



Southern Wisconsin Food Hub

Feasibility Study

Dane County Planning and Development Department
SEPTEMBER, 2011

The Southern Wisconsin Food Hub Feasibility Study is a project of the Dane County Planning and Development Department. The study was conducted in partnership with FamilyFarmed.org, Dane County UW Extension, UW Extension, and WI DATCP.

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GLOSSARY

Aggregation – A single point of collection for agricultural products from a larger number of area farms. Delivery to customers from an aggregation point can be more efficient than point-to-point distribution from farms to customers.

Food Hub – A facility that centralizes the business management structure to facilitate the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products. A food hub may provide the core services of a packing house (see below), and/or aggregate and distribute farm-packed cases. The Southern Wisconsin Food Hub Feasibility Study examines a facility that will include core packing house services. Since packing house is the traditional and more familiar term among growers, the food hub was referred to as a packing house during the project.

GAP (Good Agricultural Practices) – A voluntary audit-based program, overseen by USDA, focused on safe production, packing, handling and storing practices for fruits and vegetables to minimize risks of microbial food safety hazards.

Local – Food that is grown within a limited radius from where it is purchased. Definitions of local differ by customers and consumers, with typical ranges beginning within 100 miles and extending to 300 miles or more for regional food systems. In this report local refers to Wisconsin grown.

Packing House – A facility that handles raw produce immediately after harvest and prepares it for delivery to customers. The core services of a packing house include cooling, washing, grading, packing and storage. Additional services may include harvesting, farm pickup, customer delivery, sales and marketing.

Processing – Altering fresh produce from its raw state through heat (e.g. canning), freezing, acidification (e.g. pickling) or changing its form (e.g. chopping, pureeing).

Seasonal Extension Structure – Semi-permanent or permanent housing for the production of fruits and vegetables during cold weather seasons. Types of structures include hoop houses, greenhouses, glasshouses and indoor warehouses. These structures and innovative heating technologies can extend the growing season of some crops to 10 or more months per year.



EXECUTIVE SUMMARY

PROJECT BACKGROUND

Background: In response to overwhelming demand for local Wisconsin-grown produce, the Dane County Planning and Development Department raised funds for a feasibility study to determine the market viability for an aggregation, storage and distribution facility that connects growers in southern Wisconsin to buyers in southern Wisconsin and northern Illinois.

Purpose: The Southern Wisconsin Food Hub Feasibility Study tests the hypothesis that agricultural production and economic activity in southern Wisconsin could be fueled by the development of infrastructure to intermediate transactions between growers and wholesale customers.

Definition: This type of facility, traditionally called a packing house, is increasingly referred to as a food hub, a business model defined by the USDA: “A food hub centralizes the business management structure to facilitate the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products.”¹

Vision: The food hub was envisioned as the first of a multi-phased development project. The food hub would begin aggregating conventional local fruit and vegetables to establish the supply chain, and could be followed by the introduction of on-site processing, an organic line, proteins, collocation of existing niche aggregators and eventually an integrated agricultural business center. These supplemental projects would serve the broader needs of the agricultural community, food entrepreneurs and customers.

Funding: Public funds were sought for this endeavor to create a strategic platform from which a public or private interest could continue business development. A core team was assembled to write a grant proposal to secure planning funds. In late 2010, the project secured a 2011 HUD Sustainable Communities Regional Planning Grant awarding \$75,000 for the feasibility study. In addition, Dane County and the City of Madison each provided \$5,000 and Madison Gas & Electric provided \$1,000 toward the completion of the study.

Buyers demand local produce ranging from \$18-26 million per year and up to 800,000 pounds per week

Food hub will build
Wisconsin
local brand
and profile
of Wisconsin
products

FINDINGS, ANALYSIS, RECOMMENDATIONS

Survey Results: Two parallel surveys were implemented throughout the region to assess interest among growers and buyers in participating in the Dane County food hub. There was strong participation in both surveys. Over 240 growers and 85 grocery and foodservice buyers completed the surveys. Buyers indicated demand for local produce ranging from \$18-26 million per year and up to 800,000 pounds per week. Approximately 1,800 acres would be needed to meet this demand. Growers indicated a willingness to make up to 1,000 acres available to the food hub in 2012. Those with the highest levels of interest could make 700 acres available. Nearly 90% of this acreage is owned by growers with more than six years of experience. These findings suggest a strong base of large and experienced growers available at the outset, with willing buyers ready to buy.

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

The food hub will have three core functions: packing, marketing and distribution.

- The packing operation receives raw material from growers and packs it according to customer specifications. Depending on the grower's on-farm post-harvest handling capabilities, the product is cooled, washed, graded, packed, palletized and placed in cold storage until it is shipped to or picked up by customers. Farms that field pack may bring pre-packed cases to the food hub for cooling and storage. On-farm pickup will be offered to growers who do not have refrigerated transport.
- The marketing operation consists of buyers and salespeople who negotiate transactions with growers and customers. They may conduct pre-season crop planning with both groups to more consistently match supply and demand throughout the season.
- The distribution operation handles logistics of farm and customer pickups and deliveries. This function is often outsourced and is not included as a profit center in the business model.



Revenue Model: The packing operation earns revenue by charging a flat fee for cooling and packing. The fee schedule covers direct costs which vary based on packaging and cooling required for each crop, indirect costs and a profit margin. The marketing operation will handle two types of sales: consignment and direct purchase. In a consignment sale the food hub facilitates the sale to a buyer on a commission basis but does not purchase the product from the grower. In a direct purchase the food hub buys the product from the grower at a set price and strives to sell it to a customer at a profit.

Facility Scale: Since volume will be more constrained by supply than demand, the facility was scaled to the 700 acres likely to be supplied and the resources needed during peak season. This analysis suggests a facility of 25,500 square feet which can accommodate 12 million pounds or 470,000 cases per year. This meets approximately 40% of customer requirements, suggesting the food hub can expand its existing footprint or open a second location in the future.

Financial Analysis: The pro forma P&L shows net income of \$637,000 and cash from operations of \$708,000. This is sufficient margin to weather pricing and volume variances and provide a return of capital to investors. At full capacity using seasonal extension strategies, the facility can achieve over \$20 million in sales.

Risks: National local food trends and the survey for this study clearly indicate strong demand which exceeds available supply, so the greatest risk is lack of grower engagement to provide the volume needed to efficiently operate the food hub. There is also the pricing risk inherent in the produce industry which may squeeze margins and make it more challenging for the food hub to record profits.

