs nationally (39 percent) sell exclusively direct to consumers through their own retail stores, CSA or food box models.

- Iowa food hubs have yet to dive deeply into food processing, **with only 23 percent freezing products, 8 percent offering shared use kitchens (often used to process food for resale), and no food hubs were cutting or canning products**. Regulatory and financial challenges likely are the constraints limiting the latter activities.
- **The majority of food hubs in Iowa offer important, additional services to farmers**. Six in ten (62 percent) brand or label products according to their origin, allowing consumers to know which farm products came from which farms. The majority (54 percent) of food hubs also offer marketing and promotional services to farmers and help farmers find new markets, consistent with food hub goals focused on providing access to markets for beginning and small farmers.
- **Iowa food hubs are highly dependent on crops that are grown seasonally** as opposed to year-round. This dependence on seasonal crops adds a level of instability to product offerings that is otherwise avoided by seasonally *independent* products such as meat and eggs, dairy, grains, legumes, and processed foods. All of these foods can be sold year-round, thereby providing a steady stream of revenue.
- **Most food hubs in Iowa have a state or relatively limited geographic or regional focus**. Iowa food hubs source products from within Iowa exclusively or within 150 miles or less of the hub, with some sourcing primarily within 30 to 50 miles from the hub.

Food hubs can be successful only if they have access to a sufficient supply of high-quality, local food. For this reason, food hub capacity is strongly tied to farmer capacity and farmers' willingness to work with food hubs to supply high-volume (and generally lower-margin) markets. Exploring the status of Iowa farmers who currently supply food hubs may be one of many next steps we can take to better understand the potential of food hubs in Iowa.

Acknowledgements

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We also would like to express our gratitude to members of the steering committee for contributing their valuable time, presence, input, and commitment to developing new and different visions for agriculture in the state. They include (in alphabetical order):

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Introduction

In January 2015, the USDA's Economic Research Service (ERS) issued a new report to Congress titled *Trends in U.S. Local and Regional Food Systems*.¹ The House Agriculture Committee requested the ERS conduct the study described therein in response to an ever-increasing demand for local and regional food and the need to support data-driven public policy. The study showed that:

- **Local food sales are booming.** An estimated \$6.1 billion in local food sales occurred in 2012.
- **An increasing number of farmers are growing local foods.** Nearly 10 percent (7.8 percent) of *all* U.S. farms market foods locally (either direct-to-consumer through farmers' markets or CSAs or community supported agriculture) or via intermediated markets (e.g., restaurants, grocery stores, food hubs, or institutions).
- **Direct-to-consumer sales such as farmers markets and CSAs are declining while sales to intermediated markets are skyrocketing.** Study authors attribute peak farmers market sales to market saturation, low profit margins, the time required to sell at farmers markets, and lack of farmer interest in marketing.
- **On the other hand, economic opportunities in local food abound beyond small markets and are entering the marketing mainstream.** One in three of those farms sells products through intermediated markets.
- **The number of food hubs in the United States has exploded.** Since 2006, the number of food hubs has increased by 288 percent to a total of 302.
- Based on USDA figures, **the number of school districts with farm-to-school-programs has increased 430 percent** from 206 to 2012.
- **Concentration of market share is occurring within the local/regional food industry.** The vast majority of farms (85 percent) selling local food have a gross cash farm income below \$75,000, accounting for 13 percent of local food sales. In contrast, 5 percent of local food farms with gross cash farm income above \$350,000 took home 67 percent of local food sales.

According to the report, the unique role of regional food hubs is their ability to provide farmers with access to large markets while preserving source-identified food characteristics. Food hubs also offer education and training to farmers to increase their capacity to meet high-volume demands.

Publication of the ERS report on current trends in local and regional food systems is timely for Iowa's local food advocates and actors, including food hubs. Although Iowa has at least 79 CSAs² and 231 farmers markets selling local foods,³ most people do not buy the majority of their food through these markets for various reasons (goods only seasonally available, upfront costs,

transportation and time issues, lack of convenience, etc.). The consumer market research firm Packaged Facts found that consumers spend over half (53 percent) of their food dollars at supermarkets and grocery stores, including specialty food stores. Only 2 percent was spent at alternative food vendors, which includes farmers markets. A 2014 report issued by the Leopold Center for Sustainable Agriculture showed that in 2013, grocery store sales accounted for 68 percent of measured local food sales in Iowa.⁴ Food hubs serve as a critical link in aggregating high-quality, locally grown food produced by small and mid-sized farmers and transporting it to high-volume markets such as grocery stores, restaurants, and public institutions such as schools, colleges, and hospitals.

What is a food hub?

The National Food Hub Collaboration⁵ offers this commonly used definition:

"A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand."

The number of food hubs nationally is on the rise. As mentioned previously, recent figures from the ERS show a nearly threefold increase in the number of food hubs since 2006, for a total of 302 in 2014.

Both in spite of and in response to the proliferation of food hubs, Food Hub Benchmarking studies were conducted both in 2013 and 2014^{6,7} to better gauge the financial health of food hubs nationwide. Researchers collected financial records from participating food hubs, including balance sheets, profit and loss statements, and statements of cash flows. In addition, they collected information about food hub operations, such as their organizational structure and product offerings. Throughout this report, we will refer to the 2014 study as the Benchmarking Study. This study can and has informed food hub development in Iowa, a topic on which no central information has been gathered--until now.

Background of Food Hubs in Iowa

Six Iowa food hubs are listed in the USDA-published list, but local food advocates in Iowa know that more food hubs exist than those formally documented.

In 2014, Ag Ventures Alliance, a membership-based, pro-business alliance of agricultural investors based in North Central Iowa, awarded a \$10,000 grant to better understand food hub activity occurring in Iowa and develop recommendations to support those efforts more effectively.

A project advisory board was assembled, including representatives from the USDA, food hub managers, farmers, and researchers. The advisory board met for the first time in June, 2014. They heard the results of a literature review investigating factors contributing to viable food hub development and identified information gaps that needed to be filled to better understand and support food hubs in Iowa. With the board's input, project coordinators went on to develop two exploratory companion surveys to investigate the status of food hub work in Iowa.

