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Building a Community-based Food System: Green Economic Development

in Central Illinois

Timothy J. Glaza

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Abstract

It has been a challenge for many community-based, small to medium scale, fruit and vegetable farmers to meet the high demand of locally sourced food. Community-based producers have been mostly using farm stands, farmers' markets and community-supported agriculture (CSAs) to meet this demand. Although there has been tremendous growth in the number of farmers' markets and CSA subscriptions, a gap remains for institutional buyers demanding community-based food. Regional food hubs may be the critical piece needed for filling this gap.

The Edible Economy Project in partnership with Heartland Community College is working on a regional food hub network project in central Illinois to create a more efficient and vibrant community-based food system. A regional food hub is defined by the USDA as “a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand” (Barham et. al, 2012, p. 4). Through food hubs, buyers and farmers are better able to connect and efficiently make transactions. Food hubs allow community-based food to be more accessible and the hope is that farmers will be able to meet the high demand for community-based food. This research places the community-based food system into the broader green economy and takes a case study approach for explaining how a community with diverse stakeholders may develop a food hub.

Table of Contents

Acknowledgements.....4

Introduction.....5

Chapter 1: Collective Impact and the Green Economy Centers.....12

Chapter 2: Transformation of the Food System: Economic, Health, Environmental, and Social
Benefits of Community-based Food.....18

Chapter 3: Food Hub Models.....28

Chapter 4: Creating a Central Illinois Food Hub Network.....29

Chapter 5: Conclusions and Recommendations.....51

References.....53

Appendix A: USDA Rural Business Enterprise Grant Application

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Introduction:**Economic and Environmental Imbalance**

The economy of Illinois along with most of the United States is slowly recovering from the deep economic recession that started in 2007. Unemployment in Illinois for January 2013 was at 9.0% (Bureau of Labor Statistics, 2012). Numerous economic indicators are still gloomy. Income inequality has increased, household debt remains high and wages have stagnated (Weller, 2012).

In 2012, Illinois like most Midwestern states faced the worst drought in 50 years (Pearson & Abbey, 2012). Water supplies have yet to fully recover and agriculture harvests have been quite low. More unusual and extreme weather is expected according to the Intergovernmental Panel on Climate Change, herein referred to as IPCC (2007). The IPCC is a group of the most well trained climate scientists from around the world. They have found that climate change is happening and is caused by greenhouse gas emissions from humans. A report from the World Bank (2012) highlights the urgent need to reduce greenhouse gas emissions to prevent a global temperature rise of 4° C. Even if current commitments towards reducing greenhouse gas emissions are met by the year 2100, there remains a 20% chance of at least a 4° C temperature increase. “A world in which warming reaches 4° C above preindustrial levels (hereafter referred to as a 4° C world), would be one of unprecedented heat waves, severe drought, and major floods in many regions, with serious impacts on human systems, ecosystems, and associated services” (World Bank, 2012, p. xiv).

To address economic stagnation and climate change, the Economic Recovery Commission of Illinois (IERC) has issued a report describing what can be done. The IERC was formed by the State of Illinois and brought together leaders in a variety of fields including

business, education, technology, and government to explore how Illinois can build on its assets to grow the economy. They found that Illinois is in a unique position to grow the economy while relying on sustainable technologies that benefit the environment (Economic Recovery Commission [ERC] 2010). The Sustainable Energy Committee on the ERC recommends that any plan for economic growth must include significant actions to grow the green economy.

A 2010 study by the Illinois Department of Employment Security (IDES) found that Illinois has 115,208 green jobs and this sector is expected to grow at an annual rate of 13.4% from 2012-2014. The IDES defines a green job as “a job in which the work is essential to products or services that improve energy efficiency, expand the use of renewable energy or support environmental sustainability” (p. 1). Illinois and the federal government have been investing in the green economy through a variety of grants and projects. The Illinois Department of Commerce and Economic Opportunity is funding the Illinois Community College Targeted Energy Management Training (ICCTEMT) program with the goal to help build capacity around energy management for community college staff, students, and general business communities.

Another green economic development program is being funded by the United States Department of Labor with a focus on workforce development. The Trade Adjustment Assistance Community College and Career Training (TAACCT) grant is being implemented by many Illinois community colleges through more than 30 online-hybrid associate degrees and certificates.

In a report by the Brookings Institution, *Sizing the Clean Economy*, it was found that people in green jobs, even those who are less educated, make more than their counterparts in non-green jobs. “Median wages in the clean economy—meaning those in the middle of the distribution—are 13 percent higher than median U.S. wages. Yet a disproportionate percentage

of jobs in the clean economy are staffed by workers with relatively little formal education in moderately well-paying “green collar” occupations” (Muro, Rothwell, & Saha, 2011, p. 4). Further, job growth for “green jobs” increased much quicker than total job growth. The Pew Charitable Trusts found that “between 1998 and 2007, clean energy economy jobs—a mix of white and blue-collar positions, from scientists and engineers, to electricians, machinists, and teachers—grew by 9.1 percent, compared to 3.7 percent for total job growth” (AACC, 2011, p. 1). It is clear that the green economy is growing but it is important to ask what is meant by the green economy.

The green economy is defined in numerous ways. In 2008, University of California-Berkeley professor Karen Chapple wrote “the green economy is not just about the ability to produce clean energy, but also technologies that allow cleaner production processes, as well as the growing market for products which consume less energy, from fluorescent light bulbs to organic and locally produced food. Thus, it might include products, processes, and services that reduce environmental impact or improve natural resource use” (p. 1).

The green economy can be conceptualized as having two parts. The first part, the core green economy, “contains companies and institutions providing products and services that conserve resources, provide clean alternatives, reduce pollution and repurpose waste” (St. Louis RCGA, 2011, p. 4). The other part, the adaptive green economy, “encompasses companies and institutions that undertake serious efforts to green their products, processes, and supply chains” (St. Louis RCGA, 2011, p. 4).

Another dimension to the green economy influences people in a more direct way. The United Nations Environment Programme (2011) defines the green economy as “one that results

in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (p. 16).

The definition of the green economy has been evolving and consensus remains out of reach. The green economy can be found in a variety of economic sectors yet there is a challenge in measuring and formalizing it. However, there has been growth in the number of green economic jobs and a strong demand for more. Andrew Liveris, Dow Chemical Company CEO, claimed that, “a renaissance is within reach, if Americans are the ones who design and build the new [clean economy] technologies it will re-energize commerce in the United States, creating, without a doubt, millions of high-paying jobs” (Muro, Rothwell, & Saha, 2011, p.7).

There is an urgent need for green economic development in the United States. The Global Green Economy Index (2012) has been compiled by the consultancy firm, Dual Citizen Inc., to rank how countries perform in the area of green economic development. The United States is perceived by other countries to be the fourth greenest economy but in fact, the actual performance of the United States keeps it out of the top ten rankings. A potential reason given by the Global Green Economy Index (2012) for this difference between the perception and reality is that there have been incremental improvements in performance by the United States but a binding emissions reduction plan has not been agreed upon. In other words, the public may hear about positive green economic development but these developments tend to be piecemeal and not systemic. The economy in the United States has historically been an innovative economy but is falling behind in the area of green economic development.

A Shift in Thinking

Businesses are beginning to embrace opportunities in the green economy. A business that focuses on people, planet and profit is concerned with the triple bottom line. The triple bottom

line is used to capture “the essence of sustainability by measuring the impact of an organization's activities on the world ... including both its profitability and shareholder values and its social, human and environmental capital” (Slaper & Hall, 2011). This concept of the triple bottom line is quickly becoming the new norm.

Governments, businesses, and organizations are making sustainability a top priority. A study that surveyed thousands of companies from 113 countries appeared in the MIT Sloan Management Review (2012). The study, “Sustainability Nears a Tipping Point,” focused on 3,000 executives and their responses. It found that 70% of companies place sustainability permanently on their management agendas. Sixty-six percent of respondents said “sustainability was necessary to being competitive in today’s marketplace, up from 55% in our 2010 survey” (MIT Sloan Management Review, p. 3). Businesses around the world are increasingly including sustainability into their strategic plans. Businesses find out what makes sense for them and are able to tailor sustainability to fit their needs. Greenbiz.com has released the State of Green Business (2012) report indicating that for many businesses, sustainability has become “...normal, even mundane...” (Makower & editors, p. 5).

Discrete and Systemic Environmental Problems

Governments, businesses, and organizations have not always worried about sustainability and environmental impact. Economic development has often been perceived to be at odds with environmental sustainability. The United Nations Environment Programme (2011) claims that environmental sustainability and economic progress move together. “Perhaps the most prevalent myth is that there is an inescapable trade-off between environmental sustainability and economic progress. There is now substantial evidence that the greening of economies neither inhibits wealth creation nor employment opportunities. To the contrary, many green sectors provide

significant opportunities for investment, growth and jobs” (p. 16). It is worth noting briefly how environmentalism has become part of economic development. Fiskel et. al (2009) trace the environmental movement in the United States and show how it has evolved. The focus during the 19th century was on land conservation. There was a shift during the 20th century to focus on human health risk and site-specific problems. The focus for the 21st century has been and will continue to be on complex regional and global problems.

Through the 19th and 20th centuries, environmental issues have been approached largely in isolation. Tracts of land have been conserved as part of the National Park system, dirty rivers have been cleaned up, and some deforested areas have been replanted and allowed to regenerate. These types of issues can be considered technical problems. As described by Kania & Kramer (2011), technical problems are well defined, the answer is known in advance, and one or a few organizations have the ability to implement the solution, e.g. funding a college scholarship or building a hospital.

The 21st century is facing more complex, systemic, economic and environmental problems that cannot be solved in isolation. More complicated problems are considered adaptive. Adaptive problems are complex, the answer is not known in advance, and even if it were, no single entity has the resources or authority to create the necessary change, e.g. reforming public education, adapting to climate change.

Adaptive problems require a systemic solution. “Despite the dominance of this approach, there is scant evidence that isolated initiatives are the best way to solve many social problems in today’s complex and interdependent world. No single organization is responsible for any major social problem, nor can any single organization cure it” (Kania & Kramer, 2011, p. 39). Our transition to a green economy requires that we solve adaptive problems, e.g. climate change and

economic recession, with an adaptive solution. Kania and Kramer (2011) provide an approach, collective impact, which fosters adaptive solutions for handling complex issues.

Globalization, interdependency, and climate change are driving collective problem solving. Makower (2009) writes about how the environmental challenge has evolved in that local problems of the past are different from global problems of today. Environmental problems of the past were and some that persist today are “local, immediate, visible, relatively singular in cause (i.e., factories dumping waste into the river), short-lived (i.e., the river was cleaned up within a decade), and thus solvable” (Makower, 2009, p. 14). In addition to these singular problems, there is now climate change. “It is global, largely invisible, resulting from millions of sources over a century or so. Its magnitude and persistence make it debatable whether it can ever be controlled, let alone solved” (Makower, 2009, p. 14).

Fiskel et.al (2009) quote Senge (and colleagues) who advocate thinking through a systemic framework, “if we see each problem—be it water shortages, climate change, or poverty—as separate, and approach each separately, the solutions we come up with will be short-term, often opportunistic quick fixes that do nothing to address deeper imbalances” (p. 8718). Makower (2009) agrees with Senge et. al., “These are problems that cannot be solved by doing a few simple things. Today’s environmental challenges are far beyond anything we’ve faced before, affecting not just the birds and the trees but also, potentially, the economics, public health, and well-being of all humans, too” (p. 14). In this new century, solving environmental problems requires a fundamental shift in our economics and our approach to solving problems.

Chapter 1: Collective Impact and the Green Economy Centers

Collective Impact

Collective impact is an innovative framework for tackling adaptive problems. It is defined as “the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem” (Kania & Kramer, 2011, p. 36). Although many actors, including government, businesses, and organizations have become more environmentally conscious and pursued green economic development at some level, system-wide progress remains a challenge. There has also been a struggle for initiatives to work synergistically and to avoid duplicating efforts. Collective impact is much more than mere collaboration. “Unlike collaborations, collective impact initiatives involve a centralized infrastructure, a dedicated staff, and a structured process that leads to a common agenda, shared measurement, continuous communication, and mutually reinforcing activities among all participants” (Kania & Kramer, 2011, p. 38).

The large-scale systemic change that is needed for green economic development can derive from many participants working in unison rather than from individual entities working in isolation. In contrast to collective impact, isolated impact is “an approach oriented toward finding and funding a solution embodied within a single organization, combined with the hope that the most effective organizations will grow or replicate to extend their impact more widely” (Kania & Kramer, 2011, p. 38). Collective impact rejects the idea that isolated organizations only need to scale up to have success. Collective impact is an approach that relies on diverse actors to connect and work together through the five conditions of collective impact.

The five conditions identified by Kania & Kramer (2011) for collective impact success are:

1. Common agenda: shared vision for change and a common understanding of the problem.
2. Shared measurement system: agreement on the ways success will be measured and reported. Same types of activities require same measurements.
3. Mutually reinforcing activities: actions should be coordinated to reinforce each other. Actors play their roles based on their capabilities and strengths.
4. Continuous communication: there is a strong need to develop trust and consistent participation.
5. Backbone support organization: a platform that is able to create and manage collective impact as a separate organization and staff with a very specific set of skills to serve as the backbone for the entire initiative.

The community college system in the United States has a record of bringing diverse stakeholders together for collective action. Working people and the economy are connected through education and community colleges are critical for providing the economy with an educated workforce. From 1993-2002, community college enrollment has grown 7.8% faster than four-year college enrollment (Vaughn, 2006). Illinois' well established and flourishing community colleges are connected through the Illinois Green Economy Network (IGEN). IGEN is a consortium of Illinois community colleges formed to provide a platform for sharing best practices in sustainability and green training across campuses, curricula, workforce and every community in Illinois, as served by the 39 contiguous districts of those colleges. IGEN builds on existing assets and can reveal new partnerships and resources. With IGEN's work on community college campuses, they have been successful in collective impact. "Collective impact efforts are

most effective when they build from what already exists; honoring current efforts and engaging established organizations, rather than creating an entirely new solution from scratch”

(Hanleybrown, Kania, & Kramer, 2012, p. 6).