Recommendations: To mitigate these risks, the operating team should employ the following strategies:

- **Emphasize a strong relationship with growers and cultivate these to ensure ongoing trusted communication, and a consistent quality supply that will meet demand.** This is particularly important in the first few years of the operation.
- **Build a base of business with the highest end customers it can reach efficiently.** The company should seek customers in channels that are less price-sensitive and can purchase in large quantities. Fine dining restaurants, high-end hotels, premium grocery stores and specialty health food stores are the highest end customers. Public schools and broad line supermarket and foodservice distributors purchase very large quantities, but will be more price-sensitive. The food hub should seek a mix of customers which emphasizes the higher end of this range.
- **Make it a win for growers even if unprofitable at first.** If it doesn't work for the growers in Year 1 there will not be a Year 2. This means giving growers the price they need even if it cuts into or eliminates gross margin, and ensuring the enterprise is well enough capitalized to cover initial losses.
- **Secure a management team with experience in marketing and sales.** An experienced manager that oversees buying and selling with a deep knowledge of production, perhaps a former grower, is critical for garnering trust and confidence among growers and buyers. Growers will need assurance that they will be rewarded with a better price if they deliver a better quality product, so the sales staff must be able to effectively gauge and market quality to buyers to ensure an equitable correlation between quality and price. Depending on the breadth of experience



Up to six full time
and 16 part-time jobs
would be created at
opening, and more
than double that as
the facility reaches
capacity

The facility would provide a new market and new revenue stream for as many as 50 family farm businesses in communities across Dane County and the Southern Wisconsin region, adding value to farmland



within the management team, transportation and logistics should be outsourced until the team has perfected marketing and sales.

- **Build loyalty for the Wisconsin brand and tell the local story to customers.** There is real value-added in local produce which should command a better price: local produce has a longer shelf life, better taste, is nutritional and many shoppers and diners know the difference and will pay for it. Convey these benefits to consumers at retail through farm identification and value added information on signage, cases and PLU codes.
- **Make it easy for customers to do business with the food hub.** Deliver consistent quality, packed the way customers demand, and offer an assortment that will make them a valuable supplier to their customers. In time, the business relationship will be based less on price and more on trust and simplicity.
- **Establish a wide and cooperative network of growers.** There should be a core group of growers that participate in pre-season crop planning. Cultivating relationships with a broader range of growers will also increase the likelihood of filling gaps if weather or other unplanned events disrupt supply. These transactional relationships can be the foundation for future partnerships as the business expands.
- **Collaborate with other intermediaries and partners to strengthen the market.** This is a highly interdependent industry, one in which cooperation with competitors can expand markets and support prices. As the business and new relationships develop across the local food system, these stakeholders and other intermediaries serving the same market should be open to opportunities that could build efficiencies and strengthen markets. These intermediaries could also become customers, and vice versa, and are a potential means for finding markets and filling orders.

PROJECT IMPACTS

There could be significant positive economic and social impacts if a food hub is developed in Dane County. Based on the scale of the facility operating at steady state, the following benefits could be realized:

Jobs: In steady state the food hub employs six full-time and 16 part-time employees and require up to ten third party employees to handle distribution. Employment would increase up to 250% (2.5x) as the facility develops seasonal extension capabilities and reaches capacity. Indirect employment will also result from the enterprise. According to a recent UW-Madison study, 2.2 jobs are created for every \$100,000 in local food sales.² At the projected \$20 million capacity, the facility could create over 400 jobs in the local economy. Staffing would include positions in management, operations, sales, facilities, production, warehousing, and distribution.

New Markets: According to the average acreage among survey respondents, the facility would provide a new market and new revenue stream for as many as 50 family farm businesses in communities across Dane County and the Southern Wisconsin region, adding value to farmland.

Farm Income: It is not known what crops are currently grown on the acreage that would be committed to the food hub nor what new acreage will be put into production. However, if just 10% of the facility's volume at capacity comes from acreage converted from commodity crops to fresh market vegetables, farm revenue could increase by \$900,000 to \$1.8 million.³

Economic Multiplier: At a 2.6x multiplier, at capacity and on a retail sales basis, the food hub would inject an additional \$60 million into the local economy (\$20 million wholesale ~ \$26 million retail x 85% not currently local x 2.6 multiplier).⁴ See page 66 of Appendix for an explanation of local procurement percentages, compared with equivalent shipments of produce from more distant locations.

Environmental Impact: In steady state, the food hub will distribute annually approximately 12 million pounds of produce in 400 tractor-trailer loads over an average distance of 150 miles. This could reduce carbon emissions by 2.4 million pounds per year.⁵

2.2 jobs are created for every \$100,000 in local food sales

RECOMMENDATIONS FOR NEXT STEPS

The Project Team outlined key next steps and should work toward the following milestones subsequent to the publication of this report:

Q3 2011:	Follow-up grower-stakeholder meeting in October to continue to identify core group of growers which will form the supply basis for the food hub, and possibly its ownership basis;
	• Issue a request for proposal for a business plan consultant;
	• Issue a request for proposal for an owner/operator to join with grower-stakeholders and the Project Team as the new company's entrepreneurial management team.
Q4 2011:	Identify owner/operator, complete business plan and begin fundraising.
Q1 2012:	Identify funding and close on facility.
Q2 2012:	Prepare for launch in June 2012.



PROJECT BACKGROUND

PURPOSE AND VISION

In response to overwhelming demand for local Wisconsin-grown produce, the Dane County Planning and Development Department raised funds for a feasibility study to determine the market viability for an aggregation, storage and distribution facility that connects growers in southern Wisconsin to buyers in southern Wisconsin and northern Illinois. The Southern Wisconsin Food Hub Feasibility Study was undertaken to test the hypothesis that agricultural production and economic activity in southern Wisconsin could be fueled by the development of infrastructure to intermediate transactions between growers and wholesale customers. This type of facility, traditionally called a packing house, is increasingly referred to as a food hub, a business model defined by the USDA: “A food hub centralizes the business management structure to facilitate the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products.”⁶

The food hub was envisioned as the first of a multi-phased development project. The food hub would begin by aggregating conventional local fruit and vegetables to establish the supply chain. Subsequent projects could include: the introduction of on-site processing, organic and protein product lines, collocation of new and existing niche aggregators, bringing together a number of allied businesses in one site. Public funds were sought for this endeavor to create a strategic platform from which a public or private interest could continue business development.

In June 2009, Dane County Department of Planning and Development began discussions with FamilyFarmed.org about developing a food hub that would serve the critical function of connecting agricultural producers in the region with customers in Madison, Milwaukee, Chicago and surrounding areas.