Methods

Key Informant Survey

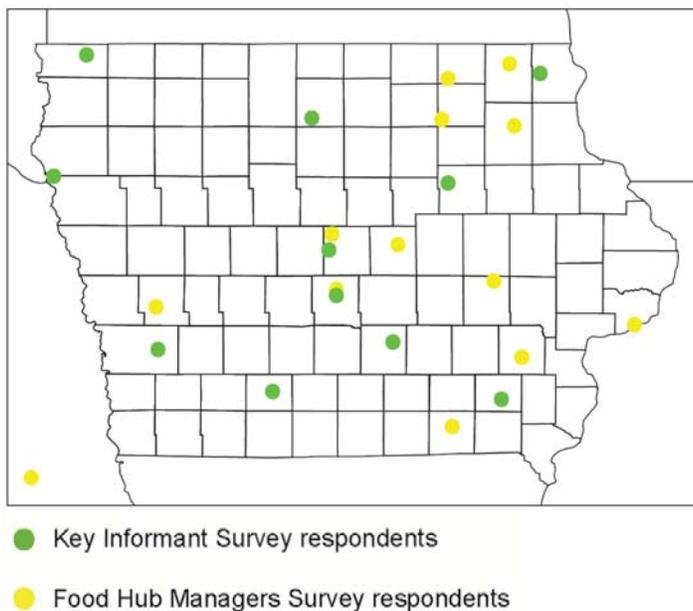
The first survey, called the Key Informant Survey, focused on geographically based regional food coordinators throughout the state via an already established network called the Regional Food Systems Working Group. Thirteen people were invited to participate in the survey which was made available as an electronic survey only. Invitations to participate in the survey were sent by email to potential participants who were given 11 days to complete the survey and offered an honorarium of \$100 for their time.

Food Hub Manager Survey

The second priority survey targeted managers of food hubs operating in Iowa. This survey was called the Food Hub Manager Survey and was sent to food hub managers representing 16 different food hubs identified by project leaders. Because some of the food hub managers do not use email, both paper surveys and electronic surveys were used. Participants were given 11 days to respond to the survey, although those using the paper version were given extra time to respond. Respondents to the Food Hub Manager survey were offered a \$200 honorarium to complete this longer, more detailed survey.

The study was deemed exempt by the Human Subjects Institutional Review Board at Iowa State University.

Figure 1: Home base of survey respondents



Response rates to both surveys were high, with 85 percent (11) of 13 key informants responding, and 81 percent (13 out of 16) food hub managers responding, with a combined response rate of 83 percent (24).

Respondents represented all parts of the state, as shown in Figure 1. However, some parts of the state had greater representation than others. Northwest Iowa had relatively few respondents. A cluster of respondents appeared in Central Iowa and another in Northeast Iowa.

Results

Characteristics of Iowa Food Hubs

Where are Iowa food hubs?

Both the key informant and food hub manager surveys were important for identifying food hub activity occurring in their regions of Iowa beyond the six food hubs the USDA had previously identified in Iowa. The result was a list of an additional 25 entities in Iowa that are food hubs or are filling some type of food hub role, for a total of 31 food hubs or centers of food hub-related activities.

Figure 2 shows the location of the identified food hubs as well as the six hubs on

the USDA list. Food hub activity is clustered around Des Moines metro area and all along the major corridors in Iowa, I-35, I-80, and the Avenue of the Saints (which connects I-35 near Mason City to St. Louis, MO, running through the key Iowa urban areas of Cedar Falls, Cedar Rapids, and Iowa City). In addition, there also is significant food hub activity in sparsely populated Northeast Iowa, as well as Southeast Iowa near Fairfield, which may reflect the important role of small farms in these regions as well as a culture of cooperation in these areas.

Some of the food hubs/centers of food hub-related activities identified by survey participants are located outside of Iowa, showing that food hub work is a regional endeavor, spanning state boundaries.

Figure 2: Food hub activity in Iowa

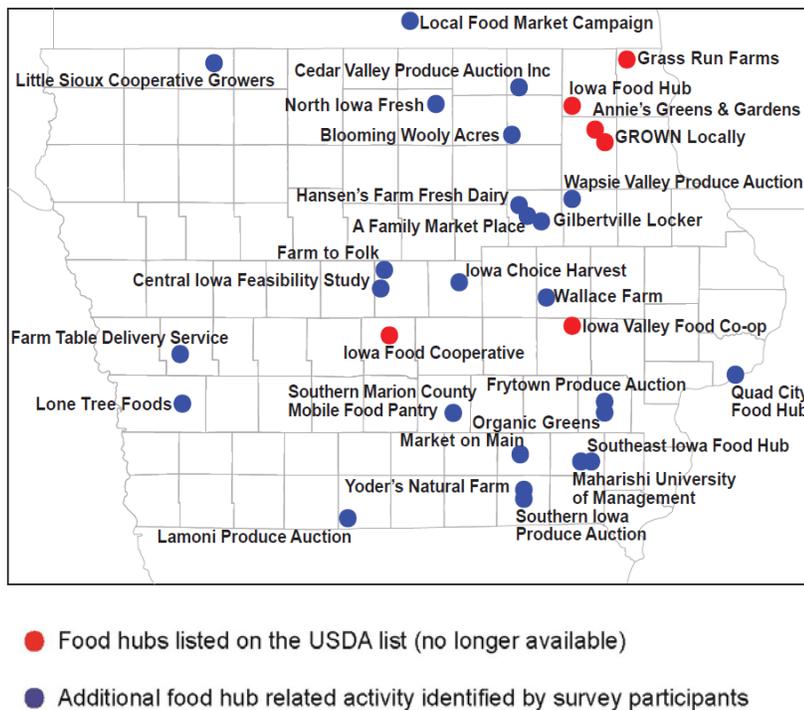
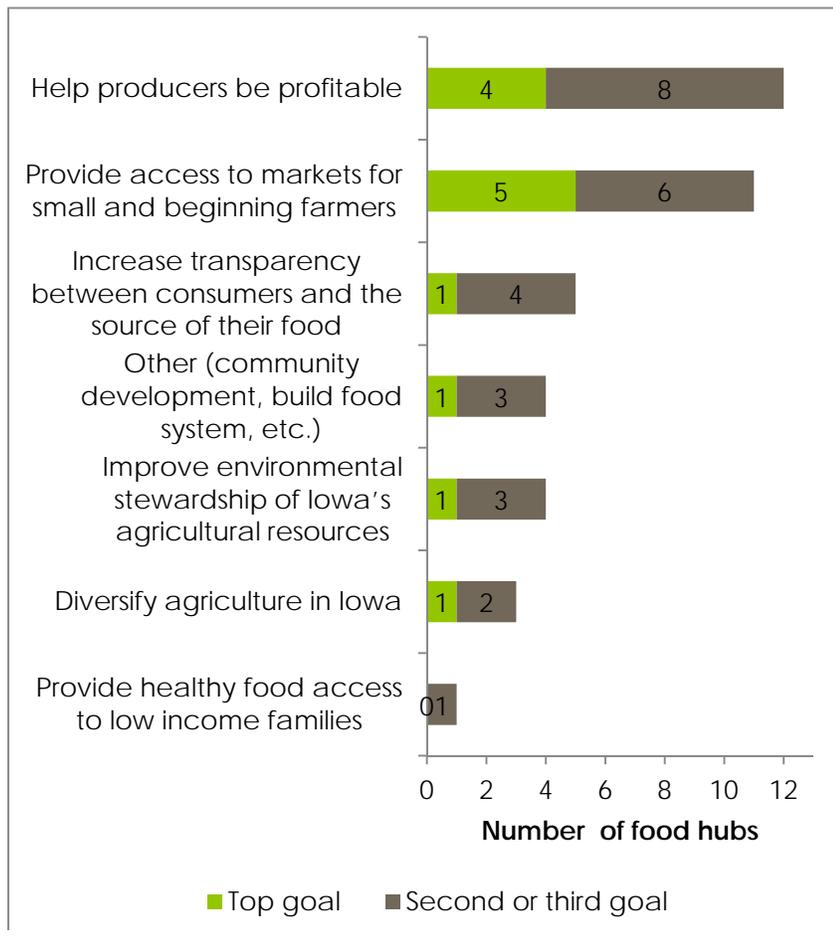