IGEN provides the backbone support organization needed to facilitate the other conditions for collective impact success. “Backbone organizations embody the principles of adaptive leadership: the ability to focus people’s attention and create a sense of urgency, the skill to apply pressure to stakeholders without overwhelming them, the competence to frame issues in a way that presents opportunities as well as difficulties, and the strength to mediate conflict among stakeholders” (Kania & Kramer, 2011, p. 40). By working within the community college system, IGEN has established the trust and credibility of being a neutral and fair mediator and facilitator.

Complex issues such as climate change or reforming the school system do not have a clear, pre-determined solution. Solutions often emerge through stakeholder interactions. Collective impact provides a conducive environment for stakeholders to discover resources, opportunities, and solutions that were previously unknown. The process of collective impact becomes a solution in itself. “The power of collective impact lies in the heightened vigilance that comes from multiple organizations looking for resources and innovations through the same lens, the rapid learning that comes from continuous feedback loops, and the immediacy of action that comes from a unified and simultaneous response among participants” (Kania & Kramer, 2013, p. 2). As a convener, IGEN is providing an excellent opportunity to catalyze green economic development.

The Green Economy Centers

As IGEN's lead administrative colleges, the College of Lake County, Heartland Community College, and Southwestern Illinois College, have established Green Economy Centers (GEC). The mission of the GEC is to operate in the community college environment within the IGEN network to spur green economy initiatives through collaborations with regional stakeholders based on changing green market demands. As shown in Figure 1, these green economy initiatives can have many levels of reach.

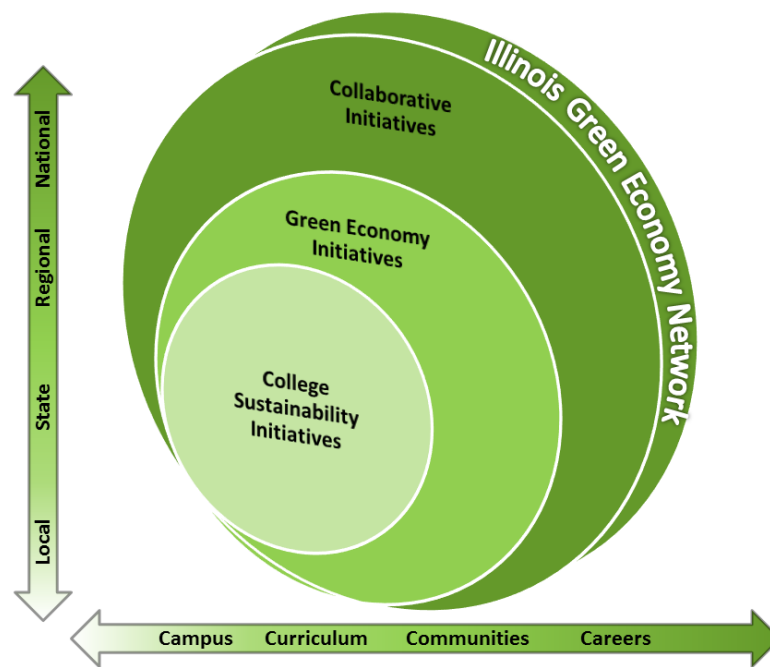


Figure 1: IGEN organization concept.

GECs accomplish the shared mission by providing resources, referrals and forums, facilitating collaboration, and acting as promoters for those businesses and organizations seeking to be more sustainable in their operations.

Illinois' three GECs will be managed by designated community colleges and located on their respective campuses. Each GEC will collaborate with IGEN and all 48 community college

campuses. While there are no hard regional boundaries, each GEC will communicate with community college sustainability professionals to ensure all institutions receive appropriate services and opportunities for engagement. GECs will work on regionally developed initiatives and contribute to a learning atmosphere.

Each GEC will:

- Work on specific green economic development initiatives in their community
- Facilitate strategic relationships among stakeholders
- Communicate through the statewide IGEN network by establishing sector based working groups, participating in monthly GEC Director conference calls and contributing to IGEN newsletters
- Develop a sector based toolbox containing resources to share with other GECs
- Seek out and obtain funding for green economic development projects
- Collaborate with other GECs, TAA representatives, and employers to create and develop a Green Employer Alliance
- Create green-related professional development opportunities for businesses, college faculty and staff
- Compile an annual report documenting the GEC story

The GECs are able to unite important actors who are committed to greening the economy along a common, progressive path. The GECs provide centralized infrastructure, dedicated staff, and a proven process that is able to capture the five conditions of collective impact as defined by Kania & Kramer (2011).

Located in central Illinois, Heartland Community College has been designated as a GEC focusing on community-based food systems. A community-based food system is defined as “a

food system in which everyone has financial and physical access to culturally appropriate, affordable, nutritious food that was grown and transported without degrading the natural environment, and in which the general population understands nutrition and the food system in general” (University of Michigan, 2009, p. 23). Developing a stronger community-based food system is just one way to generate green economic development. A community-based food system can improve the triple bottom line of economic growth, environmental sustainability and social equity.

Local food and community-based food are often used interchangeably. There are many definitions used for local food and it is worth noting what is meant by both local food and community-based food. Local food can mean food that is produced within the state, within 400 miles, or even within the country. The GEC’s work is within Illinois and therefore local indicates that the food is grown within Illinois. But instead of using the term local, community-based food provides a more apt description of what the GEC is working on because of its emphasis on the triple bottom line.

Chapter 2. Transformation of the Food System: Economic, Health, Environmental, and Societal Benefits of Community-based Food

A very brief history of agriculture in the United States

The United States has undergone a huge agricultural shift from the late 1800s until today. The United States food system is presently far more industrialized, efficient, and energy intensive than before. The reality is that the food system is global. Although there are benefits to this system such as cheap food, diversity of choices, and convenience, there are also many costs to public health, the environment, and the economy. Like many things in American life, the food system has undergone a massive transformation over the past 100 years. Agriculture has gone from being localized and community-based to industrialized and globally based. Michael Pollan, an influential food studies author, gave a lecture, “Eating Oil, Eating Sunshine”, at the University of California Berkeley in 2012. The following are some statistics from his lecture.

Since World War II, the United States food system has become very efficient. In 1930, the average American spent 24% of their income on food. Today that figure is just under ten percent. Food has become abundant and cheap but there are significant costs associated with the global food system. Twenty percent of fossil fuels used in the United States are consumed by food production. This energy use has serious implications for climate change. \$500 billion per year is spent on diseases related to diet. It is often mentioned how health care costs are so high in the United States but rarely is it mentioned that much of it is because, on average, Americans do not eat fresh and healthy food.

A different food system is beginning to emerge because the costs of the global industrial food system are becoming clear and undesirable. The number of farmers’ markets are increasing. The United States Department of Agriculture (USDA) began publishing a directory of farmers’

markets beginning in 1994. The USDA (2012) counted 1,755 markets in 1994 and counted 7,864 in 2012, an increase of 448% over 18 years. The number of community-supported agriculture (CSAs) subscriptions are also increasing at a similar rate. McFadden (2012) finds that there were just two CSAs in 1986 and there are over 6,000 today. The high demand for community-based agriculture is clear. The United States Department of Agriculture has been researching and funding community-based food through the “Know Your Farmer Know Your Food Initiative” or KY2. This KY2 Initiative has sparked a lot of interest across the United States and has streamlined the federal government’s work in the area of community-based food.

It is argued that community-based food tastes better, is more nutritious and is more environmentally friendly. Community-based food has the potential to boost local economic growth and to build stronger and more resilient communities. Most of the United States population has become disconnected from the origins of their food but that is beginning to change. This disconnection with the production of food hasn’t always been the case. During World War II, Americans participated in a victory garden movement. It is estimated that 42% of the fresh vegetables consumed by Americans during 1943 were grown in home gardens (Peters & Wooley).

Rise of the local food movement

Farmers’ markets and community-supported agriculture (CSA) have been expanding exponentially in the past 20 years in response to a high demand for locally sourced food. Many community members want to know where their food comes from and want to build relationships with the people who grow it. What are some of the arguments for consuming and supporting community-based and locally sourced food? Local food is often advocated because it can be an

economic boost to local communities, it tends to be more nutritious, it tends to be better for the environment, and it can foster stronger communities and build social capital.

Local economic development

Supporting local food has the potential to create local jobs and increase local earnings. In 2011, Ken Meter, President of Crossroads Resource Center, conducted a study concerning the agricultural economy in central Illinois. Twenty seven percent of central Illinois' farms and ranches reported net losses in 2007. Meter found that central Illinois consumers spend about \$3.9 billion annually buying food that comes from outside of Illinois. Farmers in central Illinois spend about \$2.3 billion annually buying inputs for their production from outside Illinois. Adding these two numbers together equals \$6.2 billion annually that are going outside of Illinois. However, central Illinois farmers receive \$464 million each year from the crops that they grow. This means that the total loss to the region is \$5.8 billion of potential wealth each year. If more food and inputs could be bought locally, the total loss could decrease.

If an average family living in Bloomington, IL shops at a supermarket and spends \$200 per week on food, it is very likely that a tiny proportion of that food comes from central Illinois farmers. But if the average family were to spend \$170 at the supermarket and \$30 at the farmers market per week, Meter found that this would generate \$639 million of new farm income for the region. In other words, if farmers spent 15% of their food budget directly on local food, hundreds of millions of dollars of wealth would be generated in central Illinois. Although the purpose of food hubs is not for consumers to buy directly from farmers, food hubs do allow businesses in central Illinois to source their food locally that will, in turn, generate new revenue for local farms.

The switch to buying food outside the region to buying food locally is referred to as import substitution. Import substitution is “replacing items purchased outside the region with local production” (Homm et. al, p. 3). Relying on locally produced goods and services can prevent money leaving the economy and this phenomenon is investigated through the local multiplier effect. Locally owned businesses tend to rely on local services and suppliers keeping more money within the local economy.

The local multiplier effect

Additional revenue generated through local food purchases has the potential to further positively impact the local economy through the local multiplier effect. Understanding the local multiplier effect is one way to think about local economic development. An important question to consider is what happens to a dollar when it is spent in a community? How much of that dollar is re-spent in that community and how much of that dollar goes outside the community?

Ken Meter defines an economic multiplier as “a measure of how many times a dollar earned in one community cycles through that locale before it leaves” (Meter, 2011 January, p. 10). If the multiplier is 1.0, that means each dollar a given business earns leaves the community immediately. If the multiplier is 2.0, this means that for each dollar earned, an additional dollar cycles through the locale. In other words, “the multiplier is a measure of the economic infrastructure that surrounds a given business” (Meter, 2011 January, p. 10). “If the infrastructure connects local economic actors and promotes local trade, the multiplier gets larger. The more connected a community is to itself, and the more local businesses trade with each other, and the longer a given dollar will linger in the community” (Meter, 2011 January, pp. 10-11). It is worth noting that there is a difference between the local multiplier effect indicator and saying that these

dollars will multiply through the community four to five times. The indicator measures the intensity of the multiplication as will be illustrated below.

The American Independent Business Alliance defines the multiplier effect as “the boost to your local economy that results from locally-owned independent businesses, owners, and employees spending business revenue within the region. Typically, local independent businesses recirculate a much greater percentage of sales locally compared to absentee-owned businesses (or most locally-owned franchises).” With an emphasis on place, local farms do not outsource their jobs and have a strong connection to their community.

There have been many studies calculating the local multiplier effect. Otto and Varner (2005) used an IMPLAN Input-Output economic model to estimate the local economic impact of farmers markets in Iowa. Fruits, vegetables and baked goods made up the vast majority of sales at the farmers markets surveyed. Otto and Varner found that “overall, an estimated \$31.5 million of gross sales (using the total sales estimate from consumer reports) and \$12.2 million of personal income effects were directly or indirectly related to farmers’ market activity, according to the IMPLAN I-O model; based on these estimates, the calculated multipliers were 1.58 and 1.47 respectively” (p. 15). These high multipliers indicate that money spent on food at farmers’ markets tends to spread throughout the local economy more intensely than if the food were bought from a supermarket.

How much does the local multiplier effect matter?

The local multiplier effect is a powerful concept that was introduced by the influential economist John Maynard Keynes (Sacks, 2002, p. 12). In the area of local economic development, the local multiplier effect can be very useful for communities who want to understand where their money spent goes.

The New Economics Foundation (NEF) located in the United Kingdom has developed a guidebook to help calculate the local multiplier effect. The NEF has named their tool, LM3. The three in LM3 denotes three rounds. If we think about a consumer who spends money at a business, this first exchange can be considered round one. Next, the business pays its employees and buys supplies. That is round two. Round three is determined by what the employees and the suppliers do with the money received from the initial business. The rounds can continue but three rounds are sufficient to capture most of the local multiplier effect.

To determine the local multiplier effect, you will need to obtain sensitive information from people such as income and wages. Although these data remain confidential to the researcher, people may be reluctant to disclose this information if there is not a strong relationship and trust established. Another issue to think about is what exactly is local? Are you focusing on a town, county, or state? Determining what is local is a significant first step.

To be more specific to local food, here is a possible way toward finding the local multiplier effect. The first round will be to determine the initial income of a local farm. It is important to clarify what is being measured. Is the produce from an entire farm being measured or just some produce? It is best to use net annual income of whatever is being measured.

The second round will be to determine what the farm spends its money on. Using the overall spending of the farm, local and non-local spending will need to be calculated. Local money tends to be spent on wages for employees, contractors and subcontractors, suppliers of goods and services, and rent or mortgage.

The third round will be determined by how various local people and organizations that receive money from the farm then re-spend that money. Examples of local people and organizations include employees, contractors and sub-contractors, suppliers of goods and

service, investment in the company and rent or mortgage. Local people may spend money locally on food, clothing, entertainment, and rent or mortgage.