DANE COUNTY BACKGROUND

Supporting agriculture has been a public policy and program priority for Dane County throughout the last 30 years. The county has participated in the state’s farmland preservation program since its inception, and continues to be an innovator in developing and implementing policies that protect farmland and provide new market opportunities for farmers.

In recent years, Dane County has been at the forefront of developing and adopting farmland preservation and agricultural economic development tools. These include:

- Exclusive agricultural zoning with limitations on non-farm development, generating approximately \$1.2 million in state income tax relief annually for participating farmers.
- A revised Agriculture-Business District was designed to provide for a wide range of agriculture, agriculture accessory and agriculture-related uses, at various scales.
- A Transfer of Development Rights ordinance that allows farmers to sell development rights in exchange for long term conservation easements to preserve farmland.
- A small lot agricultural zoning district that provides opportunities for small scale producers to acquire land for their operations at farmland values.
- Providing funding and staff support to start a farmers market in an underserved neighborhood in Madison.
- Two state-certified Agricultural Enterprise Areas.
- Establishing the Dane County Food Council to advise the county board on strategies to improve and strengthen the local agricultural economy and food system.
- Adopting a Local Food Purchase policy that encourages county purchases of locally grown food at various facilities.
- A competitive grant program administered by Dane County UW Extension to promote value added agricultural opportunities among small scale producers.
- Establishing the Institutional Food Market Coalition which conducts institutional market development on behalf of Dane County and regional growers and local food businesses.

Programs such as these help stabilize the agricultural land base and reflect the numerous ways Dane County government helps farmers innovate and stay economically viable. Despite being the fastest growing county in the state, agriculture remains the predominant land use, accounting for 70% of the county’s land base. The county’s commitment to agriculture is deeply rooted in its local history and culture, and is home to the World Dairy Expo, and the nation’s largest producer-only farmers’ market.

The food hub project builds on Dane County’s efforts and brand, and creates new business opportunities and a market-based approach to work in conjunction with county land use policies and regulations.

Approximately 1,800
acres would be
needed to meet
demand

AGRICULTURAL INDUSTRY

As of 2010, Dane County had 535,756 acres of land in active farming use, representing 70% of the total land area of the county. That year, 3,331 farms, averaging 161 acres apiece, produced over 15 different crops. Dane County continues to lead the state in total market value of agricultural products. In 2007, Dane County products sold for over \$470 million, the highest for any county in Wisconsin, and in the top 2% for agricultural counties nationwide. Traditionally a top dairy, grain and cattle producer, Dane County is also in the top 25% of U.S. counties in market value of twelve different commodity groups.

Dane County has a growing market for small acreage production and direct sales of farm products, including road-side stands, farmers' markets, "pick your own" and Community Supported Agriculture. In 2008, 246 Dane County farms generated over \$2.5 million in direct-marketing sales. Based on sales to individual households, the market for locally grown produce has in recent years expanded to include restaurant, grocery and institutional buyers. Between 2007 and 2010, Dane County's Institutional Food Market Coalition program worked with hundreds of local growers and institutional buyers (including the UW Madison and UW Milwaukee hotels, hospitals and local and state government facilities), facilitating over \$2.5 million in local food sales.

Dane is one of eight counties comprising the Madison Region. This region's \$1.86 billion agriculture industry supports nearly 60,000 jobs and represents a major strength and opportunity for the economy. The Madison Region counts 14,000 farms across its eight counties, representing some of the richest agricultural land in the world. The Madison Region lies at the epicenter of consumer-driven markets for artisanal, organic, and local foods between Minneapolis, Chicago, Milwaukee and Madison. It has a longstanding tradition of innovation and entrepreneurship, developing sustainable bio-energy, creating successful infrastructure for value-added products, and increasing the market for local foods.⁷

OPPORTUNITIES AND BENEFITS

In June 2009, Dane County Department of Planning and Development began discussions with FamilyFarmed.org about developing a food hub that would serve the critical function of connecting agricultural producers in the region with customers in Madison, Milwaukee, Chicago and surrounding areas.

FamilyFarmed.org, Chicago, Illinois, has been developing markets for local food since 1999 through trade shows, farmer development and training and political advocacy. The organization's work has expanded to include the planning and development of fresh produce aggregation businesses. This is in response to the inadequate infrastructure in most markets for efficient relationships between local growers and buyers, particularly in the wholesale channel.

FamilyFarmed.org assists some of the largest regional wholesale buyers in securing local produce – Sysco, Compass Group, Whole Foods Market, Goodness Greenness, Chipotle and other large scale buyers.

The demand from these large customers far exceeds supply from Illinois and Wisconsin growers, and at this time there are few intermediaries that can aggregate regional produce and supply it with the volume, quality, food safety, and consistency needed. These issues are well understood by the Dane County Planning and Development Department through its leadership of the Institutional Food Market Coalition, as well as other county initiatives.



Over 1000 acres
identified through
survey

Based on its collective food systems experience including case histories published in a 2009 UW Madison report,⁸ the Project Team identified numerous potential economic, social and environmental benefits.

Economic Stimulus: According to the 2005 Consumer Expenditure Survey (Bureau of Labor Statistics), Dane County spends over 1 billion dollars annually on food. A majority of the fruits and vegetables consumed are grown in California, Florida, Mexico and beyond. The economic impact of this trend is billions of dollars leaving the region from across the supply chain over time. The facility could bring income to Wisconsin by replacing imports with locally grown produce. For every one dollar spent locally, there is a 2.6 dollar multiplier effect.⁹

Job Creation: Based on published case studies, it was estimated that a food hub could add 30 jobs for seasonal production and an additional 20 jobs with seasonal extension. In addition, demand for farm labor could add 2-3 jobs for every acre converted to high-value crops, more with seasonal extension, plus construction or re-development jobs for a new or existing site. Staffing would include positions in management, operations, sales, facilities, production, warehousing, and distribution.

Tax Revenue: It was estimated that the facility could generate \$20-30 million in sales within three years, and increase beyond this level with seasonal extension strategies. These revenues would bring additional sales tax to the local economy.

New Markets: Wisconsin farmers of all sizes and specialties interested in selling wholesale fruits and vegetables could have a local distributor through which to sell.

Increased Farmer Income: Growers could benefit from the significantly higher market value of fresh market crops by converting acreage from commodity crops. Initial estimates of sales per acre for fresh market vegetables ranged from \$5,000-10,000 vs. \$950 on average for commodity crops.¹⁰

Dane County, Wisconsin, Local Foods Brand: Opportunity to build the local brand, raising awareness and driving demand for Wisconsin products throughout southern Wisconsin and northern Illinois.