Figure 3: Goals of food hubs in Iowa (n=13)



Goals of food hubs in Iowa

Food hubs work to create a value chain. This means that the chain doesn't just deliver food for the sake of delivering food, but delivers food produced or processed in ways that align with key social values, such as paying fair wages or protecting the environment. One study of food hubs found that the most common goals of food hubs nationally are to support farmers (52 percent) and local food (49 percent). The least common goal was profitability (2 percent)⁸ although one could argue that profitability is a necessary but insufficient condition for food hub development (and success). For example, Grasshoppers, a food hub located in Louisville, KY, went out of business after seven years of operation. The organization offered numerous services to build up the local food system in addition to its core business of aggregation and distribution of

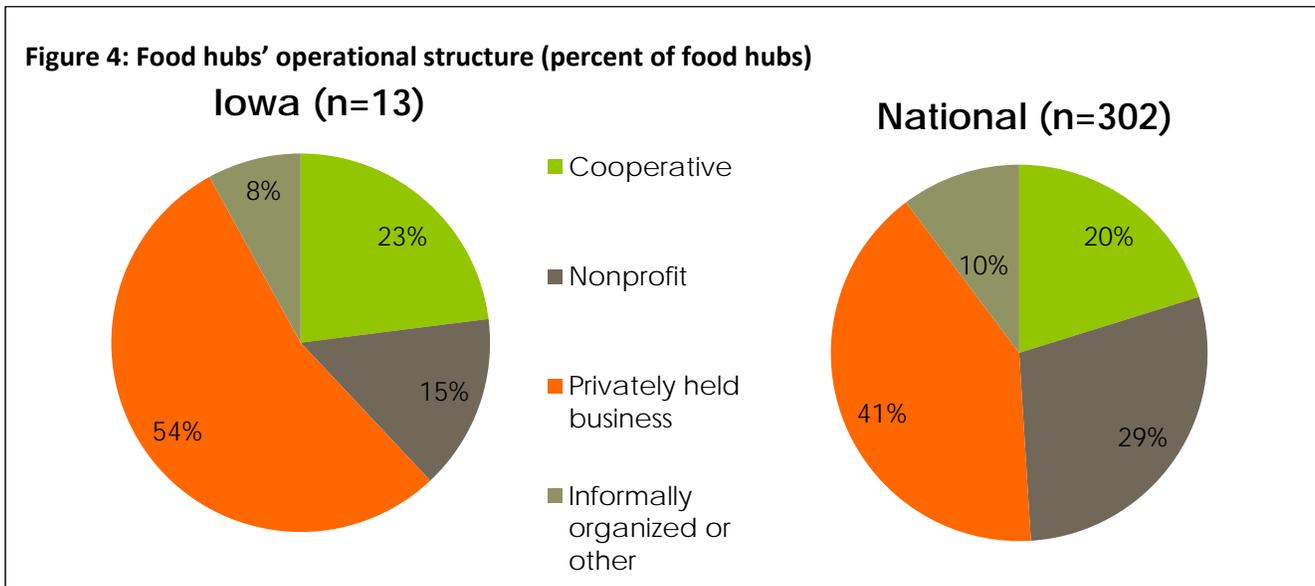
local foods. Reflecting on their ultimate failure, former stakeholders realized they had put their mission-based services above core business functions, so that net income was always negative⁹. Ironically, farmers said that while they appreciated the additional services Grasshoppers offered, such as post-harvest handling education, buying their product was the most important service the food hub offered them. Focusing too heavily on the former prevented them from continuing to do the latter.

The primary goal of Iowa food hubs centered on service to farmers, especially small or beginning farmers, as shown in Figure 3. Environmental goals of land stewardship and agricultural diversity as well as goals of improving food access to low-income or vulnerable families were the least common aims among Iowa food hubs.

Operational structures

Food hubs in Iowa may not follow a typical business model. The very fact that a business might choose a model other than for-profit supports the earlier conclusion that food hubs are more interested in securing social values than profit.