From there, local spending from round one, round two, and round three are added and the sum is divided by round one. This number indicates the local multiplier effect. The higher the number, the more money that is re-circulated in a community. As a very simplified example, imagine the initial annual income of Bill's Farm (round one) is \$50,000. Bill's Farm spends \$20,000 of that locally (round two). Those people who receive money working for Bill's Farm or providing services to Bill's Farm spend \$10,000 of that \$20,000 they received, locally (round three). $\$50,000 + \$20,000 + \$10,000 / \$50,000 = 1.6$. The local multiplier is 1.6. Comparing Bill's Farm of multiplier 1.6 to another farm, Jenny's Farm, that has a multiplier of 1.2 shows that Bill's Farm is more locally focused. The money spent buying produce from Bill's Farm tends to circulate within the local economy to a greater degree than that spent buying produce from Jenny's Farm.

It is important to note that LM3 is only an estimate and is not an exact measurement. Instead, it is a general indicator of how money is flowing. As Sarah Deweerdt (2009) points out, "studies of the potential benefits of shifting food dollars to the local food system are just that: potential. They rely on economic models to predict how a hypothetical change in consumer behavior would ripple through the economy at large" (p. 4). Another issue with these studies involves the concept of import substitution. If a region is growing its own tomatoes rather than importing, the outside region will suffer. As Rich Pirog, a food systems analyst acknowledges, "It's not like you're creating additional new jobs in the economy, you're shifting those jobs around" (Deweerdt, 2009, p. 4) Pirog adds, "that's why it's important to broaden this debate beyond economics" (Deweerdt, 2009, pp. 4-5). Community-based food is stimulating to the local

economy, but it also can be more nutritious, less environmentally destructive, and foster a more socially just society. Further, a community-based food system tends to get consumers more informed about what they are eating, where it comes from, and who produces it.

Fresh and nutritious food

Variety, production method, ripeness, post-harvest handling, processing and packaging, storage, and transportation are some of the factors that can affect the nutritional content of produce. While all of these factors can vary depending on the farm, whether local or global, there are four nutritional advantages of locally grown food (Frith 2007). Foods grown far away must spend long periods of time on a truck and the produce loses its nutritional content during this time. Local farms tend to have more diverse produce (thus more nutritional diversity) and they choose varieties based on how they taste over whether produce can be shipped easily or not. Local food is generally sold within 24 hours of being harvested and so it is most nutritional. Lastly, local food is not handled by as many people or machines. This reduces the chances for the food to be damaged.

Conservation agriculture

How can the United States provide fresh, healthy, and enough food to feed a growing population without degrading the environment while keeping the cost of food low? The best way seems to create a farming system that mimics natural ecosystems. Letting nature do the work is a common theme when describing a conservation approach or sustainable approach to agriculture. Sustainable agriculture is less reliant on inputs (fertilizers, pesticides, and other chemicals) and more reliant on biological processes (organic). Some of these processes include using compost, crop rotation, crop diversification and livestock raised on pastures.

Organic agriculture is a step toward more sustainable agriculture. Organic products tend to cost more initially but they will also lead to a healthier population and a greener environment. Locally produced food is an important part of sustainable agriculture because it reduces the distance that food must travel from the field to your plate. Organic agriculture is expanding because of high demand, high sales, and increased government support. Local food (increase in farmers markets, CSAs, food hub efforts, government support) is expanding as indicated with the growth of farmers' markets, CSAs, food hub efforts, and increased government support. Local and organic agriculture are becoming more prominent and transition into a new food system.

It will not be an easy transition to a more sustainable system of agriculture. Innovation must be encouraged. Two farmers that have been very successful with sustainable agriculture are Joel Salatin of Polyface Farm in Virginia and Will Allen of Growing Power in Milwaukee, Wisconsin. Both farms are highlighted in films such as *Food Inc.* and *Fresh* and these farms have gained global recognition for their stewardship of the land and their production of accessible and healthy food.

Social impacts

Community-based food systems focus on creating a more equitable society. Although locally grown food can be more expensive, many programs are working to make fresh, local food accessible to everyone. Thousands of farmers markets across the country have been able to accept the SNAP (Supplemental Nutrition Assistance Program) cards. Farmers' markets and cooperative grocery stores are places that tend to support community-based food, foster community involvement and facilitate relationship building. Studies have shown that farmers' markets facilitate more social interaction and conversations. "Sociologists estimate that people have 10 times as many conversations at farmers' markets than at supermarkets" (Halweil, 2002,

p. 13). Cooperative grocery stores allow community members to become owners of the store allowing them to make decisions involved in the stores operations.

Chapter 3: Food Hub Models

Community-based food is most often sold through farm stands, farmers' markets, and community-supported agriculture. In some communities, it can be found at grocery stores, restaurants, and even sourced at institutions such as Heartland Community College. One of the big challenges is building the infrastructure necessary for larger buyers to source food locally. A food hub can help provide this infrastructure (see Figure 2 below).

Food hubs are generally businesses or organizations that aggregate, transport, market, and distribute locally sourced food to larger buyers. There have been a lot of profiles of food hubs and blueprints for building a food hub but not many in depth documented cases of how communities and stakeholders organize and develop food hubs.

A recent report from the USDA, "The Role of Food Hubs in Local Food Marketing", (Matson, Sullins, & Cook 2013) describes the different business structures of food hubs and the varying functions of food hubs. Food hubs can take many forms and these forms are not mutually exclusive. A food hub can be an organization such as a nonprofit, cooperative or a limited liability company. Some food hubs can be a combination of different organizational forms. A food hub can refer to a physical facility that may include processing and packing. A food hub can also be a virtual hub that is an online ordering system. It is important to note "not all food hubs have a central structure that fit nicely in these "boxes."" (Matson, Sullins, & Cook 2013). It is up to the stakeholders involved in operating the hub to define it how they see fit with their largest objectives.



Figure 2: Food hub concept. Created by Artezen.

Chapter 4: Creating a Central Illinois Food Hub Network

Heartland Community College (HCC) was established in 1990 in Bloomington, IL and has since moved to Normal, IL and has spread to two other campuses located in Pontiac, IL and Lincoln, IL. HCC has more than 5,600 credit students and also provides a diverse selection of non-credit classes for more than 8,000 community members. As a community college, HCC is committed to local economic development and community health.

The Economic Development Council (EDC) of the Bloomington-Normal Area organizes community members of McLean County into “One Voice” to travel to Washington D.C. to lobby the federal government. The EDC solicits ideas from the community and one idea concerned the potential for expanding the local food economy in central Illinois. Heartland Community College became interested in the idea after a presentation by Terra Brockman and Elaine Sebald of the Edible Economy Project and a partnership was formed. A white paper was written about how Heartland Community College can help facilitate the development of a community-based food system and a variety of project opportunities were pursued.

The Edible Economy Project in partnership with HCC applied for and received a grant from the United States Department of Agriculture (USDA). The USDA distributes Rural Business Enterprise Grants (RBEG) that fund “rural projects that finance and facilitate development of small and emerging rural businesses, help fund distance learning networks, and help fund employment related adult education programs.” As a trusted public institution with an excellent record and as part of the Illinois Green Economy Network, Heartland Community College and its Green Economy Center became an optimal place to administer the grant. See Appendix A for the RBEG “Scope of Work.”

The United States Department of Agriculture Rural Business Enterprise Grant (USDA RBEG)

The USDA RBEG has provided focus for the Green Economy Center at Heartland Community College. The work of the Green Economy Center can be thought of as a collection of green economy initiatives and the USDA RBEG is just one of these initiatives. The grant provides \$99,000 to “provide technical assistance to small and emerging private business enterprises run by entrepreneurial farmers in rural areas of central Illinois who are developing or want to participate in “minimal food hubs.” The funds will *not* be used to produce agriculture products, but rather to provide technical assistance for the aggregation, distribution, and marketing of these products via “minimal food hubs”” (see Appendix A, “Scope of Work”). This is a low risk, low capital, farmer-driven model that allows farmers to retain as much sales revenue generated as possible.

The Green Economy Center has no hard boundaries but the project area for the grant includes 28 counties in central Illinois. For practical purposes, the Green Economy Center is a statewide resource, but its focus for this particular initiative is on rural development in these 28 counties. The purpose for the project is to develop rural areas and to build on existing facilities and assets. Many farmers in the area have already developed some relationships with each other and may even be considered food hubs. The long term vision is for minimal food hubs to become part of a larger food hub network.

The Edible Economy Project has built a foundation with the community through its partnerships with other groups. The Edible Economy Project is a member of the Great Lakes Food Hub Network (GLFHN). GLFHN is a collaborative, “community of practice” and they provide a connection for community-based food initiatives throughout the region.

The food hub model proposed in the USDA RBEG has been inspired by some previous research and expertise developed by a buyer and a grower. The buyer, Irv Cernauskas of Irv and Shelly's Fresh Picks, provides high year-round home delivery of a variety of locally sourced fresh produce in the Chicago area. With an \$85,000 USDA Small Business Innovation Research Grant, Irv and Shelly's Fresh Picks conducted some research, "Efficient ways to aggregate, store, pack and ship local food from farms to regional centers: Illinois Pilot connecting Simpson to Chicago," and found that many Illinois farmers are interested in developing minimal on-farm food hubs that would reduce time and money spent on transportation.

Kris and Marty Travis of Spence Farm have established "Stewards of the Land." "Stewards of the Land" is a group of individuals and families located within a 50 mile radius of Fairbury, IL in Livingston County. The group of farmers began organizing as a Limited Liability Company (LLC) in 2006. They worked together to create an "indoor market" at Dave's Supermarket in Fairbury. Members of the group meet once a month and they volunteer on duties such as bookkeeping and marketing to keep the group functioning. "We wish to work with nice, honest, trustworthy people." "Stewards of the Land's" core value statement establishes an environment where a community-based system can flourish: "We value honesty, integrity, and treating others with respect. We wish to work together closely as a group and look out for each other. Communication is vital to our success" (Spence Farm Foundation & Stewards of the Land).

"Stewards of the Land, LLC", has the following functions:

1. provide marketing and sales opportunities for its members
2. provide liability insurance for each of its members
3. provide educational experience and opportunities for its members

4. represent each member in good faith and be an advocate for each member
5. use membership fees and percentage of sales fees for the benefit of the entire membership with consent of the members.

There is a strong emphasis on the community aspect with the “Stewards of the Land” and not so much on the physical place where food can be aggregated and distributed. Food hubs come in countless shapes and sizes and can take on many different forms. It is up to the members of the hub to determine how it will function and the USDA RBEG is to provide facilitation for creating a network of hubs. The project will utilize existing networks of farmers to allow a connecting up and scaling up of production. The following are intended outcomes that are indicated in the USDA RBEG:

- farmers have developed a management structure to administer minimal hubs
- at least three minimal hubs are in operation, and each hub serves at least six farmers
- farmers are more knowledgeable about food safety and implement food safety practices
- participating farmers have reduced their transportation costs
- participating farmers have increased the volume of products they are selling to anchor buyers
- participating farmers have retained and/or created jobs
- farmers’ bottom line has improved due to lowered transportation costs and increased volume of sales
- sufficient interest to initiate at least three more minimal hubs in the next growing season.

There is an emphasis on the economic development component of community-based food systems with the USDA RBEG. To reach these outcomes through technical assistance, there are three main areas of the budget indicated in the USDA RBEG:

1. Business counseling: collaborative marketing and farmer business entity formation (LLC, cooperative or network), organizing principles and operating procedures, hub site planning and transportation logistics.
2. Business service improvements: communication and business transactions through research and development of an IT platform to provide interface between entrepreneurial farm business and buyers.
3. Business training: food safety protocol development and implementation.

Heartland Community College's Green Economy Center is implementing the RBEG and is reporting to the USDA. The project is informally being called the central Illinois food hub network project. It has taken time and careful thinking to understand the grant and translate the budget and outcomes into action steps to develop a food hub network.

The purpose of this research is to understand how to create a food hub network. For this research, a case study design is being followed. Case study research does not rely on sampling or quantitative data. Case study is "the study of particularity and complexity of a single case, coming to understand its activity within important circumstances" (Stake 2005, p. xi). The case study approach is being used because this food hub network project is unique and case study allows for flexibility when something unexpected happens. Three key informants were interviewed to provide background on the Edible Economy Project and Heartland Community College's partnership. Through this partnership, a USDA Rural Business Enterprise Grant was

obtained and is currently being implemented. These semi-structured interviews allowed the key informants the freedom to explore background details that may have otherwise been undisclosed.

Other data are being collected through observation and document analysis. As a participant in the project, the researcher has been able to capture a holistic view of the process of creating the food hub network. This is important because “in qualitative research, the goal is to understand the situation under investigation primarily from the participants’ and not the researcher’s perspective. This is called the *emic*, or insider’s, perspective, as opposed to the *etic*, or outsider’s, perspective” (Hancock & Algozzine, 2006, p. 8). The following is an insider’s view of creating a food hub network.

The central Illinois food hub network project began to take shape in August of 2012. The project team is made up of a diverse group of community leaders and has been meeting two to three times per month to discuss and think through the project. The central team consists of:

- Heartland Community College:
 - Catherine Dunlap, Associate Director of the Green Economy Initiative
 - Adrienne Tucker, Associate Director of the Green Institute
 - Mary Beth Trakinat, Vice President for Continuing Education
 - Tim Glaza, Stevenson Fellow
- Edible Economy Project:
 - Elaine Sebald
 - Marty Payne
 - Darl Leman
- The Land Connection:
 - Terra Brockman

The project team has been using Basecamp.com, an online project management tool. Basecamp allows groups to share documents and emails, create discussions, and to assign tasks. Basecamp has been indispensable for keeping track of how the project has evolved. Figure 3 is a concept map that helped to steer the project team in the initial stages of the project. The project can be organized into three parts. Part 1 of the project has involved a lot of planning, discussion, and thinking. Part 1 has built up to a farmer organization meeting on February 7th. Part 2 of the project has included learned themes from the February 7th farmer organization meeting, planning for follow up social meetings, and the creation of a transportation bulletin board. Part 3 has been the transition to the Arthur Produce Auction Company hub and a shift to focus efforts towards one hub and a group of anchor buyers to serve as a model and catalyst for any emerging hubs. The Arthur Produce Auction Company is a group of Amish farmers located near Arthur, IL that have expressed interest in connecting to the food hub network. An advantage of the Arthur hub is that there is already a formal organization of farmers and they have the volume to consistently supply large anchor buyers.