Environmental Impact/Emissions Reduction: Local produce distributed from Dane County would travel approximately 150 miles to its largest customer base in Chicago. Compared to the current average produce journey of 1500 miles,¹¹ this would reduce carbon emissions by 6,000 pounds per load (based on 5 mpg and 22.2 lbs CO₂ per diesel gallon).¹²

Improved Health: With the pervasiveness of obesity, hypertension and many other diet-related health issues and diseases, it is important not only to facilitate eating fresh local produce for personal health, but also to reduce health care costs.

FEASIBILITY STUDY FUNDING

Based on the vibrant and diversified farming economy in southern Wisconsin and strong demand identified from Chicago, FamilyFarmed.org and the Dane County Department of Planning and Development began raising funds for a feasibility study to investigate the financial viability of building a food hub in Dane County serving growers in Dane County and southern Wisconsin and regional buyers. A core team was assembled to write a grant proposal to secure planning funds. In late 2010, the project secured a 2011 HUD Sustainable Communities Regional Planning Grant awarding \$75,000 for the feasibility study. As funding partners, Dane County and the City of Madison each provided \$5,000 and Madison Gas & Electric provided \$1,000 toward the completion of the study.

Food Hub will
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PROJECT TEAM

The Project Team was composed of three groups: a Core Team which participated in all aspects of the study, a team of Technical Advisors who provided valuable input for facets of the study relevant to their expertise, and an Advisory Board for project oversight and stakeholder engagement. Biographical summaries for the Core Team and Technical Advisors are provided on page 52 in the Appendix.

The Core Team leading the study included the following individuals:

Name	Title	Role/Expertise
Olivia Parry	Senior Economic Development Specialist, Dane County	Project Director, study design, oversight and management, final report
Kathy Nyquist	Principal, New Venture with FamilyFarmed.org	Study design, business modeling, final report
Carrie Edgar	Director, Dane County University of Wisconsin Extension	Grower outreach strategy and implementation in southern Wisconsin
AJ Bussan	University of Wisconsin Professor of Horticulture	Wisconsin horticulture industry, grower outreach, model development
Jim Slama	Founder and President, FamilyFarmed.org	Buyer outreach and overall project design and strategy

Technical Advisors provided expertise for survey design, facilities and equipment design, model, variables, and risks.

Name	Title/Organization	Expertise
Kelly Liddington	Extension Agent, Agriculture and Natural Resources, Virginia Cooperative Extension	Grower-led food hub development; public/private partnerships
Duane Maatz	Executive Director, Wisconsin Potato and Vegetable Association	Grower networks; private, for-profit food hubs
Anne Reynolds	Associate Director, UW Center for Cooperatives	Cooperative business models, strategy development
Kerryann DiLoreto	Survey consultant	Survey design and implementation
Laura Witzling	IFM Coordinator, Dane County	Identify and help develop and implement buyer outreach

An Advisory Board was convened to provide project oversight and facilitate stakeholder engagement.

Name	Organization
Grant Abert	Slow Money
Amber Bennett	Badgerland Financial
Bob Bloomer	Chicago Public Schools
Leah Caplan	Metcalfe's Market
Mike Daniels	USDA Rural Development
Mark Daugherty	Collaborative Energy Ventures LLC
Teresa Engel	Wisconsin DATCP
Lois Federman	Wisconsin DATCP
Michael Gay	Office of Business Resources, City of Madison
Robert and Barbara Golden	RE Golden Produce
Diane Hesselbein	Dane County Board of Supervisors
Anna Maenner	Wisconsin Fresh Market Vegetable Growers Association
Anne Reynolds	UW Center for Cooperatives
Bob Scaman	Goodness Greenness
Joie Schoonover	UW Madison Housing
Brandon Schulz	Wisconsin Grocer's Association
Rick Terrien	Iowa County Development Corp.
Jose Valadez	Whole Foods
Todd Violante	Dane County Planning and Development
Jim Welsh	Natural Heritage Land Trust
Phyllis Wilhelm	Madison Gas & Electric

STUDY METHODOLOGY

APPROACH

A five-stage business planning approach was initiated by the Project Team to ensure adequate due diligence was conducted to instill confidence among future stakeholders.



Once an opportunity, idea or hypothesis has been identified for a successful business, a feasibility study is conducted to shape the business concept and test its viability before a significant capital investment is made. In a for-profit context the crux of the feasibility study is a financial model that analyzes the potential for the business to earn a satisfactory profit for owners and investors based on a set of reasonable assumptions. These assumptions are derived from primary and secondary research conducted in the study, often borrowing available data from analogous operations. If the study reveals sufficient evidence that the business can be successful, a business plan is developed in the third stage that adds further rigor to the assumptions and business model including complete operations, marketing and financial plans. The business plan will identify the funding needed from investors and project the level and timing of investor returns. As funding is secured in stage four, the entrepreneurial team can prepare to launch the business.

The first two stages have been completed by the Project Team and are represented in this report.

FEASIBILITY STUDY WORK PLAN

Based on the opportunity identified prior to receiving funding for the feasibility study, the Project Team designed the study to address the following questions/areas:

1. Types of produce buyers demand, in what quantities, at what time of year, and their other requirements
2. Number and characteristics of fruit and vegetable farmers interested in selling to the food hub; quantity and type of produce
3. Number of acres of fruit or vegetable production growers could supply/add by 2012, 2013
4. Grower interest in seasonal extension and for which crops
5. Grower interest in a cooperative business structure vs. other models
6. Operating model: basic packing services, value-added services, private labeling, shipping, etc.
7. Optimal scale in terms of facility size and throughput
8. Potential size of the market and size of the business
9. Economics of the operation at breakeven and optimal capacity; sensitivity analysis for pricing and volume
10. Location: evaluate potential sites in Dane County
11. Nature of current and potential competition and sustainable competitive advantages
12. Chief business risks and mitigation strategies
13. Composition of management team, skill set required
14. List of financing options - state, local, federal, private

To answer these questions, the Project Team developed a work plan that encompassed stakeholder engagement, primary and secondary research, finalizing recommendations and developing the report.