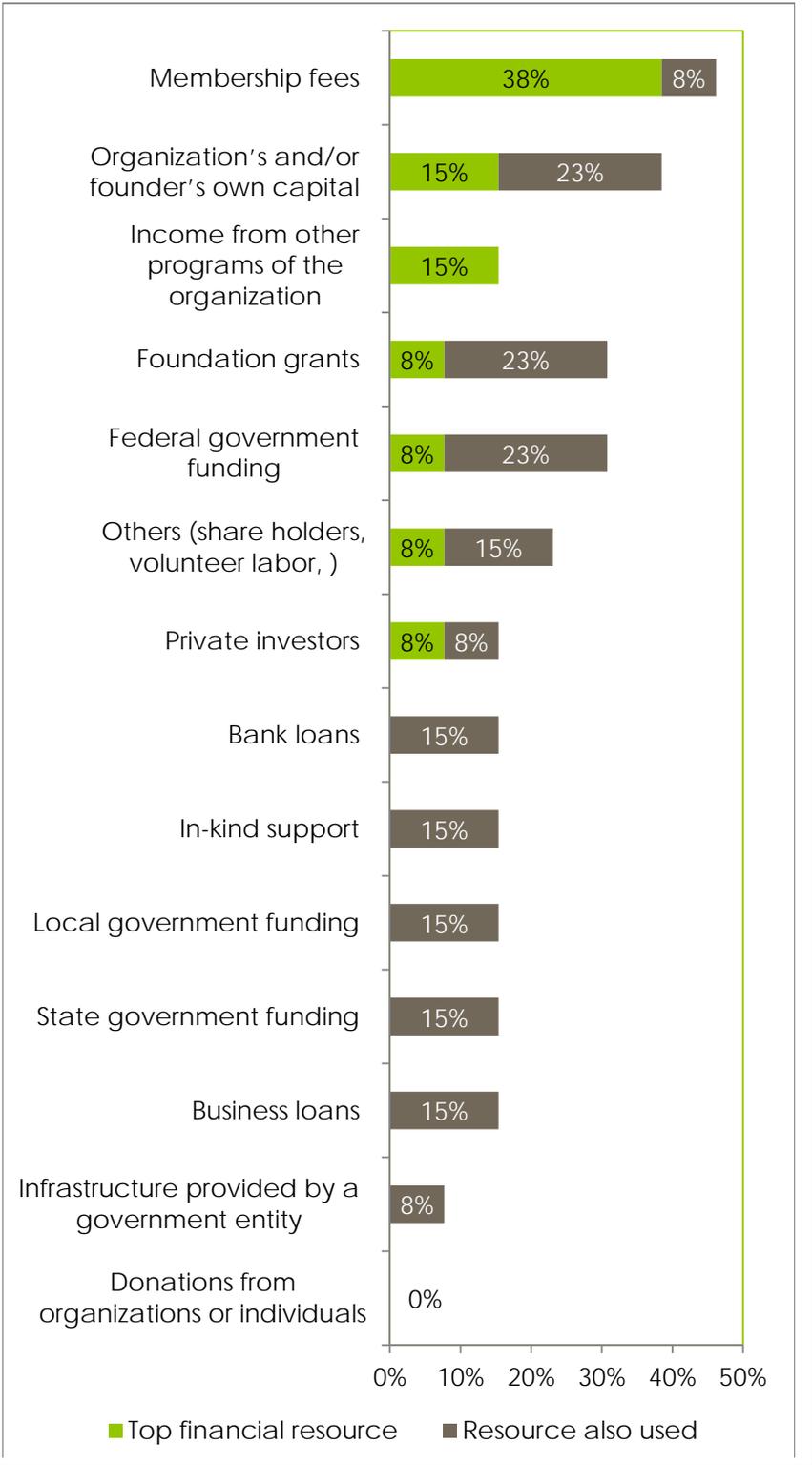
Food hub operational structures typically falls into one of five categories (Figure 4): privately-held businesses, non-profits, cooperatives, publicly owned, and other. The Iowa study found that roughly half of participating Iowa food hubs are privately owned for-profits (54 percent), slightly higher than Low et al. (2015), which found the 41 percent of food hubs were for-profit¹. A somewhat larger proportion of Iowa food hubs are cooperatives (23 percent) than nationally (20 percent) and only 15 percent of food hubs represented in our survey were non-profits compared with 29 percent nationally.



Food hubs may choose alternative business models for various reasons. Non-profits have the benefit of qualifying for specific sources of funding, such as government or philanthropic grants, for which for-profits are not eligible. This is especially helpful if the hub offers additional services to farmers or community members. For example, Red Tomato, a food hub that manages a regional food-based value chain in Massachusetts, developed the Eco Apple label and certification program, which certifies that fruit growers meet specific standards of pest management. Red Tomato's non-profit status allowed it to invest the time and money to create the Eco Apple program, something a for-profit company would not likely be able to do. Other food hubs choose a cooperative structure out of a desire to be community-owned and -led. Cooperatives are guided by a board of cooperative members, which may include farmers, consumers, or both.

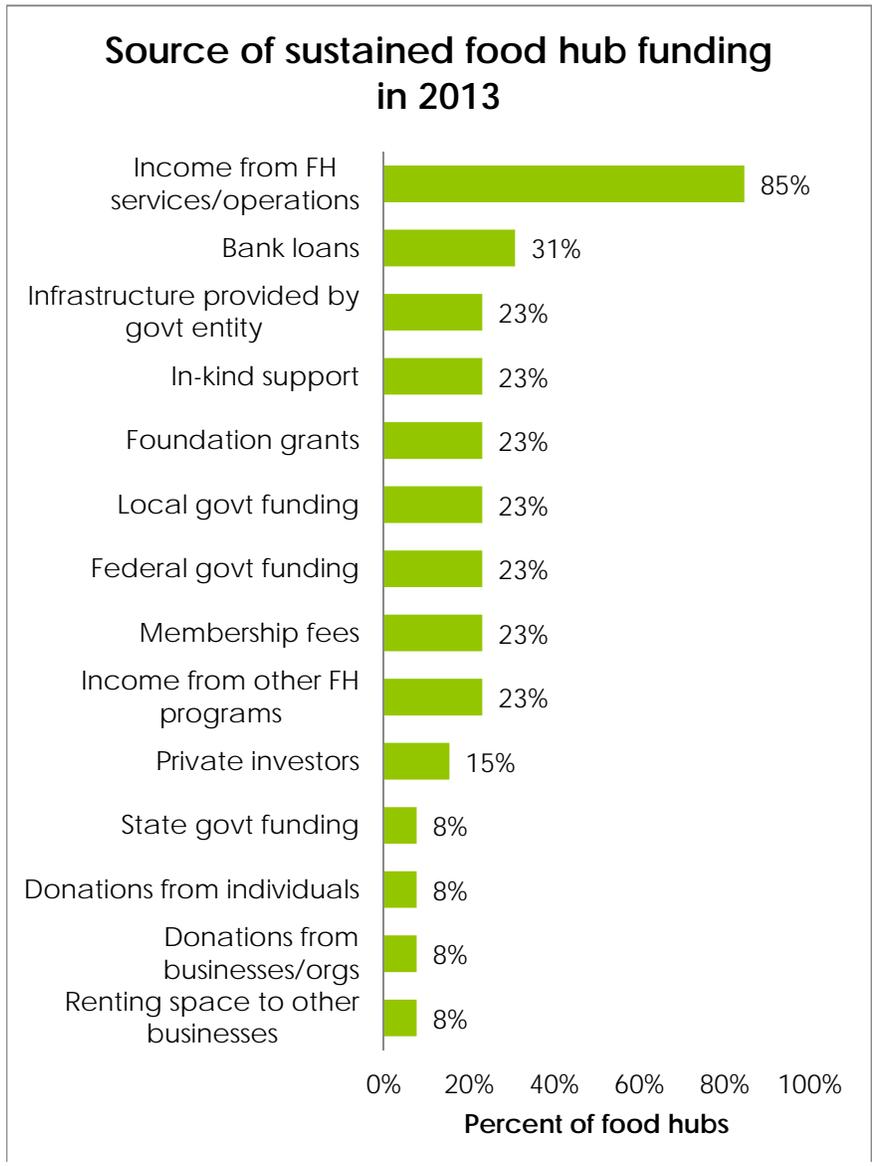
Funding food hub startups

Figure 5: Funds used to begin food hub



Consistent with their varying structures, food hubs in Iowa obtained funds to begin and generate income in different ways. Figure 5 shows that food hubs in Iowa used 13 different types of financial resources to launch their operations. They relied most heavily on membership fees (46 percent) and the organization or founder's own capital (38 percent) to start their food hubs. All of the cooperatives participating in the study listed membership fees as their top source of start-up funds. Consumers and/or farmers become members of cooperatives by investing at the outset. In return, members can participate in co-op activities, such as being able to shop at a co-op store, and may receive dividends or discounts. Since 23 percent of food hubs represented in the survey are co-ops, membership fees were cited first among the financial resources used to start food hubs. None of the food hubs in Iowa used donations as a source of start-up funds.