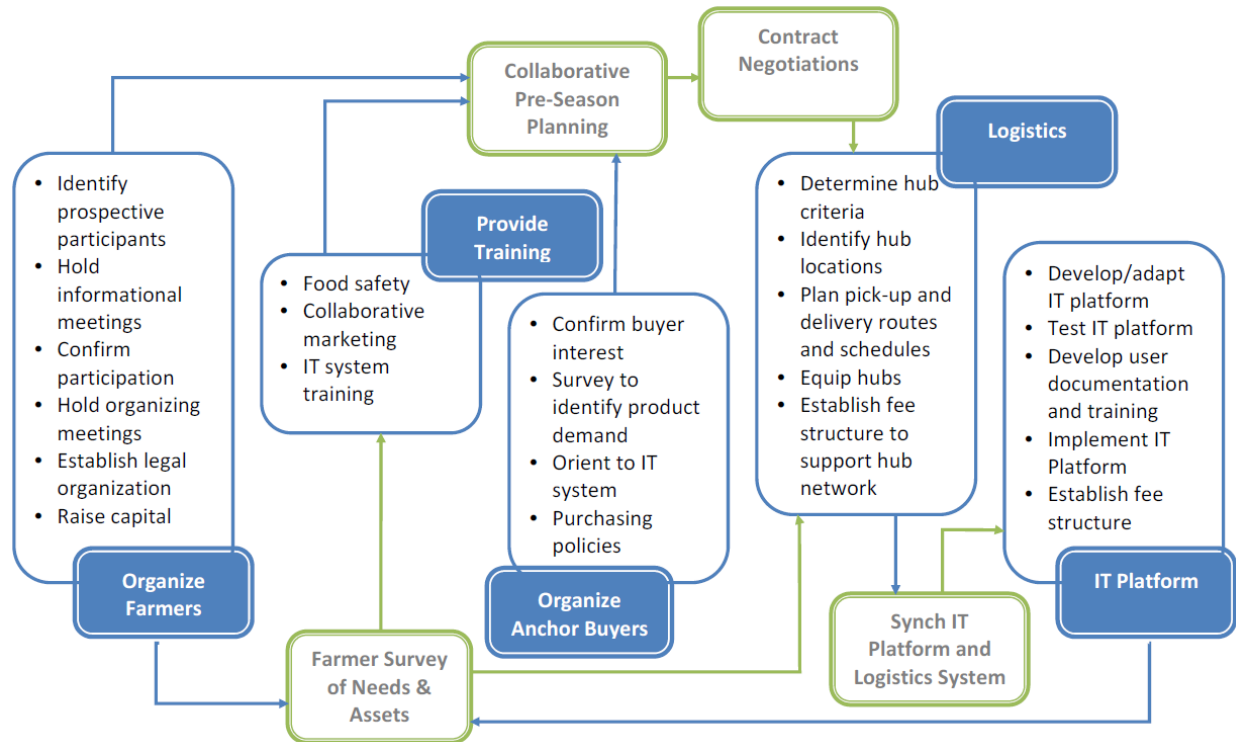


Figure 3: Food hub key areas. Created by Elaine Sebald.

Part 1 of the case study: Identity takes shape and laying the foundation

The Edible Economy Project wants to create an environment where community-based food can thrive. A network of minimal food hubs is an important piece for creating the physical infrastructure to allow community-based food to be scaled up. In addition to the food hub business entity and physical place, there needs to be information sharing, communications, logistics and an IT platform. The connections and relationships between stakeholders need to be strong and the food hub network must be self-sustaining and revenue neutral. The food hub network does not value creating excess profit but it will allow for different business models (for profits, nonprofits, co-ops, entrepreneurs, etc.) to be implemented. A purpose of the food hub network is to reduce risk for farmers and the related entities involved. It is important to note that the Edible Economy Project is a project and is not a formal organization. As the initial network

of food hubs in central Illinois grows, the long-term vision is that the network will become part of a larger Midwest network.

The five key areas of the food hub project include organize farmers, provide training, organize anchor buyers, develop logistics, and provide an IT platform. Before beginning to implement the grant by providing the technical assistance, the project team discussed what each of these areas entail.

Organize farmers

The location of the hubs is limited to a 28 county region in central Illinois. These 28 counties are indicated in the USDA RBEG as areas in need of rural economic development. The project team decided that having lead farmers from different geographic areas would be critical to establishing the minimal number of on-farm food hubs. These lead farmers will help recruit neighboring farmers. Some members of the project team have extensive knowledge and of the farming community and have developed relationships with farmers in central Illinois. However, there is a challenge with identifying the lead farmers. Does the project team choose the farmers or will the farmers emerge on their own? If the project team asks farmers to volunteer to be lead farmers, will the best lead farmers volunteer?

As indicated in the USDA RBEG, the food hubs will be geographically based. The potential sites for the food hubs include the Peoria area, Champaign/Urbana area, Bloomington/Normal area, and Fairbury/Chenoa/Gridley area. The project team has developed the following roles and responsibilities for the lead farmer:

1. Identify and organize at least six farmers to participate in each minimal on-farm food hub. Ideally, all farms participating in the hub would be located within a 30-minute drive of the aggregation farm.

2. Work with other farmers to identify farms that may serve as the on-farm hub. This central aggregation point would have, in the best case scenario, a dock and adequate cooling facilities. This is where the trucks would pick up the produce from all of the farms in the hub and deliver it to the buyers.
3. Work with the central Illinois food hub network project team to schedule and plan the agenda for meetings to be held for organizing the farmers around the on-farm food hub. Some topics to be covered are developing a structure for each hub; making decisions about the products and buyers for each hub; participating in the coordinated transportation and online ordering system, etc.
4. Provide input to the central Illinois food hub network in areas related to the establishment and operation of the on-farm hub. Areas may include an online ordering and inventory system, equipment needs, transportation needs, and farmer training needs (e.g. Good Agricultural Practices (GAP)).
5. Identify sources of capital for funding ongoing operations and equipment needs to establish and maintain the on-farm food hub.

For the food hub network project to work, it is important that participating farmers take ownership of the project and be involved in the decision-making and operation of the hub. The project team believes it is critical for the food hubs to be controlled by the farmers as much as possible. Heartland Community College and the Edible Economy Project do not have the capacity or the will to operate the food hubs. The role of the project team is to get the hubs established and developed to a point of sustainability.

Provide training

After the farmers have organized around hubs, training can take place. Potential areas of training include food safety training, IT platform training, and food hub operation training. The food safety training falls under the framework of GAP or Good Agricultural Practices. GAP has been widely used internationally but is only beginning to be used in the United States. The University of Illinois Extension has developed GAP training that can be useful to the food hub network at a minimal cost. The Food Safety Modernization Act was recently passed by the federal government and the Food and Drug Administration is still developing the rules for implementation. It is unclear what these rules will mean for farmers but it will change the way that small-scale farmers ensure food safety.

When an IT platform is adopted for the network, farmers will need training in this area. Another area of training can involve many areas of running a food hub business. How should the food hub network market itself and will the hubs need to standardize packaging and what type of entity will the hub be? These are important questions that will need to be answered. At this point it is clear that farmers are creative and must become competent in a variety of fields including food safety, business, and transportation logistics.

Organize anchor buyers

Several buyers indicated interest in the food hub network by providing letters of support as part of the USDA RBEG application. There is a wide range of buyers that include small restaurants, nonprofit organizations, hospitals, colleges and universities. These buyers have different requirements and demands. For example, the dining service at a university has very high volume in the fall and spring and will have lower volume in the summer. The small-scale farmers who will be part of the food hub network are not able to supply large amounts of

produce during the winter months. Some buyers may want to have all of their ordering done through a computerized system. Other buyers may want to do their ordering by phone. The buyers were not formally engaged in these early stages of the process. The project team felt it was important to focus initially on the growing side of the food hub network. Many of the buyers have been engaged later on in the project as part of the Arthur hub development.

Logistics

How can a food hub network be coordinated and operated affordably? Understanding the quantities that need to be transported and the most efficient routes will make or break the food hub network. The trucks need refrigeration and the project team needs to figure out the quantity for transportation and how to make it affordable. The team needs to find transporters who embrace caring for the produce as it needs to be handled with care. An issue with community-based food systems is that farmers often spend a lot of time on logistics and transportation and do not ascribe value to their time. It may be a better use of a farmer's time to focus on growing and harvesting as opposed to driving and delivering. It can be easy to get trucks, equipment, and routes put in place. Illinois has plenty of roads and potential aggregation points. The challenge is finding out how to make it affordable and paying for it.

If a food truck is transporting produce from Normal, IL to Chicago, IL the truck will often return to Normal empty. This is problematic. Are there opportunities for back haul? Hauling refrigerated goods back from the cities may be an opportunity to help generate revenue for the food hub network. How much is the transportation and operation of the food hub going to cost the farmers? Many farmers who are interested in the food hub network do not have a lot of capital to risk. How do we capture costs in a holistic way? There are several aspects to

transporting food that cost money. Fuel, packaging, insurance, and other unforeseeable costs may be generated.

The project team brainstormed these potential costs to the farmer:

- costs for the operation of the hub.
- Transportation to the hub and then to the buyer (aggregation hub costs).
- Food safety costs.
- IT platform costs.
- Insurance/group insurance as an LLC or other legal entity.
- Start up legal fees.
- Costs with packaging (labels, boxes).
- Regulation costs with the FDA, health departments, and other regulators.
- Accounting/billing costs.

A central upside to becoming part of a food hub is that the costs are shared. Rather than a farmer paying for transportation, food safety, insurance, and regulation costs as an individual, the farmer's costs are spread out over a group of farmers organized as the hub. Food hub costs may seem high initially, but the hope is that a food hub will make community-based farming more viable.

IT platform

The initial focus for the IT platform was an enterprise resource planning (ERP) system built to facilitate different business models. How can the project team unite farmers and businesses around a common system? The project team has looked at other systems including "Local Dirt". "Local Dirt" has been proven to work and has offices in Madison, WI and San Francisco, CA. "Local Dirt" started with a grant through the National Science Foundation but is

only an ordering system and does not include transportation. Through all of this research, the project team decided it would be best to develop different IT platform scenarios for farmers to evaluate. The hope for the IT system would be to make ordering and coordinating less labor intensive.

This first phase of the project has involved understanding the role of the project team, identifying existing assets and relationships, and communicating with the public the purpose of the central Illinois food hub network. The project team sees itself as creating an environment where a community-based food system can thrive and where a variety of entities can plug into a network of food hubs.

Part 2 of the case study: Farmer organization meeting and socials

As a result of numerous meetings and discussion, the project team decided that it was time to hold a large meeting with farmers from the central Illinois region. It was important to re-affirm the commitment of the community to move forward with the food hub network project. The key question to be addressed during the meeting:

“As a community of local food producers and consumers, are we ready to tackle the gaps in our local food infrastructure and work together to get an efficient food hub network in place for the 2014 growing season?”

There was a great response from the community of farmers and other interested individuals attending the farmer organization meeting. The meeting was held at Heartland Community College on Thursday February 7th, 2013 from 4:00 pm to 7:30 pm. The meeting began with a welcome and introduction of the project team. The president of Heartland Community College, Dr. Allen Goben, gave opening remarks and the meeting attendees were very appreciative of that.

The project team explained why the Edible Economy Project started the effort to enhance the local food system and why now is the time to move forward. There is a high demand for locally sourced food in Illinois and with support from the Illinois Green Economy Network and the Rural Business Enterprise Grant, Heartland Community College is well positioned to facilitate the development of a more efficient infrastructure to meet the high demand for local food.

The team spoke about the minimal on-farm food hub network concept and what a shared infrastructure and transportation network might look like (see Figure 2). The team also summarized the Rural Business Enterprise Grant and the resources that Heartland Community College has devoted to the food hub network project. It was explained why direct market farmers need to collaborate on shared aggregation, marketing, and distribution. The project team shared some information concerning the collaborative food hub model that the USDA RBEG supports. The model was inspired by a buyer, Irv and Shelly's Fresh Picks, and a grower, Spence Farm of "Stewards of the Land." This shared information at the meeting included how "Stewards of the Land" of Livingston County has been able to work effectively and findings from Irv and Shelly's Fresh Picks Small Business Innovation Research Grant experience. Irv Cernauskas from Irv and Shelly's cited above, states that keys to creating the food hub are indicated in the first list and the second list includes important steps for building the network. These succinct lists help to answer the questions of how to build a food hub and why it is important.

List 1: Creating a Collaborative On-Farm Food Hub

- Shared values, fairness, willingness to work together, regular communication/meetings
- Workable location—suitable hub site; members within reasonable driving distance; close to major transportation route
- Agreement on organization/business structure (cooperative, LLC, non-profit, informal association) and decision making rules (e.g., majority vote)

- Willingness to share costs and responsibilities, including volunteer and/or paid labor (bookkeeping, coordination, training/education, marketing, food safety/quality control, marketing, logistics, etc.)
- Willingness to collaborate with other on-farm hubs for shared pre-season crop planning, marketing, and logistics

List 2: Creating a Collaborative Food Hub Network

- Consolidating shipments makes delivery possible when small lots would not be practical otherwise
- Consolidating shipments enables outsourcing transportation to lower cost trucking companies
- Lower freight cost enables farmers to increase profits
- Less need to own and operate trucks enables farmers to invest more financial resources in productive capacity
- Having a variety of crops available in adequate quantities makes purchasing more efficient
- Participating in a food hub facilitates collaborative crop planning among growers, avoiding farmers all trying to sell the same product at the same time

The opening sessions of the farmer organization meeting were to inform the farmers about how the project team was conceptualizing a food hub network and to set the stage for the breakout sessions. The project team organized the farmers into different groups. There was a Peoria Group, Bloomington-Normal Group, Fairbury/Chenoa/Gridley Group, Champaign-Urbana group, and Marketing/Logistics group. Each group discussion was facilitated by a project team member. One purpose of these discussion groups was to determine existing assets and relationships in the geographic areas. Another purpose was to determine if the groups are willing to move forward to further define what is needed to establish a shared on-farm aggregation hub within the central Illinois food hub network. Here are some questions that were used to encourage discussion during the small group discussions. The purpose of these questions was to provide a starting point for thoughtful discussion—not to resolve all questions and make a final decision.