STAKEHOLDER ENGAGEMENT	Invited buyers, County representatives, Ag Extension, ag associations and other stakeholders to participate on Advisory Board and convened 3 meetings Conducted extensive grower outreach and convened 2 grower meetings
PRIMARY RESEARCH	Developed and implemented two surveys among growers and buyers Held one-on-one discussions with key buyers, growers and investors Conducted ad hoc focus group at June grower meeting Issued RFI for potential sites in Dane County
SECONDARY RESEARCH	Obtained market and trends data from USDA and syndicated sources Analyzed operating data from published case histories and confidential data made available to Project Team Synthesized all findings Created financial model and conducted sensitivity analysis
REPORT FINALIZATION	Reviewed findings with Advisory Board Wrote study and reviewed with Project Team Created and disseminated final report

Timeline of Activities Feasibility Study Completed:

Initiation	Engaged Advisory Board with a kickoff meeting to garner support. Attended by 19 Advisory Board and Project Team members.
Initiation	Began grower outreach with the Southern Wisconsin Fresh Produce Workshop at the Alliant Energy Center. Agenda included workshops on production and marketing, and a general session introducing the food hub development project. Attended by 94 growers and presenters, 39 of which completed evaluations. 100% found the workshop worthwhile, and the food hub session drew the highest interest.
March-May 2011	Developed and disseminated grower and buyer surveys. The first assessed the available supply, interest levels and concerns among area growers, and the second gauged buyer demand for local produce. Both achieved extremely high response rates and revealed complementary interests among growers and buyers.
April 27, 2011	Convened Advisory Board to review preliminary grower survey results and review buyer survey for feedback.
May 2011	Developed and issued RFI for potential sites in Dane County. Six responses were submitted and three additional sites were identified by the Project Team.
June-July 2011	Analyzed and synthesized research findings, built the financial model and began drafting the report.
June 9, 2011	Convened grower meeting at Alliant Energy Center to present initial findings from surveys, gauge interest, and discuss ownership and operating structures. Attended by 25 growers, two Wisconsin produce auctions representing over 100 growers, the Project Team and Technical Advisors.
June 27, 2011	Final Advisory Board meeting to review a draft of the feasibility study and discuss the team's interest in continuing in the development of the project.
September 2011	Published and disseminated report.
October 2011	Action plan, business planning phase begins.

Nearly three in ten quickservice operators serve locally sourced items now and nearly half believe these items will grow more popular in their segment in the future

SURVEY RESULTS

In March, April and May, two parallel surveys were implemented throughout the region to assess interest among growers and buyers in participating in the Dane County packing house. Both surveys were available online and the grower survey was also distributed in hard copy through a mailing and at grower events. The food hub was referred to as a packing house in the surveys because it is the more traditional definition, and it also conveys that the core services offered by the food hub would include those offered by a packing house (see page 4 for Glossary).

The surveys were promoted through the following channels:

Grower Survey	Buyer Survey
2011 Southern Wisconsin Fresh Produce Workshop	Institutional Food Market Coalition
2011 Wisconsin Fruit and Vegetable Conference	Wisconsin Grocers Association
2011 Midwest Value Added Ag Conference	Something Special From Wisconsin
2011 Wisconsin Local Food Summit	FamilyFarmed.org (Chicago markets)
Wisconsin Fresh Market Vegetable Growers Association	
Wisconsin Apple Growers Association	
Wisconsin Berry Growers Association	
Wisconsin State Farmer	
DATCP	
Dane County UW Extension	
UW Extension	

GROWER AND BUYER RESPONSES

The most consequential findings are presented below. The Appendix contains more detailed response data.

NUMBER OF COMPLETED SURVEYS

There was strong participation in both surveys. Over 240 growers and 85 grocery and foodservice buyers completed the surveys. To ensure the surveys captured responses from a base ready to do business with a food hub, 137 growers who do not currently grow fresh market vegetables were removed from the sample; however, one-third of these respondents expressed an interest in diversifying their farm, indicating the pool of ready growers may increase in the future. The remaining 104 grower responses and 85 buyer responses provided robust data from which to draw implications.

The response rate among buyers was surprising to the Project Team given the survey’s detail and comprehensiveness. One buyer noted that it required three staff people to fully answer the survey.

TABLE 1: NUMBER OF COMPLETED GROWER AND BUYER SURVEYS

	Grower Survey	Buyer Survey
When the survey took place	Available from March 1 to May 17, 2011	Available from April 7 to May 17, 2011
Number of completed surveys	241 completed surveys and 104 are included in results 104 (43%) currently fresh market growers and comprise the maximum number of respondents for questions below 137 (57%) not currently fresh market growers; however, approximately 1/3 of this group indicated an interest in diversifying their farms	85 completed surveys are included in results

Note: While these numbers represent the total possible sample, not every respondent answered every question. Some findings may be drawn from a smaller sample, particularly those drawn from cross-tabbed responses.

NATURE OF RESPONDENTS

Growers: Approximately two-thirds of respondents are experienced farmers with six or more years growing produce. The least experienced group is the largest segment by overall number of respondents and interest level; however, the most significant segment has six to ten years of experience. Together, this group represents more than half of the acreage that could be made available to the food hub in 2012. Notably, the high level of interest among newer farmers and those not yet growing produce highlights substantial long-term growth potential for the food hub as these growers increasingly participate.

A number of growers, including large commercial growers, have expressed their interest to the Project Team since the surveys closed in May. The sample would be weighted toward higher experience and acreage if they had been included.

TABLE 2: GROWER EXPERIENCE AND ACREAGE AVAILABLE

Years growing produce	# Respondents	Total acreage that could be available in 2012	Ave. acres/farm	# Interested*
0-5	34	116-149	4	27
6-10	24	577-579	24	20
11-20	21	111-121	6	18
21-30	10	49-84	7	7
31-50	11	71-101	8	8
50+	2	10-15	6	1
TOTAL	102	934-1049		81

*Cited “somewhat, very or extremely interested” in doing business with a packing house



Buyers: The large majority of respondents buy produce for foodservice outlets or distributors: 80% when counted together with buyers who purchase for both foodservice and grocery outlets. Most respondents have total annual produce purchases of less than \$100,000, but 6 buyers report purchases exceeding \$5 million. The total amount of produce purchased by this sample ranges from \$45 to \$145 million per year. With the market sized at \$10 billion wholesale (see page 29 of Market Analysis), this sample represents a small portion of the total opportunity.

Not believed to be represented in this sample are buyers from independent restaurants, since the survey was neither sent to the Wisconsin Restaurant Association nor that target market.