Figure 6: Source of sustained food hub funding in 2013



Sustained funding

The source of funds used to sustain food hub operations is dramatically different than that of the startup period (Figure 6). Once their operations were underway, food hubs in Iowa relied most heavily on the income from the services they provide, with 85 percent of food hubs generating income that way in 2013. Bank loans (31 percent) were a distant second. The fact that 31 percent of food hubs have been able to secure bank loans indicates that food hubs have strong business plans and banks are becoming increasingly aware of the economic promise of food hubs. Banks typically don't invest in businesses they expect to fail.

Marketing Models

Food hubs usually are seen as serving primarily wholesale markets. However, **only 38 percent (n=11) of Iowa food hubs are selling exclusively through wholesale channels.** This is higher than food hubs around the nation, where 29 percent sell exclusively to businesses¹. Roughly one-third of both Iowa food hubs (31 percent) and food hubs nationally (39 percent) sell exclusively to consumers through their own retail stores, CSA or food box models, or direct-to-consumer models.

Figure 7: Marketing models used by Food Hubs¹

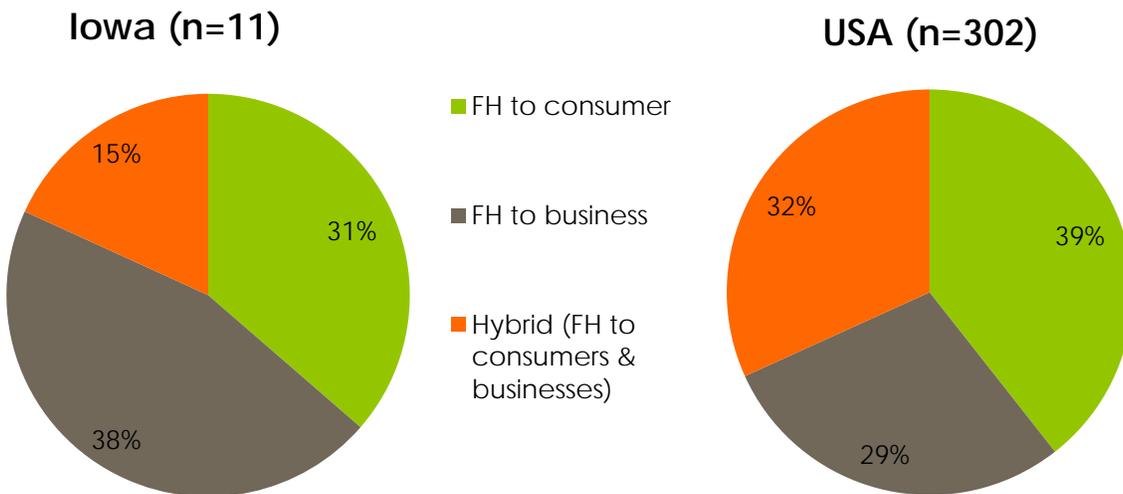
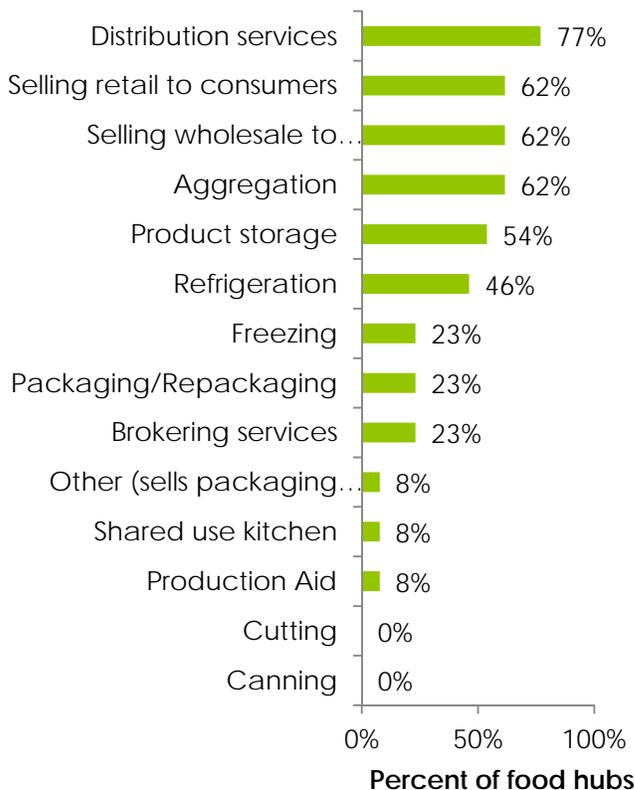


Figure 8: Percent of food hubs offering listed farmer service (n=13)



Iowa food hub services

As mentioned previously, food hubs sell products to large-volume buyers, but also provide various other services to support the movement of food from farm to table or tray. The majority of food hubs in Iowa (77 percent) deliver products to consumers (see Figure 8), rather than relying on others to move product.

Iowa food hubs have yet to dive deeply into food processing, with only 23 percent freezing products, 8 percent offering shared-use kitchens (which often are used to process food for resale). No food hubs were cutting or canning products.

In addition to general product services, the majority of food hubs also offer important services to farmers (Figure 9). Six in ten (62 percent) brand or label their products according to their origin, allowing consumers to know which farm products came from which farms. The majority (54 percent) of food hubs also offer marketing and promotional services to farmers and help farmers find new markets, consistent with food hub goals focused on providing access to markets for beginning and small farmers.