- What are your opinions about the concept of small on-farm aggregation hubs linked by a marketing and distribution network? Do you feel this idea could work for you and other farmers?
- Do you think it would be feasible to establish a shared on-farm aggregation hub in your area?
 - Would there be enough farmers to make it feasible?
 - Would enough farmers have an interest—and could they produce enough volume to support the hub?
 - Would they be able and willing to support the hub financially?
 - Would it be possible to locate a shared hub so that it is close enough to all farmers in the area?
 - Do you feel the farmers in your area have compatible values and could work together?
 - Could the farmers acquire the building, facilities, and equipment needed?
 - How might the administrative demands of a shared hub be handled?
- Do you think it would be feasible for multiple on-farm hubs to share in the cost and administrative responsibilities for a shared marketing and distribution network?
 - Would farmers be willing to contribute to the cost for shared marketing and logistics services?
 - Would farmers be willing to share in governance responsibilities?
- What about the timing for implementing an on-farm aggregation hub? Does the 2014 growing season seem like a feasible goal?

- Does the group want to move forward with further exploration of this concept? What do you think about having a social event (e.g., potluck) in your area where all farmers can come together to learn more and engage in further discussion?

From what was gathered at each of the group sessions, many farmers support the idea of creating food hubs and some are already participating in what could be considered food hubs. Overall, the farmers attending the meeting seemed very interested in moving forward with the food hub network project. As a follow up to the farmer organization meeting, the project team sent out an informational newsletter sharing what they had learned. The newsletter included the following themes (in bold):

Demand for processing facilities: Many farmers expressed an interest in identifying and developing processing facilities. It has been a challenge for farmers to find places where fresh produce can be taken and processed for preservation. For example, a farmer may want a processing facility that would allow them to take some excess strawberries to be frozen.

Coordinate transportation through an online system: There is a need for an informational website that could allow farmers to post their routes so other farmers may share transportation. This transportation bulletin board is being developed.

Build synergy and share information with other efforts across the region: Many relationships exist that may already be classified as a food hub such as the “Stewards of the Land.” There are also many emerging food hubs taking a variety of shapes across Illinois. There is a need for information sharing and relationship building to enhance the movement toward a more sustainable local food system.

In response to the farmer organization meeting, here are some of the next steps the Edible

Economy Project will be taking:

- Build on existing relationships across central Illinois and to connect with other food hub efforts.
- Research potential places for processing and how they may participate in the food hub network.
- Edible Economy Project and Heartland Community College are developing an online forum that will only be available to farmers that subscribe to the site to help connect those who have extra space on trucks to others that might need help getting their product to different markets.
- Begin meeting with farmers in different geographic areas to gauge interest in forming food hubs.

Two main steps were pursued from the farmer organization meeting. Members of the project team began developing an online transportation bulletin board. This bulletin board is free to use for registered farmers. The online board is a place where users post offerings or solicit services. The board is expected to begin testing sometime in May 2013.

The other next step was to schedule socials for each of the geographic areas to move the food hub network project forward. The socials were scheduled but were later cancelled for a few reasons. April is a very busy time for farmers and many of the farmers who were contacted were not able to make it to the arranged social events. The project team was not quite sure if the farmers had the volume of produce to support a food hub and if enough farmers were to be able to establish the food hubs. The project team has decided to lay more groundwork and recruit more farmers and that is where the part 3 of the project begins to emerge.

Part 3 of the case study: The Arthur hub as a catalyst

The growing season for farmers begins to get very busy in April. The response from the socials was lukewarm and after reconsideration, the project team cancelled the socials with a plan to reschedule them at some point. Around this same time, Dave Bishop of PrairiErth Farm brought an idea to the project team. This idea is to engage a group of Amish farmers located near Arthur, IL. The farmers are organized as the Arthur Produce Company and are in a great position to work as a hub. Dave Bishop has emerged as an important connection and liaison between the folks in Arthur and the project team at Heartland Community College.

An advantage to the Arthur Produce Company is that it is an organization already formed and they are able to grow a large volume of produce that many buyers need. The project team is able to facilitate the development of an Arthur hub through its connections with buyers and by using the RBEG grant to provide technical assistance in the areas of logistics, training, and an IT platform. The central Illinois food hub network can facilitate the connecting up that is needed for the Arthur Produce Company to have consistent buyers. The hope is that this hub can be a catalyst for the other hubs to get going and to show what is possible with this type of infrastructure in place.

The Arthur Produce Company is ready and prepared to negotiate products, prices, quantities, and other agreements with large anchor buyers. The plan is that this hub will be a pilot initiative for other hubs in the region to learn from and to build on. The goal is that by the end of 2013, a formal agreement will be in place between the Arthur Produce Company and a number of buyers to start sourcing locally grown food consistently throughout the 2014 growing season.

The project team is continuing to work with farmers in central Illinois to establish and develop on-farm food hubs. The Arthur Produce Company is a great opportunity for the transportation, logistics, and the information technology system to be worked out and tested for efficiency.

An important first step for the project team has been to re-engage the anchor buyers and gauge their interest in working with this group of farmers near Arthur, IL. Starting in May, the farmers near Arthur hold a produce auction twice a week. Interested buyers that have been selected by the project team are being invited to attend an auction in May to meet the farmers, get a sense of what they are working with and to build cultural understanding. To prepare for this auction visit, the project team has used an “Arthur Produce Auction Price List” spreadsheet document to compile a list of products, 2011 and 2012 quantities and prices, and seasonality. The buyers have expressed the value of this type of document and the hope is that a formal agreement between the Arthur Produce Company and a group of anchor buyers will be in place for the hub to become operational in 2014.

Chapter 5. Conclusion and Recommendations:

Community-based food systems are being developed throughout the United States. Connecting farmers and buyers is the purpose of community-based food systems. If food hubs can flourish, then the food system will be enhanced because locally grown, healthy, and environmentally sustainable food will be more accessible. Imagine students at all levels of school being able to eat delicious, seasonal, and fresh food on a consistent basis. Imagine large corporations such as State Farm serving fresh local food in their cafeterias.

The idea of place is critical to building a community-based food system. There is not a one size fits all approach to building a food hub. Communities are unique and there are different assets, relationships, cultures, leadership, histories, etc. that will affect the steps needed to build a community-based food system. It is important to connect with community assets and to ascertain what works best. Communities can learn from other communities about their past or current experiences, but it is critical to remain flexible to understand what community members and stakeholders in a particular area think are best for them. As the food hub network has evolved, an Amish community of farmers have become partners and the hope is that they will become a catalyst for all of central Illinois.

Creating a more community-based food system through a collective impact approach takes time and it is not always clear what steps will be needed. The steps will emerge through the interactions among stakeholders. As the food hub project moves forward, there are some important challenges that must be addressed. Collective impact is a framework that can help with thinking about innovative change, but learning how to move forward and getting stakeholders oriented toward a common agenda is not easy. Like many community development projects, the food hub network project is expected to take years to becoming viable and full time staff is

critical for keeping the project moving. Fortunately, Heartland Community College with support from the Illinois Green Economy Network, the Edible Economy Project, and the United States Department of Agriculture have been able to successfully incubate the food hub project and the collective impact conditions for success are emerging.

The USDA RBEG funding is a great asset and providing technical assistance to central Illinois is needed. There are people with expertise and experience with organizing farmers and coordinating transportation and they can help provide guidance for building the food hub network. But how do the technical assistance providers actually get involved? Do they work with farmers directly? Do they work with the project team at Heartland and then Heartland works with farmers in a sort of train the trainer process? These are all still questions that need to be answered and it should also be determined the strengths and weaknesses of different approaches.

Another challenge is establishing the project team's role and creating a model that is farmer-led. Creating a conceptual picture of the food hub network and actually doing the work to create the food hub network are different tasks. Actions need to be carried out and it is difficult to say what will emerge. In whatever way this happens, it must be driven by farmers who are interested in the project. Farmers should have a meaningful voice in the decision making process. The project team must build relationships and provide a platform for diverse stakeholders, most notably farmers to come together.

When a food hub network is in place, several research questions may emerge. What is the local economic impact of the hubs? What kind of effect have the hubs had on the farmer's bottom line? Are there any positive public health outcomes from the food hub network? As with many community development programs, the food hub network may take many years to demonstrate positive economic, environmental, health, and social impact.

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Appendix A

Rural Business Enterprise Grant Application

Providing Technical Assistance to Create a Central Illinois Network of “Minimal Food Hubs”

Heartland Community College and the Edible Economy Project

April 30, 2012

SCOPE OF WORK

PROJECT OVERVIEW

The grassroots-based Edible Economy Project, through its member and administrative partner Heartland Community College, **seeks \$99,000 in Rural Business Enterprise Grant funding to provide technical assistance to Central Illinois farmers developing minimal food hubs. (see diagram on p. 6)**

As a founding member of the Illinois Green Economy Network (IGEN), Heartland Community College has established a sustainability center (The Green Institute) that has successfully fostered best practices in sustainability on campus and in the community through a number of programs and initiatives. **Recently, Heartland was funded by IGEN as one of four Green Economy Initiatives in the state, each focused on spurring the emerging green economy in their region. Heartland’s Green Economy Initiative has a content focus on community-based food systems and aligns very well with the College’s involvement over the past year and a half with the Edible Economy Project.**

This grass roots initiative seeks to create a modern, efficient, local food system in Central Illinois. **Its primary goal is to create an integrated network of “food hubs”** defined by the USDA as “a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products.” These food hubs will serve local farmers, consumers, and institutions such as schools, hospitals, universities, and private businesses . . . all of whom are demanding local food but cannot get it efficiently without a food hub in place. Similarly, farmers are reluctant to grow larger amounts than they can sell directly (generally at farmers markets and/or Community Supported Agriculture) unless a food hub is in place.

These types of initiatives are emerging across the country as communities recognize the many benefits of community based food systems. These benefits range from improved quality of food that has been recently harvested and is more nutrient rich to the significant economic returns of retaining dollars spent on food in the local economy rather than exporting them to other states and countries. These initiatives take a variety of forms depending upon the needs of each unique community. **In Central Illinois, Heartland’s Green Economy Initiative is focused on creating economic growth through building partnerships with community members, businesses, and nonprofits to lay the foundation for strong food, farming, and business enterprises.**

PROJECT PURPOSE

The requested funds will be used to **provide technical assistance to small and emerging private business enterprises run by entrepreneurial farmers in rural areas of central Illinois who are developing or want to participate in “minimal food hubs.”** The funds

will **not** be used to produce agriculture products, but rather to provide technical assistance for the aggregation, distribution, and marketing of those products via “minimal food hubs.”

PROJECT NEED: The case for minimal hubs

As the demand for local food has grown, so has the number of entrepreneurial farmers raising that food. In 2011, local food analyst Ken Meter utilized 2007 Ag Census data to study a 32-county region of Central IL.¹ His report revealed that 36% of Central Illinois farms (9,451 farms) are less than 50 acres, and many of those farms raise fruits, vegetables, meats and eggs. Direct and organic sales by 972 farms in the region resulted in \$5.9 million of sales, a 28% increase in the number of farms, and a 74% increase in direct sales over 2002 statistics. Woodford County leads the region in direct sales as of the 2007 census, with \$650,000. Although the Ag Census data does not fully represent vegetable production, it indicated that 408 central IL farms worked at least 19,636 acres of vegetables, which represents a 78% increase over 2002 levels.

Although these and other statistics show that small farms and the local foods they produce are a “growth industry,” entrepreneurial farmers often struggle with the multiple demands of their businesses, particularly with the lack of local food infrastructure. Presently, most local vegetable, fruit and livestock producers not only grow, market, and sell their own products to individuals, restaurants, grocers and others in regional cities, but they drive their own trucks into town and run their own delivery routes, resulting in much inefficiency:

- It is more expensive to run many small trucks than it is to have fewer larger trucks operating on the same routes.
- Most farmers operate their trucks empty half the time, on the return trip to the farm, and often less than full on the trip into town.
- The vehicle, fuel and labor expense of delivering food diverts time and resources from investments to increase production, i.e., driving is not the highest and best use of a farmer’s time.

This duplicative, fragmented and inefficient system for aggregating and distributing locally-raised food diminishes farmers’ production volume, financial returns, and quality of life. The proposed minimal food hubs will begin to remedy these many inefficiencies through nearby on-farm aggregation and contracted drivers running an efficient distribution route with stops at each minimal hub, and deliveries to the buyers.

This low-cost, low-risk beginning of a regional distribution network for locally-produced foods will allow farmers to focus on growing a more diverse set of crops, and will ensure they have access to buyers. If small farm production can expand more easily and quickly, there will be an increase in higher margin, job-creating sales for farmers, and more economic growth for rural communities.

The latent demand from individuals and institutions in regional cities like Chicago is far greater than the current local food supply. Even local supermarkets such as Schnucks and institutional buyers such as the Illinois State University and University of Illinois Dining

¹Meter, Ken. Central Illinois Local Food and Farm Economy, <http://creworks.org/crcdocs/ilcentsum11.pdf>

Services have volume and other requirements that cannot be met locally at this time. And smaller buyers such as Gourmet Gorilla and Irv and Shelly’s Fresh Picks spend far more time to source local products and manage the logistics than is optimal.