TABLE 3: BUYER CHANNELS AND ANNUAL PURCHASES

Buyer Channel	Annual Total Produce Purchases
11 (12%) buy produce for grocery stores	Majority (60%) purchase less than \$100,000/year in total produce
48 (56%) buy produce for foodservice outlets	<ul style="list-style-type: none"> 11 (20%) purchase less than \$10,000
22 (26%) buy for both channels	<ul style="list-style-type: none"> 15 (25%) purchase between \$10,000-\$50,000 8 (15%) purchase between \$50,000-\$100,000
	19 (30%) purchase between \$100,000-\$5 million
	6 (10%) purchase more than \$5 million/year
Total: 81 respondents	Total sample buys from \$46 - \$145 million per year

LEVEL OF INTEREST IN PACKING HOUSE

There is extremely high interest among both growers and buyers in doing business with a packing house in Dane County. Among growers and buyers respectively, 75%, a virtual unanimity reported to be at least “somewhat” interested in doing business with a packing house; one-third and more than 60% respectively were “very” or “extremely” interested. The presence of selection bias in the sample – those most interested will go to the effort to complete a survey and skew findings favorably – is made less consequential by the quantity of data provided, which permits quantitative analysis within the sample rather than applying percentages to a broader data set.

With two-thirds of the most interested growers having six or more years of experience, and these representing as many as 700 acres that could be made available to the food hub in 2012, the early involvement of a core group of large and experienced growers appears likely, and will be a platform for the food hub’s success.

Level of buyer interest did not vary from the total sample averages by channel or level of current purchases. While buyers individually tend to be on the smaller end of the range, together they represent significant purchasing scale. Those expressing any interest purchase approximately \$96 million in total produce today, and those most interested, \$78 million.

TABLE 4: GROWER AND BUYER LEVEL OF INTEREST

	Grower Survey	Buyer Survey
Total citing “somewhat,” “very” or “extremely” interested	75% are interested in selling to facility	97% are interested in buying from a packing house
	2/3 have been farming for 6+ years	Represent approx. \$96 million in total annual produce purchases (midpoint of range)
	Would make approximately 1,000 acres available to the packing house in 2012	Roughly equivalent interest among retail and foodservice buyers and among small and large buyers
“Very” or “extremely” interested	33% are extremely/very interested in selling to facility	More than 60% are extremely/very interested in buying from facility
	2/3 have been farming for 6+ years	Represent approx. \$78 million in total annual produce purchases
	Would make approximately 700 acres available to the packing house in 2012	

PRIORITY CROPS

Generally, there is high synergy between the specific crops that buyers demand and those growers wish to supply. Of the fruits and vegetables growers highlighted as most likely to be sold through a packing house, five were also flagged by buyers as crops they would be most likely to purchase locally: tomatoes, cucumbers, peppers, apples and strawberries.

TABLE 5: TOP CROPS CITED BY GROWERS AND BUYERS

	Top Grower Crops (% of growers offering)		Top Buyer Crops (% of buyers demanding)	
	Whole	Processed	Whole	Processed
Vegetables	Butternut Squash	42%	Carrots	72%
	Acorn Squash	40%	Carrots	35%
	Tomatoes	38%	Peppers	72%
	Cucumber	35%	Cucumbers	68%
	Peppers	34%	Peppers	32%
Fruit	Pumpkins	34%	Onion	65%
	Apples	22%	Onion	64%
	Strawberries	21%	Broccoli	64%
	Watermelon	18%	Broccoli	29%
			Cantaloupe	27%

Crops in red are cited by both growers and buyers

The data reveals differences in the degree and level of interest between growers and buyers. Buyers tend to be generally interested in purchasing almost any local crop type, and interest level differences between major types of produce are relatively minor. For example, locally grown collards, which generated the least interest among buyers, are still in demand by 21% of buyer respondents. On the other hand, grower interest in selling different crops is more diffuse and based on what they are currently producing. This is a positive trend, indicating that growers currently producing fruits and vegetables can confidently continue to focus on their specific crop type knowing that they will find an interested buyer.



As noted in the complete summaries in the Appendix, 80% of grower respondents grow both retail grade (US No. 1) and seconds (US No. 2). This, along with the relatively high buyer demand for processed produce highlights the potential for a strong processed seconds line offered by the facility in a future phase.

SUPPLY AND DEMAND

Supply: Approximately 1,000 acres could be made available to the food hub in 2012 according to survey results. This equates to approximately 14 acres on average per respondent. The median acreage per farm is four acres, signaling a majority of smaller farms and a fewer large farms among respondents. Notable in the data is greater-than-the-average acreage among the most interested growers and a positive correlation between acreage and interest: 41 and 18 acres among those “extremely” and “very” interested, respectively. These growers could make 700 acres available to the food hub in 2012. Also notable is a positive correlation between acreage and experience, and the indication that 620 acres could be made available among the most experienced and interested growers. This suggests a strong base of large and experienced growers could participate at the outset.

Demand: Buyers indicated they would purchase 800,000 total pounds of local produce per week if it were available. Of this volume, 750,000 pounds would be whole fresh produce and 50,000 pounds would be processed. This suggests 30 million pounds of throughput during the 40-week local season – more with seasonal extension – if the food hub handled 100% of customer demand in the sample for whole local produce. Buyers indicated they would purchase an average of \$22 million in local produce if available, which is consistent with the pound volume noted above. Top crops in demand based on weight include potatoes, apples, onions, cucumbers, broccoli and cauliflower.

Based on survey response alone, the weekly demand for local fruits and vegetables would require the facility to aggregate produce from over 1800 acres (see page 23 of Business Analysis) and growers could make 1,000 acres available to the food hub in 2012. These figures could be considerably higher since the survey only captured a sample of the potential universe of growers and buyers. This discrepancy between buyer demand and immediate supply reflects the packing facility’s long-term growth opportunity. After a successful first year aggregating from a smaller acreage base and securing several major buyers, the facility would have significant growth potential by expanding its acreage and grower base, and then selling to new large customers.

TABLE 6: SUPPLY – ACREAGE AVAILABLE TO PACKING HOUSE IN 2012

Grower Survey	Grower Acreage That Could be Available to Packing House in 2012
Total all respondents	1,000 total acres (lo-hi range 940-1050) 14 acres average per farm 4 acres median per farm
“very” or “extremely” interested	700 total acres 24 acres average per farm vs. 16 acres for all respondents to this question “Extremely interested” 41 acres on average “Very interested” 18 acres on average “Somewhat interested” 10 acres on average 700 acres among those with 6+ years experience
Total with 6+ years experience	860 total acres 13 acres average per farm vs. 10 acres for all respondents to this question 700 acres among “very” or “extremely” interested

TABLE 7: DEMAND – BUYER POUND AND DOLLAR VOLUME

Buyer Survey	Buyer Volume
Total pounds purchased from packing house in 2012	800,000 avg. pounds per week (750,000 whole + 50,000 processed) Suggests 30 million pounds of packing house volume in 40-week season Highest cited: <ul style="list-style-type: none"> • Potatoes 125,000 lbs/week • Apples 105,000 lbs/week • Onions 70,000 lbs/week • Cucumbers 64,000 lbs/week • Broccoli 62,000 lbs/week • Cauliflower 47,000 lbs/week
Total dollar amount of produce purchases	Currently purchase \$95 million per year in total produce (\$45-\$145 million range) Would purchase \$22 million per year in local produce if available (\$18-\$26 million range)

SEASONAL EXTENSION

Both grower and buyer responses indicate that seasonal extension would be a viable strategy to pursue. The majority of growers already use extension structures and would invest further if the market were assured. This is highly likely as half of buyers indicated that if available they would purchase produce grown or stored in seasonal extension facilities year-round. Seasonal extension is one of the most effective strategies a food hub can employ to grow sales and profit.