Figure 9: Percent of food hubs offering listed product services (n=13)

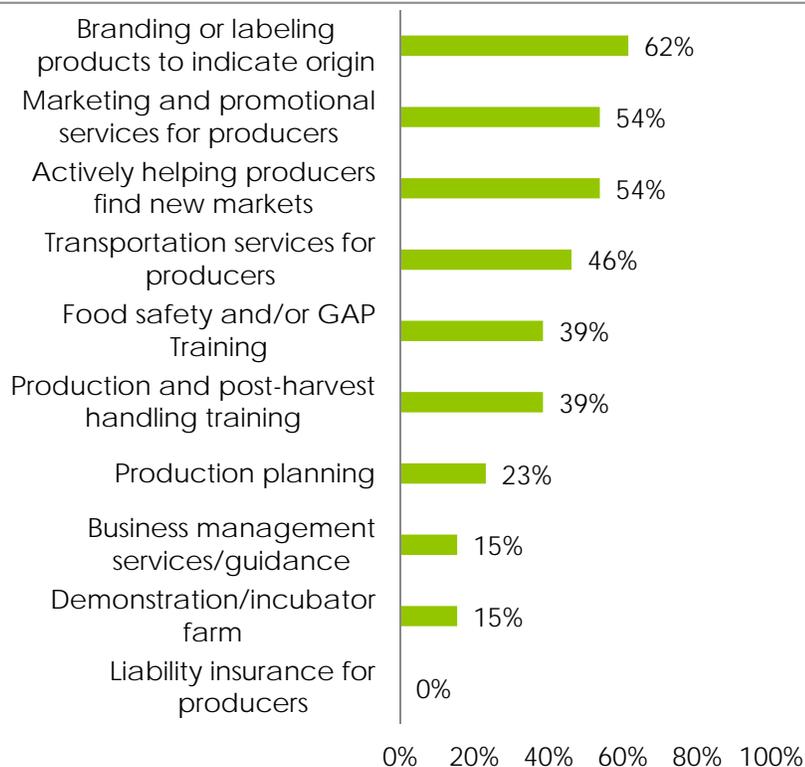
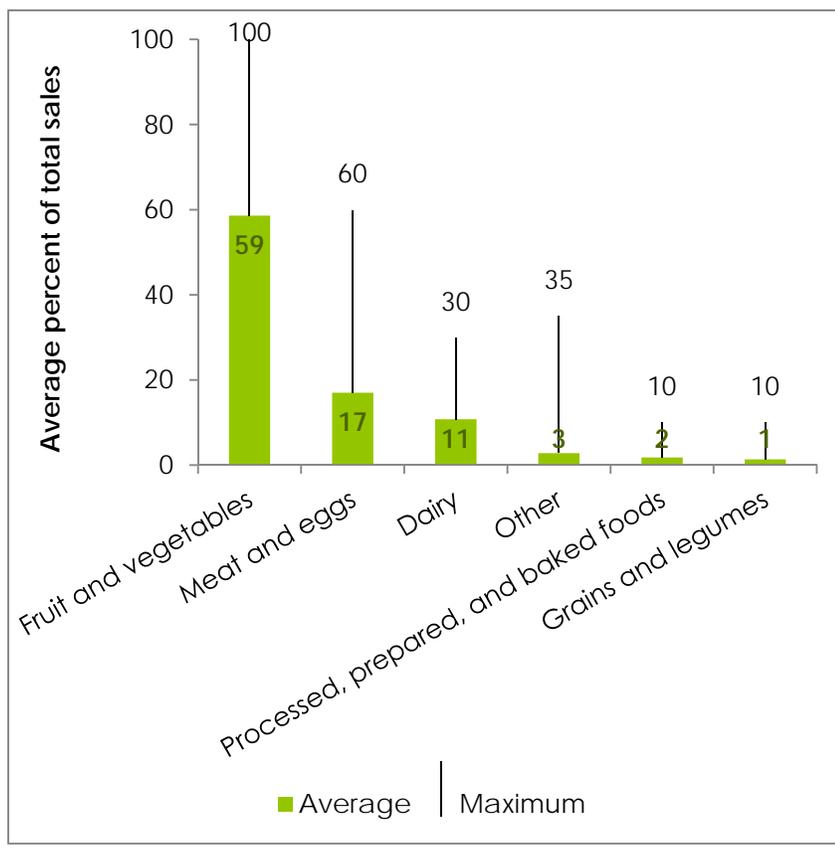


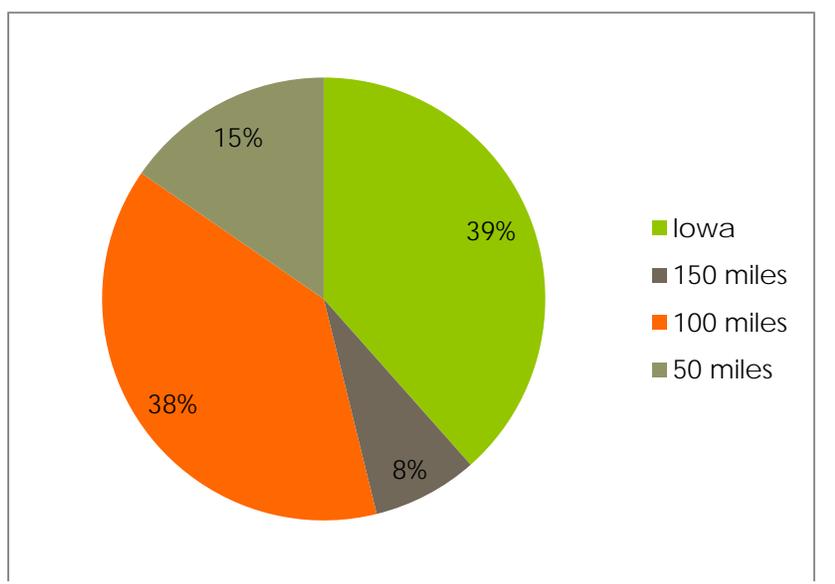
Figure 10: Average percent of food hub sales by product



What do food hubs sell?

The greatest majority of food hub sales in Iowa are of fruits and vegetables. Average produce sales equal 59 percent of all sales, and in extreme cases, some food hubs derive 100 percent of their sales from fruits and vegetables. No food hub derives more than 10 percent of its total sales from grains and legumes or processed, prepared, or baked foods, with the averages being 1 and 2 percent, respectively. These data show that Iowa food hubs are highly dependent on crops that are grown seasonally as opposed to year-round. This dependence on seasonal crops adds a level of instability to product offerings that is otherwise avoided by seasonally independent products such as meat and eggs, dairy, and grains and legumes, which can be sold year-round, thereby providing a steadier stream of revenue.