Specific Project Purpose and Justification

The purpose for which grant funds will be utilized is **to provide specific technical assistance (outlined below) to farmers and farmer networks in 28 counties in Central Illinois that are developing basic aggregation facilities—“minimal food hubs.”** (See map and county list in Appendix 1.) These hubs will be networked via information technology and a trucking route to provide efficient distribution to anchor buyers, thus increasing participating farmers’ economic viability, and enhancing rural economic development.

Minimal food hubs are a low-cost, low-risk form of aggregation that allows farmers to more efficiently meet consumer and institutional demand by incrementally increasing supply as their capacity grows. Minimal hubs may aggregate products from as few as six farmers, with facilities located on a farm easily accessible to other farmers and within a short distance from major trucking routes. The optimal infrastructure for each minimal hub is simply a dock and slab with a cooler.

This minimal food hub strategy has the advantages of utilizing existing farmer networks and on-farm infrastructure, emerging out of close relationships between the Edible Economy Project leadership, local buyers, and farmers, including existing farmer networks. Some of these networks are loose collaborations among nearby farmers and some formal LLCs. After many years of hearing farmers express their need for more efficient ways to get their products aggregated, marketed, and distributed, this approach evolved in order to provide specific technical assistance in the following areas:

Technical Assistance	Major Tasks	Technical Assistance Providers
Business counseling to help farmers organize into groups around the hubs; collaborative marketing; farmer business entity formation (cooperative, LLC or network), organizing principles, and operating procedures	Develop and administer farmer survey to identify farmer participants and their interests; consult with participating farmers to develop organizing principles and structure to govern operation of the minimal hub. Conduct workshops for farmers and institutions, and meeting facilitation with farmers and buyers.	Heartland Community College Marty Travis (Founder, Stewards of the Land) The Land Connection Black Oaks Center for Sustainable Renewable Living
Business counseling in hub site planning and transportation logistics	Asset inventory, location analysis, recommendations	Irv Cernauskas Logistics specialist (TBD)
Business service improvements in communication and business	IT research, testing, training, materials	Heartland Community College Kris Travis (Founder, Stewards of the Land)

transactions through research and development of an IT platform to provide interface and administrative functions for entrepreneurial farm businesses and buyers		Marty Payne Sam Rose
Business training in food safety protocol development and implementation	Materials and curriculum development; delivery of training on food safety practices, packing, labeling, workshops and individual consulting	Heartland Community College Donnell & Associates The Land Connection

PROJECT IMPACT

A network of minimal food hubs in Central Illinois will expand marketing and growth opportunities for small and mid-size farms raising food crops, increase the ease with which institutions and other buyers can purchase local foods, increase local food access for consumers at all income levels, and enhance the economies of rural communities in central Illinois and beyond.

The major impact of the proposed technical assistance to develop a “minimal food hub” network will be **at least 60 jobs retained, as well as improved farm incomes in Central Illinois**. These jobs all reflect on-farm employment, and it is anticipated that new jobs will be created on central Illinois farms and in the food hubs themselves as the network expands with this technical assistance.

1942.314(d) How the grant purposes will be accomplished

The minimal hub strategy of this project is grounded in the assets and expertise of its diverse collaborators and technical assistance providers described below. They will provide expertise in:

- Farmer organizing
- Business counseling
- Business service improvements in IT-enabled communications and administration
- Cultural competence in working with disadvantaged farmers
- Technical expertise in food safety, logistics, and business planning
- Experience and expertise in local food purchasing
- Training and facilitation

Heartland Community College and the Edible Economy Project will utilize technical service providers to implement the following:

- The formation of at least 3 minimal hubs, each aggregating product from at least 6 nearby farms. Wherever possible, hubs will use existing on-farm facilities, including docks and coolers, rather than incurring expenses for new equipment and construction.
- Participating farmers will conduct pre-season planning to coordinate planting schedules, and varieties and amounts to be planted. To maximize farm sales, the goal will be to have a variety of crops available each week through staggered plantings timed to most efficiently match supply to defined buyer demand.

- Hubs will be located within 15 minutes of an interstate highway if possible, and within a 30-minute drive of the other participating farms.
- Participating farmers will work with technical assistance providers to agree upon organizing principles that will govern operation of their hub.
- Each hub will have at least one known and trusted anchor buyer to help estimate expected demand, and several alternate buyers to absorb surplus product.
- Bids will be sought from third party trucking companies for collecting aggregated products from minimal hubs and delivering them to Chicago and central Illinois buyers.

PROJECT OUTCOMES:

By the end of the grant period, we expect the following outcomes:

- Farmers have developed a management structure to administer minimal hubs
- At least three minimal hubs are in operation, and each hub serves at least 6 farmers
- Farmers are more knowledgeable about food safety and implement food safety practices
- Participating farmers have reduced their transportation costs
- Participating farmers have increased the volume of products they are selling to anchor buyers
- Participating farmers have retained and/or created jobs
- Farmers' bottom line has improved due to lowered transportation costs and increased volume of sales
- Sufficient interest is generated to initiate at least three more minimal hubs in the next growing season

The following diagram illustrates the concept of a network of minimal hubs sharing logistics, marketing, and an IT system to administer orders, inventory, invoices, payments, etc.:



Research and Findings Relating to Illinois Food Hub Needs

The model for this work was developed independently by Kris and Marty Travis of Spence Farm and Irv Cernauskas of Irv and Shelly's Fresh Picks. The Travises brought together groups of farmers such as Stewards of the Land and Legacy of the Land to plan, aggregate, market, and transport their products collaboratively. Around the same time Irv Cernauskas of Irv and Shelly's Fresh Picks, garnered \$85,000 in support from a USDA Small Business Innovation Research Grant for a project entitled "Efficient ways to aggregate, store, pack and ship local food from farms to regional centers: Illinois Pilot connecting Simpson to Chicago." Principle conclusions from that initial research were:

- Excessive capital investments in food hub development can create debilitating cost burdens, i.e. lean and incremental food hub development is better;
- Investments in trucking capacity are the least value added and most easily outsourced way to reduce overhead and operating expenses. Unit transportation

costs decrease with greater volume and larger trucks. When using a commercial trucking company, expense is only incurred for delivery of the number of pallets actually shipped.

- Investments in trucks can detract from productive capacity if a farm is capital constrained, which is typical. When operating one's own truck, expense is incurred for the whole truck whether full or not, and is also incurred for the return trip. Often, the truck sits idle.
- To outsource transportation and drive down shipping costs, adequate and consistent volume must be generated to support a regular pickup schedule;
- It is important to have established buyers and to adequately develop demand for the products of the hub in tandem with developing the volume of supply
- To succeed, participating farmers need to have a stake in the outcome of the hub and feel that it serves their interests.

Irv and Shelly's piloted the concept in three regions: southern Illinois, southwest Wisconsin, and central Illinois. Their main findings include:

- There is substantial interest among farmers.
- The benefits of collaborating on transportation can quickly lead to coordinated crop planning to maximize combined production and sales among hub participants.
- There is a need to increase the volume and consistency of orders from the hubs to make engaging a trucking company financially viable. This will in turn reduce shipping costs and make Chicago and other markets more accessible for farmers.
- There is a need to arrange for shipping of diverse items with different temperature control requirements for example, tomatoes at a more moderate temperature, leafy greens and other produce at a colder temperature, and frozen products such as meat.

Based on the experience of the Trivises of Spence Farm, Irv Cernauskas, previous studies, and our own research and interviews, our assessment is that market demand for local food will continue to be strong for years to come, with a reasonable consensus estimate for continued growth of 20-25% per year.

- This consumer demand is seen in growing direct purchases from home delivery services like Irv & Shelly's Fresh Picks, retail stores, restaurants, many new farmers markets and CSAs, and demand at K-12 schools, hospitals, and universities.
- The FamilyFarmed.org study² of wholesale buyers in 2010 estimated \$23.5 million per year in unmet demand for local foods.
- Our interviews with institutional buyers such as Illinois State University Dining Services, Gourmet Gorilla, and others indicate that current local food offerings provided by their large suppliers such as Sodexo, Aramark, US Foods and SYSCO are inadequate.

² FamilyFarmed.org. "Ready to Grow: A Plan for Increasing Illinois Fruit and Vegetable Production." July 2010. <http://www.familyfarmed.org/wp-content/uploads/2010/07/IllinoisProduceReport-final.pdf>.

Initial Groundwork Completed:

As crucial first steps toward achieving the long-term goal of restoring local food infrastructure in Central Illinois, the Edible Economy Project contracted with professional experts to complete a local food system assessment and an initial business plan:

- **Local Food System Assessment:** In June 2011, noted food system analyst Ken Meter of Crossroads Resource Center completed an assessment of local food system assets and gaps in 32 counties within our targeted 33-county region of Central Illinois. This research indicated that Central Illinois loses approximately \$5 billion annually from its local economies because purchases of agricultural inputs and food from outside the region exceed income realized from agricultural production inside the region. However, Mr. Meter also estimated that farms would earn \$639 million of new income, if local consumers made just 15% of their food purchases from local farms.
- **Initial Business Plan:** In December 2011, Illinois Business Consulting (IBC) at the University of Illinois completed an initial business plan to identify and recommend solutions for establishing a local food hub in Central Illinois. With the roadmap provided by this plan, Edible Economy has been moving forward with next steps, including meetings with Central Illinois farmers and community members to establish the cooperative that will own and operate the food hub network. IBC also developed a spreadsheet to assist in construction of a budget for the food hub as existing assets are identified and additional facility and equipment needs are identified.

Illinois Producers and Buyers Collaborating on Food Hub Network Development

Development and networking of minimal food hubs requires community-building and engaged participation from both buyers and growers. The Edible Economy Project has developed strong relationships with both. Within Central Illinois, there are more than 200 potential minimal hub farmers, many of them already participating in farmer associations, co-ops, or LLCs. In addition, many of these groups are already functioning as a food hub. All of these farms are currently selling to retail, restaurant, institutional, or wholesale markets and have validated the need for more efficiency in moving product from farm to buyer.

Great Lakes Food Hub Network Collaboration and Expertise

The Edible Economy Project also has strong relationships with other food-hub practitioners through its membership in the Great Lakes Food Hub Network (GLFHN), a collaborative “community of practice.” Membership in this Network provides the Edible Economy Project access to a broad range of specialized expertise and experience with a wide range of food hub projects.

GLFHN was convened over a year ago by Karen Lehman of Fresh Taste, a funder collaborative focused on re-localizing the food system in the Chicago foodshed. The proposed project will draw upon the expertise and resources of GLFHN members as technical assistance providers, as well as anchor buyers. Karen Lehman, Executive Director of Fresh Taste, is donating professional services to facilitate collaboration with GLFHN members, including those listed under “Technical Service Providers” below.

Farmers Committed to Making Use of Technical Assistance: The following are farmers who have committed to using the technical assistance made available through this grant. They also indicate that this technical assistance will enable them to retain 60 jobs and expand their business into additional markets. (See Letters of Commitment Appendix 2.)

- [Ackerman Certified Organic Farm](#) (Ron and Nga Ackerman, McLean County): The Ackermans operate a certified organic farm, specializing in produce, herbs, and grains. They sell their products through farmers' markets and through retail stores in Central Illinois and Chicago.
- [Hartz Produce](#) (Lyndon Hartz, Stark County): Lyndon Hartz grows ten acres of crops including some strawberries, raspberries, asparagus, and fruit trees in addition to vegetables. The farm includes several unheated hoop houses that are used to get an early start on summer crops and grow throughout the winter months.
- [Huelskoetter Pork](#) (Vicki Huelskoetter, Logan County): Huelskoetter produces pork products for the local markets. All of their animals are USDA inspected, steroid, animal by-product, and growth hormone free. Huelskoetter Pork is Pork Quality Assured III certified.
- [Kilgus Farmstead](#) (Matt Kilgus, Livingston County): The Kilgus family operates a farmstead bottling plant in Fairbury using milk from Jersey cows raised on their own pastures. In addition, they raise beef and pork, as well as goat meat, which are primarily sold to Chicago restaurants. With two walk-in coolers and a loading dock, Kilgus Farmstead is already operating as an aggregation hub for neighboring farms and is interested in expanding their facilities to become part of the central Illinois food hub network.
- [Living Water Farms, Inc.](#) (Kevin Kilgus, Livingston County): Living Water is a family owned and operated farm in Strawn, IL. With over 8,000 square feet of greenhouse production, they supply area grocery stores, restaurants and consumers with year-round salad and specialty greens, pea tendrils, and basil.
- [PrairieErth Farm](#) (Dave Bishop; Hans and Katie Bishop, Atlanta): The Bishop family has been operating their 300-acre, certified organic, diversified farm near Atlanta for over 30 years. PrairieErth crops include corn, soybeans, oats, alfalfa and grass hay, plus a large assortment of vegetables, fruit, flowers, and livestock. Hoop houses are used for year-round farming.
- [Samara Farm](#) (Zack Metzger, Shelby County): Samara Farm grows all of its crops according to organic principles, notably that adding organic material to the soil is of critical importance. Samara Farm has a CSA and participates in farmers' markets.
- [Spence Farm](#) (Marty Travis, Livingston County): The oldest farm in Livingston County, Spence Farm is a bustling center of activity with a wide array of heirloom and native crops, heritage animals, and a huge diversity of agricultural opportunities on the 160 acres. Visitors come from all over the world to enjoy learning about small scale family farming of the Midwest.

- [Triple S Farm](#) (Stan Schutte, Shelby County): Triple S is a family operated farm, and all of their pastures and vegetables are certified organic and all of their animals are drug free. The poultry at Triple S farm are free range and receive no GMO grains. Triple S is interested in heading up efforts to aggregate meat and eggs by utilizing local meat processing facilities such as Das Schlacht Haus and Central Illinois Poultry Processing, both near the Amish community of Arthur, IL.
- [Twin Oak Meats](#) (Tom Ifft, Livingston County): All of the pork sold by Twin Oak is raised on their farm, so they have control from start to finish. They raise a Duroc-Yorkshire crossbred hog which yields a very lean pork product with excellent taste and quality. The hogs are raised in outside lots and are fed a corn/soybean meal ration. No animal by-products are used in their feeds, and no growth hormones or steroids are used.