TABLE 8: USE AND INTEREST IN SEASONAL EXTENSION

	Grower Use	Buyer Interest
Interest in seasonal extension	60% use seasonal extension structures 70% would invest further in seasonal extension with secure market	Half of buyers would buy local produce year-round if available Peak interest in May, September, October Top crops: apples, carrots, tomatoes, onions, peppers, potatoes



GROWER PRACTICES AND BUYER REQUIREMENTS

This line of questioning was designed to determine if current growing practices and food safety protocols are consistent with the requirements of buyers. Fewer than 10% of growers in the sample are currently GAP certified (there are just 60 GAP certified growers in the state of Wisconsin),¹³ and about 50% of buyers require certification. Fortunately, there is a high degree of interest among growers in pursuing the necessary certifications. Of all respondents, 75% would consider certification if required. Among the 24 “very/extremely interested” growers who have been farming for at least six years, 19 (roughly 80%) are either certified or interested in pursuing certification and could make 625 acres available to the food hub in 2012.

Other food safety and regulatory compliance requirements are more often required by buyers. The large majority require traceability, liability insurance, a farm food safety plan, compliance with labor laws and HACCP certification. About two-thirds of growers are familiar with safe handling protocols.

A key to success in the wholesale channel is removing field heat quickly and maintaining the cold chain throughout distribution. Only 30% of growers have cooled transportation; however, the larger growers are those with refrigerated trucks so there may be a large enough supply with cooled transport. The additional logistics of arranging pickups will also need to be considered.

TABLE 9: GROWER PRACTICES AND BUYER REQUIREMENTS

	Grower Practices	Buyer Requirements
GAP certification	<p>Overall:</p> <ul style="list-style-type: none"> Fewer than 10% report being GAP certified Top certified crops are potatoes, cucumbers, peppers and tomatoes 75% would consider certification if needed <p>Of 24 very/extremely interested with 6+ years farming experience:</p> <ul style="list-style-type: none"> 3 with 140 acres combined report being GAP certified 16 with 485 acres combined would pursue certification 	Less than half require GAP certification
Other handling	65% are familiar with safe handling protocols 30% have refrigerated delivery trucks, and these are the larger growers (avg. 25 acres)	<p>More than 70% require</p> <ul style="list-style-type: none"> Traceability Liability insurance Farm food safety plan Compliance with labor laws HACCP certification

ORGANIC CERTIFICATION

To most buyers certified organic is “somewhat” or “not very” important, suggesting that their primary demand is for conventional local. This corresponds with the vision of creating a food hub for conventional local produce and possibly adding an organic line over time.

TABLE 10: BUYER ATTITUDES ABOUT ORGANIC CERTIFICATION

How Important	# Responses	% Responses
Extremely	3	5%
Very	8	14%
Somewhat	23	40%
Not Very	17	30%
Not At All	6	11%
Total	57	100%

BUYING AGREEMENTS

Growers and buyers are both highly interested in pre-season crop planning and establishing contracts. This is a particularly positive trend because growers are more likely to invest in infrastructure and pursue necessary certifications if more formal buyer agreements are in place.

TABLE 11: GROWER AND BUYER INTEREST IN CONTRACTS AND CROP PLANNING

	Grower Interest	Buyer Interest
Interest in pre-season crop planning	80% would participate in pre-season crop planning	80% would participate in pre-season crop planning
Interest in purchase contracts	About 50% would prefer at least some of their sales to be on contract 10% currently grow on contract, and have larger acreage vs. average (22 vs. 14)	90% are interested in contracts

INTEREST IN OWNERSHIP, MANAGEMENT OR INVESTMENT

When asked if they would be interested in ownership, management or financial investment opportunities with the packing house, the majority of buyer and grower respondents cited interest only in a traditional supplier/customer business relationship. Growers’ primary focus is that they are being treated fairly and given fair market prices for their products. Approximately 35% of growers claim their interest in participating in the packing house would increase if it were a grower-owned cooperative. Of this group, 80% representing 400 acres were only “somewhat” interested, so the co-op structure might solidify a significant amount of acreage.

Approximately 40% of buyers are interested in ownership of, investment in or management of the packing house. This percentage was the same among small and large buyers.

Approximately 40% of buyers are interested in ownership of, investment in or management of the packing house. This percentage was the same among small and large buyers

TABLE 12: GROWER AND BUYER INTEREST IN OWNERSHIP, MANAGEMENT, FINANCIAL INVESTMENT

	Grower Survey	Buyer Survey
Those not interested	60% do not care about ownership structure so long as price is fair 60% of these cited "very or extremely interested" and represent approx. 800 acres	60% are interested only in a supplier/customer relationship
Those interested	35% would be more likely to participate in a grower-owned cooperative. 80% of these cited "somewhat interested" and represent approx. 400 acres	40% are interested in ownership, investment or management Similar ratio among largest buyers (\$2M+/year of local produce)

SERVICES NEEDED

Growers: There appears to be a strong initial base of large, experienced growers with the knowledge and infrastructure required to meet wholesale customer packing requirements (cooling, washing, sorting, packing and labeling). On the other hand, there are many smaller growers that would either prefer or require these packing services. As well, the logistics for on-farm pick-up will need to be determined for many growers to assure proper cold chain management from field to customer.

Buyers: Close to half of the buyer respondents would be interested in private labeling products received through the packing house, and could add a profitable service to the food hub.