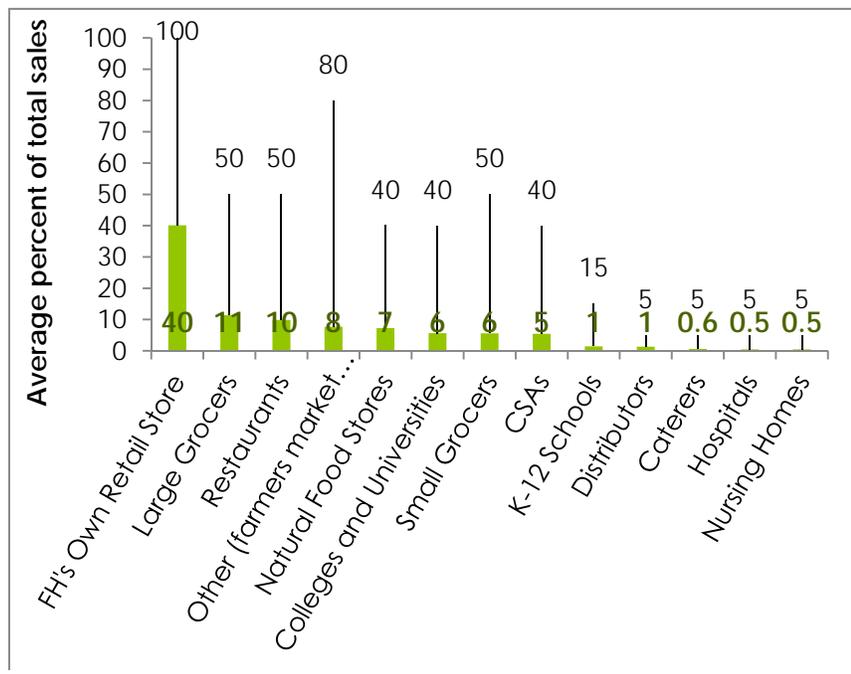
Figure 11: Food hubs’ definition of local- distance from food hub from which they source food



Where do food hubs get and sell their products?

The Iowa survey collected data on where food hubs buy and sell their food. First, participants shared their food hubs’ definition of local, indicating how far from the hub they source food. The most common definitions are “Products produced in Iowa” and “Products produced within 100 miles of the food hub.” The USDA Agricultural Marketing Service defines “local” as products sold within 400 miles of their origin. Participants in the Benchmarking Study sourced food from an average distance of 385 miles⁷.

Figure 12: Percent of food hub sales by customer



Food hub managers shared the percent of their total food sales to different types of customers. Figure 12 shows that on average, Iowa food hubs sell 40 percent of their goods through their own retail stores, with some selling up to 100 percent of their products that way. This is followed by sales to large grocers (an average of 11 percent). While the average percent of total sales to all other venues is less than 10 percent for each venue, some food hubs make over half of their sales via those other venues.

Food hub economic indicators

Despite their growing popularity, food hubs are not a guaranteed success by any means. The Benchmarking Study tracked financial records of 48 food hubs from around the nation and found that as a group they were losing 2 cents for every dollar of product sold⁷. However, the top 25 percent of hubs participating in the study earned 4 cents for every dollar sold, demonstrating that food hubs can be profitable even when operating with tight margins.

Fischer (2014) suggests that a food hub reach a minimum gross sales level of \$600,000 per year to ensure profitability¹⁰. Anecdotal evidence supports the conclusion that reaching a certain sales level may make profitability more likely. For example, Growers Collaborative in Davis, CA, and Red Tomato in Canton, MA, invested heavily in infrastructure at their start, then failed to reach sales levels great enough to pay for their high initial investments¹¹. They were able to survive only after selling infrastructure and beginning to manage food delivery rather than carrying it out themselves. Yet Red Tomato remains unprofitable. However, focusing too much on sales thresholds runs the risk of ignoring the importance of the way food hubs are managed which can be equally critical, albeit more complex, to study.

Gross sales and profitability

Food hub managers in Iowa were asked if they were making a profit after overhead is paid. Sixty-two percent (n=13) indicated that they were, but given the exploratory nature of the survey, we left the definition of “profitable” open to interpretation by the respondent. Unlike the Benchmarking Study, the Iowa study did not ask respondents to share financial records, so no standard method was used to determine if food hubs were profitable.

Table 1: Financial performance of food hubs in Iowa in 2013

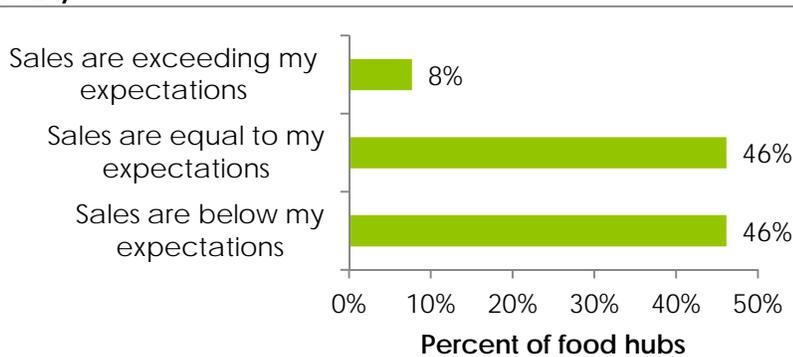
Total gross revenue of all hubs (n=9)	\$4,519,752
Average gross revenue (n=9)	\$451,975
Median gross revenue (n=9)	\$114,000
Percent indicating they are profitable (n=13)	62%

Total gross revenue of all food hubs (n=9) responding to this question was \$4.5 million in 2013, shown in Table 1. The average gross revenue of participating hubs was \$451,975 in 2013, which is close to the \$600,000 cutoff for profitability suggested by Fischer (2014).¹⁰ However, the median shows that half of food hubs in Iowa had sales of less than \$114,000 and half had sales above that level in 2013, indicating that the average is skewed by a few hubs with high sales.

The fact that food hubs commit to paying farmers high enough prices to ensure farmers remain profitable makes it hard for them to resell the product at a price that buyers are willing and able to pay. According to survey comments, this puts pressure on food hubs to shrink their own margin, paying more for food than conventional distributors pay and reselling it for less than they should to succeed. Comments indicated that some Iowa food hubs may need to increase their margins. The 2013 Benchmarking Study also found this to be true of food hubs, and suggest that margins be increased by paying farmers less for

products, charging customers more, or reducing waste along the supply chain⁶.

Figure 13: How are food hub sales meeting your expectations? (n=13)



Food hub managers also were asked if their gross sales were meeting their expectations. The majority (54 percent) said food hub sales were meeting or exceeding expectations, as shown in Figure 13.