Potential Hubs: These farmer collaboratives and farms are well positioned geographically, organizationally and facility wise to provide core hub membership and potential minimal hub sites:

- [Black Oaks Center for Sustainable Renewable Living](#) (Fred and Jifunza Carter, Pembroke Township, Kankakee County): Black Oaks Center is interested in developing an aggregation facility in the African-American farming community of Hopkins Park in Pembroke Township for a group of 20 farmers seeking greater access to Chicago markets. Black Oaks Center has relationships with several commercial buyers in south Chicago and operates a 500-member buying club on Chicago's South Side that serves as an outlet for Pembroke farm products. Hopkins Park in Pembroke Township is one of the oldest black rural townships. Black Oaks is a member of the Great Lakes Food Hub Network.
- [Kilgus Farmstead](#) (Matt Kilgus, Fairbury, Livingston County): The Kilgus family operates a farmstead bottling plant in Fairbury using milk from Jersey cows raised on their own pastures. In addition, they raise beef and pork, as well as goat meat, which is primarily sold to Chicago restaurants. With two walk-in coolers and a loading dock, Kilgus Farmstead is already operating as an aggregation hub for neighboring farms and is interested in expanding their facilities to become part of the central Illinois food hub network.
- [Triple S Farm](#) (Stan Schutte, Stewardson, Shelby County): Triple S is a family operated farm, and all of their pastures and vegetables are certified organic and all of their animals are drug-free. The poultry at Triple S farm are free range and receive no GMO grains. Triple S is interested in heading up efforts to aggregate meat and eggs by utilizing local meat processing facilities such as Das Schlacht Haus and Central IL Poultry Processing, both near the Amish community of Arthur, IL.
- [Good Earth Food Alliance](#) (Lyndon Hartz, Wyoming, Stark County): Good Earth Food Alliance (GEFA) operates as a multi-farm CSA with customers in Peoria, Morton, Wyoming, Farmington, and Canton. GEFA emerged in response to the need for small growers and producers to work collaboratively to better meet the needs of a burgeoning local food movement. By avoiding duplication in their planting and harvesting and assisting each other through the challenges of the growing season,

the seven grower members of GEFA are putting more locally-produced food on plates throughout Central Illinois.

- [Stewards of the Land, LLC](#) (Marty Travis, Fairbury, Livingston County): The mission of the Stewards of the Land, a farmer collaborative composed of 25 farmers, plus 5 farmer advisors, is to create, maintain, and support the family farm, to help them become and remain sustainable and profitable, and to provide the same opportunity for future generations. The Stewards grow a huge variety of fruits, vegetables, and heirloom plants and raise a wide range of poultry and meats. Their products are sold at farmer's markets, to local food shops and grocery stores, and to high-end restaurants across Illinois.
- [Legacy of the Land, LLC](#) (Emma Lincoln, Fairbury, Livingston County): Legacy of the Land is a collaborative of farmers in the Chenoa-Fairbury-Forrest area. Modeled on Stewards of the Land, this new collaborative has a similar mission, and assists member-farmers with marketing, transportation, and networking.

Anchor Buyers for the Hub Network: The Edible Economy Project has been engaged in discussions with several anchor buyers who are committed to purchasing central Illinois farm products aggregated through the central Illinois food hub network. They include:

- [Illinois State University Dining Services](#) (Arlene Hosea): ISU Dining Services collaborated with the Edible Economy Project on a pilot project to source selected produce from three local farmers in 2011. Many elements of this grant proposal are based on learning from this pilot.
- [University Housing, University of Illinois at Urbana-Champaign](#) (Dawn Aubrey): University Housing's award-winning Dining Services staff cooks from scratch at every meal to provide customers with variety and nutrition all year long. Dining Services currently uses local produce grown on the U of I student farm, and would like to expand use of local farm products.
- [Heartland Community College Child Development Lab](#) (Mary Beth Trakinat): Heartland Community College Child Development Lab (CDL) is a nationally accredited inclusive demonstration laboratory school that provides high quality care and education to the children of Heartland Community College's students, faculty and staff. The College wants to introduce more fresh, local products into meals served to children in the CDL.
- [Irv & Shelly's Fresh Picks](#) (Irv Cernauskas): A member of the Great Lakes Food Hub Network, Irv & Shelly's is a Chicago-area retailer providing year-round home delivery of local and organic food--and wants to source a larger proportion of their product from farmers in downstate Illinois. The Edible Economy Project is seeking to integrate Irv & Shelly's existing network of minimal hubs into the central Illinois food hub network.
- [Feeding Illinois](#) (Tracy Smith): Feeding Illinois' eight member food banks work through a network of member agencies, community partners and corporate and government partners to provide food for hungry people in Illinois, to advocate for policies that reduce hunger, and to educate the public about the vital role food

banks play in addressing hunger. Feeding Illinois has a portion of their budget set aside for local food purchases.

- [Gourmet Gorilla™](#) (Jason Weedon): A member of the Great Lakes Food Hub Network, Gourmet Gorilla™ supplies local and organic school lunches and healthier eating options for students in pre-schools, elementary and high schools, as well as other institutions in the Chicago area. Gourmet Gorilla currently uses 500 pounds per day of sweet potato, peas, carrots, broccoli, corn, zucchini and squash, among other vegetables, and expects to double this amount by September 2012. Gourmet Gorilla would like to source these products locally as much as possible.
- [Hendrick House](#) (Diane Cooper): Hendrick House provides private housing and dining services for University of Illinois students. To support their commitment to sustainability, Hendrick House built a LEED-certified dining hall in 2009. In addition, they participate in a cooking oil recycling program, buy locally grown produce, and no longer use trays for food.
- [Soul Vegan](#) (Ellamahd Israel): Chicago's leader in Sustainable Soul Food wishes to source more of their ingredients locally. Soul Vegan specializes in prepackaged vegan entrees, sandwiches and salads with gluten free and organic options, and plant-based catering for events. Soul Vegan is particularly interested in connecting with farmers in Pembroke.

Other Interested Buyers: These buyers have expressed interest in purchasing from local farmers aggregating at minimal hubs, but without committing to be anchor buyers:

- [Common Ground Food Co-op](#) (Jacqueline Hannah): Common Ground Food Co-op is a cooperatively owned grocery store that promotes local and organic production, fosters conscious consumerism, and builds community. They are a full service grocery store with produce, bulk goods, a self-serve deli, frozen foods, cleaning products, and more.
- [Common Ground Natural Foods](#) (Katha Koenes): Common Ground Grocery, a locally owned natural and organic foods grocery, has been located in downtown Bloomington, IL since 1977. Proudly supporting local foods since their beginning, they carry local grain, flour, popcorn, eggs, cheese, meats, and produce.
- [DESTIHL®](#) (Manny Martinez): DESTIHL® creatively combines and reinvents craft beer and full-flavored dishes using many local ingredients and both modern and traditional techniques. When possible, they utilize local ingredients, material and area businesses and support local charities.
- [Dublin O'Neil's](#) (Josh Huddleston): Dublin O'Neil's is committed to serving customers an unmatched array of traditional Irish dishes, but also to the community of Champaign and the surrounding areas. Menu selections are made from 100% grass feed beef and fresh produce from local farmers.
- [Fresh Moves](#) (Steve Casey): Using a bus donated by the CTA, Fresh Moves partnered with Architecture for Humanity to transform the bus into a mobile produce market that brings fresh, delicious, nutritious produce into under-served Chicago neighborhoods. Fresh Moves would like to source their food from local farmers.

- [Harvest Café](#) (Cameron Urban): Located in historic downtown Delavan, the Harvest Cafe is a farm-to-table restaurant specializing in modern takes on classic American dishes. They make everything in-house and source ingredients locally whenever available, supporting area farmers and producers as much as possible.
- [Quench Restaurants](#) (Quentin Love): Quench Restaurants is a small chain of Chicago restaurants, whose mission is to develop communities through people’s appetite by positioning food establishments and systems where they’re needed the most-- right in the neighborhood.

1942.314(b) Timeframe

The timeframe in which this project’s work will be accomplished is somewhat dependent on when grant funds become available, given that farmers have more time in the winter to meet and work on new projects, and minimal hubs will be implemented and tested during the growing season. Thus we have not assigned specific dates to the activities, but rather outlined them in this general month-by-month overview.

Date	Activity	Technical Assistance	Provider
Month 1	Farmer-participant identification	Business counseling through survey administration and follow-up communications	Heartland Community College; The Land Connection; Black Oaks Center
Months 1-2	Technical Assistance Needs Determination	Technical Assistance Provider identification and contracting	Heartland Community College; Karen Lehman (Fresh Taste) and Great Lakes Food Hub Network Technical Assistance providers
Months 2 - 3	Pre-season planning with farmers and anchor buyers	Facilitation of meetings between farmers and buyers	Irv & Shelly’s Fresh Picks; Heartland Community College, The Land Connection; Sara Riley; Black Oaks Center
Months 2 - 4	Minimal hub site identification	Asset inventory, location analysis	Marty Travis, Irv Cernauskas, Logistics consultant (TBD)
Months 2-4	Collaborative marketing training	Workshops, consulting services	Marty Travis, The Land Connection
Months 5 - 7	Food safety protocol development	Materials and curriculum on food safety practices	Heartland Community College,

			Donnell & Associates, The Land Connection
Months 5 - 12	IT platform development/adaptation, testing, and implementation	IT consulting, training materials	Kris Travis, Marty Payne, Sam Rose, with support from Karen Lehman (Fresh Taste) and other Great Lakes Food Hub Network Technical Assistance providers as needed
Months 8 - 12	Development and delivery of training on food safety practices, packing, labeling, use of IT platform	Workshops, individual consulting	Heartland Community College, with support from Karen Lehman (Fresh Taste) and Great Lakes Food Hub Network Technical Assistance providers as needed
Months 4 - 12	Minimal hub implementation	Transportation logistics	Irv Cernauskas, Heartland Community College, The Land Connection, logistics consultant (TBD)

1942.314(c) Key Personnel

PROJECT MANAGEMENT TEAM:

Heartland Community College, Green Economy Initiative:

Administrative support, including project management, is provided by staff of the Green Economy Initiative at Heartland Community College.

Mary Beth Trakinat, Vice President of Continuing Education at Heartland Community College, has over 20 years' experience in workforce education and training. She will oversee the staff who will coordinate the technical assistance; provide survey development and administration services; facilitate pre-season planning between farmers and buyers;

partner on curriculum development; deliver training and consulting services; and assist with outreach to producers and buyers .

Associate Director, Illinois Green Economy Initiative, Heartland Community College: Heartland is currently in the process of employing an individual to provide community development and project management support to this project. The selection process is close to completion with an announcement of the position planned in the near future.

Applied Community and Economic Development (ACED) Fellow, Illinois Green Economy Initiative: Heartland is planning to secure the services of a Applied Community and Economic Development (ACED) Fellow from the Stevenson Center at Illinois State University for 11 months starting in June 2012. Fellows have at least one year of full-time experience in community development or social services or the equivalent. Fellows are up-and-coming community and economic development professionals with strong financial, economics, and business planning skills.

Edible Economy Project:

The Edible Economy Project has an active following of several hundred stakeholders—including farmers, government officials, chefs, restaurant executives, local schools and universities, and food justice organizations. Steering Group Members of the Edible Economy Project bring proven planning and execution skills to the project and are fully committed to its goals and outcomes.

Elaine Sebald, Founder and Steering Committee Chair, 309-287-0454; elaine@edible-economy.org: Elaine coordinated operations of the Downtown Bloomington Farmers' Market for 13 years and has a proven record of successful projects, including implementation of one of the first farmers' market EBT programs in Illinois. Elaine will partner with Heartland Community College staff in providing project guidance and management.

Marty Vanags; 309-452-8437; mvanags@bnbiz.org: Marty is CEO of the Economic Development Council of Bloomington-Normal and has over 15 years' experience in community, economic, and private commercial development, and business management. A founding steering committee member of the Edible Economy Project, Marty will promote the project by building awareness of local food as local economic development, and fostering project support with community leaders across the region.

TECHNICAL ASSISTANCE PROVIDERS:

The Project Management team identified in the previous section will decide on specific technical assistance providers in the first months of the project, after the initial surveys are completed. Those providers will include members of the Great Lakes Food Hub Network, local farmers, nonprofits, and businesses with on-the-ground experience and success in farmer training and minimal hub work. These are some of the technical assistance providers who may work on this project:

BUSINESS COUNSELING

- Karen Lehman; Karen directs Fresh Taste, a funder collaborative dedicated to relocalizing the food system in the Chicago foodshed and improving equity of access

to good food. She serves as an advisor to the Great Lakes Food Hub Network. Karen's food system work spans three decades, beginning with an award winning PBS documentary on women's leadership in farm movements. She directed both the Food System and Regional Economy programs at The Minnesota Project; co-founded and co-directed the Youth Farm and Market Project in Minnesota, recipient of three USDA Community Food Projects Grants; directed the Institute for Agriculture and Trade Policy's Food and Agriculture Program; and held the Endowed Chair in Agricultural Systems at the University of Minnesota. She consulted on rural development with the Ford Foundation in Mexico and worked with Bob Rodale at Rodale Press where she was a contributing editor for Regeneration. Karen attended Harvard University's John F. Kennedy School of Government as a Bush Foundation Leadership fellow, where she studied with Ronald Heifetz, subsequently joining his leadership consulting firm, Cambridge Leadership Associates.

- **Marty Travis** has successfully put together two farmer groups to collaboratively market their produce. His experience will be extremely valuable as more farmer groups form around minimal hubs.
- **Terra Brockman** is the founder and Executive Director of The Land Connection, a 501(c)3 educational nonprofit working to preserve farmland and train new farmers. Having facilitated Central Illinois Farm Beginnings for eight years, Terra has connections with both beginning and experienced farmers throughout the region. Terra will provide technical assistance in farmer collaboration and communication, and will assist with pre-season planning, and outreach to producers and buyers.
- **Sara Riley**; 309-268-9906; sara.colin@frontier.com: Sara is a graduate of the Culinary Institute of America, and a graduate of Central Illinois Farm Beginnings. She teaches Family and Consumer Sciences at Normal Community West High School, where she emphasizes fresh and local foods in her Culinary Arts and Food for Thought classes. Sara will assist with outreach to farmers and buyers, and will provide expertise to assist in developing and applying criteria to assess potential minimal hub sites.
- **Fred Carter** co-founded Black Oaks Center for Sustainable Renewable Living in 2006 with his wife Dr. Jifunza Wright Carter, a holistic integrative family physician, with a goal to heighten the African American community's awareness of impending resource depletion, climate change and alternative food supplies. As co-founder of Black Oaks Center, Fred facilitates training and outreach around energy conservation, permaculture, and food issues for the 40 acre facility. Prior to Black Oaks Center, Fred was a transportation/distribution executive and certified teacher of permaculture. He has managed and created large supply chain systems, including General Motors' 2nd largest distribution center in Chicago Heights. His 30 years' experience in supply chain management and food distribution was instrumental in his shift to making a local food system with networks to move food from gardens and farms to the food deserts in and around Chicago.
- **Dr. Jifunza Wright Carter** is a holistic integrative family physician who for years has prescribed whole foods, including fresh fruits and vegetables, for her patients as

part of their therapy. Dr. Carter has more than 25 years' experience as a physician and in 1998 she founded the Holistic Family Medicine Healthy Lifestyle & Prevention Center in Chicago, a multicultural practice which uses nutrition, lifestyle, and the mind-body connection to prevent disease. Additionally, in 2006, Dr. Carter co-founded with her husband, Fred Carter, the Black Oaks Center for Sustainable Renewable Living with a goal to heighten the African American community's awareness of impending resource depletion, climate change and alternative food supplies. Black Oaks is a member of the Great Lakes Food Hub Network.

BUSINESS SERVICE IMPROVEMENTS (IT)

- **Marty Payne** is a Computer Science Engineer and is currently an information architect at State Farm Insurance Companies, focusing on architecture, design, and development of large-scale data systems. She is part of the Great Lakes Food Hub Network IT team, which will provide technical assistance in developing the IT platform.
- **Kris Travis** developed the online system used by the 25 farmer-members of Stewards of the Land for tracking produce, orders, payments, and logistics.
- **Sam Rose** is the Principal Technologist for Hollymead Capital Partners, LLC. Sam designs and leverages Internet and network technologies to create and cultivate sustainable wealth-generating ecologies, addressing the challenges of global and local communities in the 21st century. Sam has an extensive skill set, including: agile software development project management; system administration for IT components; research and development; more than nine years' experience building and co-maintaining/stewarding common pool resources; and data mining/visualization. Sam is a member of the Great Lakes Food Hub Network.
- **Irv Cernauskas** founded Irv & Shelly's Fresh Picks in 2006 with his wife Shelly Herman to provide new market opportunities for farmers and to help stimulate the re-growth of Chicago's local food system. Fresh Picks' home delivery service now brings great food to thousands of area residents, and adds hundreds of thousands of dollars to the annual incomes of local farmers. Irv's path to this venture began with a concern for social and environmental justice and wound its way through years of travel in developing countries, a Master's degree in Economics, an MBA from MIT, a six year stint as a Wall Street executive, and 20 years as an Information Technology consultant. Several years of service on the boards of Seven Generations Ahead and The Land Connection helped forge friendships with local farmers and convinced Irv of the importance of local food businesses to the health of the regional economy. He will provide technical assistance in hub siting, hub IT needs, and transportation logistics. Irv is a member of the Great Lakes Food Hub Network.

BUSINESS TRAINING IN FOOD SAFETY

- **Mary Donnell**, President, Donnell & Associates. Donnell & Associates is a consulting firm specializing in business planning and development in the greenhouse, agriculture, and renewable energy sectors. Mary has extensive experience in the

national produce and hydroponic greenhouse industries. She has held key roles in the integration of two fresh produce companies and managed a fresh herb production facility in Florida. Prior to working in the produce industry, Mary was Director of the Ohio State University Extension Agricultural Business Enhancement Center and co-creator and Director of the Ohio Hydroponic Vegetable program and the Ohio Good Agricultural Practices Program. Mary has a B.A. in Zoology, a M.S. in Horticulture, and a M.B.A. Mary is a member of the Great Lakes Food Hub Network.

Preliminary Budget

		Description	RBEG Request	Other Non-Federal Resources
Personnel				
	Assoc. Director, Green Economy (50% of salary; 1 year)	Technical Asst. (business counseling, organizing principles, operating procedures dev.); Admin. Support		\$22,500
	Stevenson Fellow (50% of salary; 1 year)	Technical Asst. (business plan dev.,)		\$13,250
	Accountant	Grant Accounting and audit	\$1,500	
	Assoc. Director, Green Institute (25% of salary; 1 year)	Business Training Development in food safety protocol development and implementation		\$12,376
Fringe Benefits				
	Assoc. Director, Green Economy (50% of benefits; 1 year)			\$6,000
	Assoc. Director, Green Institute (25% of benefits; 1 year)			\$2,985
Travel				
	Assoc. Director, Green Economy	Travel to hubs; community dev. Meetings [6 hubs x 6 trips x 50 miles/RT x .55/mile]	\$1,500	
	Steering Committee members	Travel to hubs; community dev. Meetings [6 hubs x 6 trips x 50 miles/RT x .55/mile]	\$1,500	
Equipment				
	Office equipment and furnishings			\$10,000
Supplies				
	Instructional; office; community dev. meetings		\$1,500	
Contractual				
	Fresh Taste - Karen Lehman	Business Counseling - collaborative marketing; organization development; operating procedure development		\$15,000
	Heartland Community College - Associate Director of Green Economy Initiative	Business Counseling - collaborative marketing; organization development; operating procedure development		
	Contractual Consultants - yet to be determined	Business Counseling - collaborative marketing; organization development; operating procedure development	\$28,000	
	Heartland Community College - Associate Director of Green Economy Initiative	Business Counseling - hub planning and transportation logistics		
	Contractual Consultants - yet to be determined	Business Counseling - hub planning and transportation logistics	\$19,000	
	Edible Economy Project - Marty Payne, data architect	Business Service improvements - IT Platform development		\$10,000
	Contractual Consultants - yet to be determined	Business Service improvements - IT Platform development	\$29,000	
	Contractual Consultants - yet to be determined	Business Training in food safety protocol development and implementation	\$17,000	
Other				
Total RBEG Request			\$99,000	
Total Non-Federal Resources				\$92,111

Budget Definitions

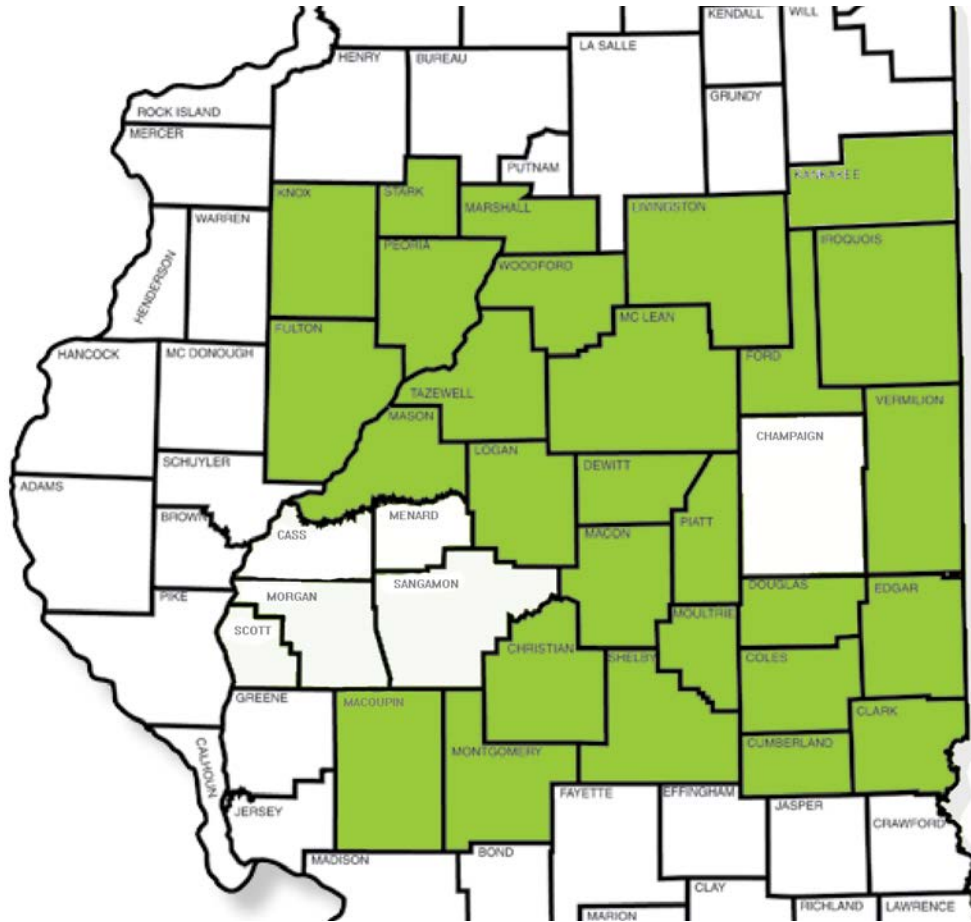
The following is a summary of the technical assistance descriptions included in the preliminary budget. These descriptions, include, but are not limited to, the following definitions:

Business counseling: collaborative marketing and farmer business entity formation (LLC, cooperative or network), organizing principles and operating procedures, hub site planning and transportation logistics

Business service improvements: communication and business transactions through research and development of an IT platform to provide interface between entrepreneurial farm business and buyers

Business training: food safety protocol development and implementation

Appendix 1: Map of Counties Where Technical Assistance Will Be Provided:



Counties Included: Christian County; Clark County; Coles County; Cumberland County; De Witt County; Douglas County; Edgar County; Ford County; Fulton County; Iroquois County; Kankakee County; Knox County; Livingston County; Logan County; McLean County; Macon County; Macoupin County; Marshall County; Mason County; Montgomery County; Moultrie County; Peoria County; Piatt County; Shelby County; Stark County; Tazewell County; Vermilion County; Woodford County

Appendix 2: Unemployment in Selected Counties

County	Feb. 2012 Unemployment Rate	Percentage Above or Below State Unemployment Rate
CHRISTIAN COUNTY	10.2	8.5%
CLARK COUNTY	12.8	36.2%
COLES COUNTY	9.4	0.0%
CUMBERLAND COUNTY	11.5	22.3%
DeWITT COUNTY	9.1	-3.2%
DOUGLAS COUNTY	9.2	-2.1%

EDGAR COUNTY	10.9	16.0%
FORD COUNTY	10.3	9.6%
FULTON COUNTY	11.2	19.1%
IROQUOIS COUNTY	10.6	12.8%
KANKAKEE COUNTY	12.9	37.2%
KNOX COUNTY	9.5	1.1%
LIVINGSTON COUNTY	9.5	1.1%
LOGAN COUNTY	9.1	-3.2%
McLEAN COUNTY	7.5	-20.2%
MACON COUNTY	11.0	17.0%
MACOUPIN COUNTY	12.0	27.7%
MARSHALL COUNTY	10.1	7.4%
MASON COUNTY	11.7	24.5%
MONTGOMERY COUNTY	13.7	45.7%
MOULTRIE COUNTY	7.9	-16.0%
PEORIA COUNTY	9.4	0.0%
PIATT COUNTY	9.6	2.1%
SHELBY COUNTY	10.1	7.4%
STARK COUNTY	11.0	17.0%
TAZEWELL COUNTY	8.9	-5.3%
VERMILION COUNTY	11.1	18.1%
WOODFORD COUNTY	7.4	-21.3%
ILLINOIS	9.4	-

Source: Illinois Department of Employment Security, February 2012 Unemployment Rates.

Appendix 3: Letters of Commitment from Farmers (attached)

Ackerman Certified Organic Farm (McLean County)
29087 North 2850 East Road
Chenoa, IL 61726

Hartz Produce (Stark County)
RR2 Box 158
5235 Township Road 900E
Wyoming, IL 61491-9039

Huelskoetter Pork (Logan County)
2322-2000th Street
Beason, IL 62512

Kilgus Farmstead (Livingston County)
21471 E 670 N. Rd
Fairbury, IL 61739

Living Water Farms, Inc. (Livingston County)
P.O. Box 74
Strawn, IL 61775

PrairieErth Farm (Logan County)
2047 2100 Rd
Atlanta, IL 61723

Samara Farm (Shelby Farm)
RR 3 Box 222
Shelbyville, IL 62565

Spence Farm (Livingston County)
2959 N 2100 East Rd
Fairbury, IL 61739

Triple S Farm (Shelby County)
RR #1 Box 122A
Stewardson, IL 62463

Twin Oak Meats (Livingston County)
11197 N 2300 East Rd
Fairbury, IL 61739

Appendix 4: Letters of Support (attached)

Illinois State University Dining Services (Arlene Hosea)
University Housing, University of Illinois at Urbana-Champaign (Dawn Aubrey)
Heartland Community College Child Development Lab (Rob Widmer)
Irv & Shelly's Fresh Picks (Irv Cernauskas)
Feeding Illinois (Tracy Smith)
Soul Vegan (Zarakyah Ahmadiel)
Fresh Taste (Karen Lehman)
Illinois Green Economy Network (Julie Elzanati)
University of Illinois Student Sustainability Committee (Marika Nell)
Spoon River Community College (Jeffrey Bash)
Kankakee Community College (Bert Jacobson)

Appendix 5: Heartland Community College Comprehensive Annual Financial Report (Audit) (attached)