Those whose sales were lower than expected cited these factors (listed in order of frequency mentioned):

- Growing competition from other suppliers
- Loss of or lack of buyers
- Lack of collaboration in the food system
- Weather negatively affecting local food production

Two food hub managers explained that it is not a goal of their food hub to make a profit, or at least not right now. One, rather, wants to produce enough to pay labor a reasonable wage, whereas the other doesn't expect to profit for a few more years. Remarks like this demonstrate, again, that food hubs' primary goals may be to produce a social good, rather than to profit. However, food hubs that don't at least break even won't be around for long.

Total food hub jobs (n=13)	58
Total full time, year-round jobs	4
Part-time, year-round jobs	21
Seasonal jobs	33
Total number of farmers supplying hub (n=12)	459

Responding food hubs employ a total of 58 people, although only four hold full-time, year-round jobs (Table 2). In addition, they sell products from a total of 459 farmers. Seventy-seven percent (10) of hubs indicate a total of 97 additional farmers have inquired about accessing new market opportunities through the food hub. This indicates that Iowa food hubs are supporting jobs both within the hubs and on farms, although we are unable to establish whether these jobs are quality jobs that pay a living wage.

Recommendations for development and support of food hubs in Iowa

The two surveys were completed in October, 2014. A follow-up meeting was held with food hub managers and steering committee members to share survey results. They used the results to develop a set of recommendations for next steps in supporting Iowa's food hub development.

Among the recommendations:

- **Form a food hub manager working group.** This group should convene in facilitated meetings focused on resolving specific challenges and sharing best practices.
 - Explore possibilities for shared services, talent and infrastructure

- Consider the role of this network in working with emerging food hub needs
- Collect stories on buyer projections versus actual purchases by food hub managers
- **Form a larger network of hub operators and advocates**, working toward business goals.
- **Conduct an assessment of food hub infrastructure and services.** An assessment is needed to develop an inventory of available infrastructure and services for local food aggregation and distribution. This might include storage space or opportunities to share transportation resources.
- **Position Iowa food hubs to receive public and private investment.** Develop a specific plan to facilitate public and private investment in food hub development.
- **Prepare farmers to sell to food hubs.** Recruit and promote expanded educational opportunities for focused on preparing farmers to participate in food hub markets.
- **Conduct outreach with key stakeholders.** Educate key stakeholders on the survey results in this report, related recommendations, and findings from other seminal works addressing food hub development across the country.

Conclusions

This study was the first systematic, coordinated effort to understand and characterize existing and emerging food hubs in Iowa. While the USDA only listed six food hubs in Iowa in April 2014, our efforts identified an additional 25 food hubs or centers of food hub activity for a total of 31 active or emerging food hubs in Iowa. This study gathered data from 13 (42 percent) of those food hubs or food hub-related groups. Based on those results, we learned that food hubs are generating a significant amount of interest and commerce in local and regional food systems. Nearly \$5 million in local food revenue passed through 13 of Iowa's 31 food hubs or centers of food hub activity. If those we sampled are at all representative, Iowa food hubs are currently purchasing more than \$10 million of locally grown food in the state.

Food hub development is in its infancy in Iowa. The current state of food hub development does not represent what it can accomplish as food hubs evolve over time, increase their sales, and develop reliable, long-term relationships with both farmers and buyers. Median sales for Iowa food hubs is \$114,000, a more accurate number than the average, which was artificially inflated to \$452,000 in Iowa due to figures offered by unusually large food hubs. Although some research suggests that food hubs need to capture at least \$600,000 in sales to be profitable, there is a question as to whether such a magic profitability threshold actually exists. Instead, food hubs can be profitable at any revenue threshold, *as long as they are managed for profitability* (i.e., expenses do not exceed revenue).

Food hubs can be successful only if they can access a sufficient supply of quality, local food. For this reason, food hub capacity is strongly tied to farmer capacity and farmers' willingness to work with food hubs to supply high-volume (and generally lower-margin) markets. Exploring the condition of Iowa farmers who currently supply food hubs may be one of many next steps for us to take to better understand the promise of food hubs in Iowa.

Works Cited

1. Low, S. A. *et al. Trends in U.S. Local and Regional Food Systems: A Report to Congress*. (USDA Economic Research Service, 2015). at <<http://www.ers.usda.gov/publications/ap-administrative-publication/ap-068.aspx>>
2. Lyons, S. & Trout, S. *Iowa CSA Farms 2014 Statewide List of Iowa CSA Farms and Organizations*. (2014). at <<http://www.leopold.iastate.edu/pubs-and-papers/2014-12-iowa-csa-farms>>
3. USDA Farmers Markets Directory - Agricultural Marketing Service. at <<http://search.ams.usda.gov/FARMERSMARKETS/>>
4. Enderton, A. & Bregendahl, C. *2013 Economic Impacts of Iowa's Regional Food System Working Group*. (Leopold Center for Sustainable Agriculture, 2014). at <<http://www.leopold.iastate.edu/pubs-and-papers/2014-11-2013-economic-impacts-iowas-regional-food-systems-working-group>>
5. Barham, J. What are Food Hubs and Why do They Matter. *Smart Marketing* (2013). at <<http://agribusiness.dyson.cornell.edu/SmartMarketing/index.html>>
6. *Food Hub Benchmarking Study Report on Findings 2013*. (Farm Credit East, Morse Marketing Connections, Farm Credit Council, and Wallace Center at Winrock International, 2014). at <<http://ngfn.org/resources/ngfn-cluster-calls/financial-benchmarks-for-food-hubs>>
7. Farbman, J., Matteson, G., Gerencer, C. & Pirro, E. *Food Hub Benchmarking Study 2014*. (2014). at <<http://ngfn.org/resources/ngfn-cluster-calls/food-hub-benchmarking-study-2014#section-3>>

8. Fischer, M. *et al. Findings of the 2013 National Food Hub Survey*. (Michigan State University Center for Regional Food Systems & The Wallace Center at Winrock International, 2013). at <<http://foodsystems.msu.edu/food-hub-survey>>
9. Brislen, L., Woods, T., Meyer, L. & Routt, N. *Grasshoppers Distribution: Lessons Learned and Lasting Legacy*. (Agricultural Experiment Station, University of Kentucky College of Agriculture, Food and Environment, 2015). at <<http://www2.ca.uky.edu/agc/pubs/SR/SR108/SR108.pdf>>
10. Fischer, M. Investigation and analysis of food hub operations. (Michigan State University, 2014). at <<http://search.proquest.com.proxy.lib.iastate.edu/pqdtft/docview/1527173536/abstract/783747F5CAD947FFPQ/1?accountid=10906>>
11. Diamond, A. & Barham, J. Money and Mission: Moving Food with Value and Values. *J. Agric. Food Syst. Community Dev.* 101–117 (2011). doi:10.5304/jafscd.2011.014.013