TABLE 13: GROWER AND BUYER INTEREST IN SERVICES

Grower Interest	Buyer Interest
About half may need core packing house services, and these are smaller growers as compared to the 14 acre average of all respondents:	About 40% are interested in private labeling
50% not familiar with grading standards (avg. 7 acres)	
45% do not have washing facilities (avg. 10 acres)	
45% do not have storage capacity (avg. 4 acres)	
70% would deliver to packing house, but only 30% would use refrigerated trucks, and these are the larger growers (avg. 25 acres)	

GROWER CONCERNS

While there are many positive signals in the survey data, pricing, GAP certification and availability of farm labor are highlighted as the top grower concerns, even among the largest and most interested growers. Grower respondents also have a myriad of broader uncertainties – about their potential yields, insurance, labor, delivery and storage. While some of these concerns will be further addressed in the business planning phase, these responses demonstrate the need for consistent and ongoing communication and education efforts between the County, Extension, the future food hub owners and growers through each stage of the process from planning to development and launch.

TABLE 14: GROWER CONCERNS REGARDING WORKING WITH A PACKING HOUSE

Grower Concerns	# of Respondents	% (out of 80 growers)	# "Extremely Interested"	# with 40+ Acres
Have doubts about pricing	50	63%	5	7
Lack knowledge about GAP certification	30	38%	5	3
Lack of farm storage	28	35%	1	1
Lack of farm labor to harvest	27	34%	5	3
Unsure if I grow enough	26	33%	4	2
Unsure about liability insurance	23	29%	0	0
Unable to deliver to packing house	22	28%	2	1
Cannot afford GAP certification	21	26%	1	0
Unsure about signing a contract	15	19%	3	2
Questions about labor laws and farm labor management	10	13%	2	1
Unsure about when to harvest for a packing house	8	10%	3	3

ENGAGEMENT

Overall, many growers are interested in moving forward – beyond initial discussions. Over 70% provided contact information and expressed interest in being contacted for further discussions. This demonstrates that many are genuinely invested in the packing house concept and may be open to collaborating in order to address the concerns and obstacles surfaced by the study.

TABLE 15: GROWER AND BUYER INTEREST IN CONTINUED DIALOG

	Grower Engagement	Buyer Engagement
Gave permission to be contacted	70% provided contact information and many gave explicit permission to be contacted 342-428 acres among those who gave explicit permission to be contacted Average of 10.4 acres per respondent who is willing to be contacted	75% gave permission to be contacted regarding their interest

IMPLICATIONS

Overall, the results of the buyer and grower surveys provide strong evidence supporting the development of a food hub in Dane County. The food hub would address a gap in Wisconsin's current food supply chain, enable growers to further expand and diversify their crop base, meet some of the high demand for locally grown produce and provide farming communities with more stability, jobs and economic growth opportunities.

The survey highlights a high level of immediate interest among buyers and growers in the services that would be provided by a food hub. Growers of all sizes, experience levels and crop types have demonstrated interest. Collectively, a core group of experienced growers would likely devote a substantial amount of acreage to the facility in early years.

Additionally, the survey results reveal a high potential for early success and long-term growth. Buyer demand would outstrip grower supply in early years. The food hub could bring on new growers each year with confidence that there will be a strong market for this additional supply. Seasonal extension will also be a very viable growth strategy for the food hub, and its individual producers, to pursue. The tasks of bringing on new growers and helping them invest in seasonal extension infrastructure will be greatly facilitated by the fact that buyers are open to establishing contracts to guarantee fair market pricing and help farmers hedge against some of the inherent risk associated with growing produce.

The food hub would certainly face many challenges, especially in its earlier years, but these are surmountable. In addition to building out food hub infrastructure, developing sales strategies and providing a conduit for this overwhelming demand, if the facility is to assist in growing the agricultural base it will be important to provide highly trained field management to provide support and guidance to help growers crop plan, establish proper cold chain management protocol and receive certifications necessary to successfully sell to wholesale customers.

These up front investments would pay off over time, for both growers and food hub owners. Buyers are extremely interested in a variety of different crops, and their demand is likely to exceed the food hub's supply for at least several years.

In addition to emphasizing seasonal extension and adding private labeling services, other like businesses have already expressed interest in co-locating with the food hub and could provide additional future income to the facility.



MARKET ANALYSIS

INDUSTRY SIZE, GROWTH RATE AND SALES PROJECTIONS

The U.S. wholesale fruit and vegetable industry reached \$71B in revenues in 2010,¹⁴ a 12% increase from \$63B in 2007.¹⁵ The 5-year growth projection is 8%, and is being fueled by health and wellness trends, greater awareness of sourcing and food safety, and growing cooking and eating trends inspired by food connoisseurs/gourmets and ethnic groups.¹⁶ Retail statistics from the Organic Trade Association suggest the size of the wholesale organic fruit and vegetable industry is \$8B, grew 11.4% from 2008-2009¹⁷ and is projected to grow at an annual rate of 13% through 2012.¹⁸

The U.S. has been a net importer of fresh produce since 1998.¹⁹ According to the USDA, approximately 15% of all vegetables and 45% of all fruit consumed in the U.S. comes from foreign sources, a 50% increase since 1983.²⁰ Growth has been driven by demand for year-round supply and facilitated by favorable trade agreements and handling methods that extend shelf life.

INDUSTRY TRENDS

Demand for local food is strong and increasing. According to the market research firm Mintel which tracks consumer purchase and lifestyle trends, "Local procurement is a fast-growing category with tremendous promise, and marketers that are aware of the many dynamics at play can generate significant revenues."²¹ Mintel found that one out of six Americans will go out of their way to buy local products. Locally-sourced fruits and vegetables was the product category with greatest consumer interest, with 31% purchasing this product category from local sources at least once per week.²²

The trend is similarly strong in the restaurant industry. Chefs surveyed by the National Restaurant Association ranked locally-grown produce as the #1 menu trend of 2010,²³ and the editors of FoodChannel.com rank "Locavore" (person who eats local food) as first among the top food influencers of the decade.²⁴ According to National Restaurant Association research, "89 percent of fine-dining operators serve locally sourced items, and nine in 10 believe demand for locally sourced items will grow in their segment in the future. Close to three in 10 quickservice operators serve locally sourced items now and nearly half believe these items will grow more popular in their segment in the future. Seventy percent of adults say they are more likely to visit a restaurant that offers locally produced food items."²⁵

The political climate for the development of local food enterprises is extremely favorable. According to the USDA Economic Research Service, "Federal, state, and local government programs increasingly support local food systems. Many existing government programs and policies support local food initiatives, and the number of such programs is growing."²⁶ One prominent example is the \$4.5B Healthy, Hunger-Free Kids Act, a federal program signed into law in December 2010 which provides schools with incentives to source local foods.²⁷

Compared with many other states, Wisconsin has supported increasing its specialty crop production and distributing produce locally. Wisconsin instituted the Buy Local, Buy Wisconsin (BLBW) competitive grant program in 2008 to strengthen Wisconsin's agricultural and food industries by reducing the marketing, distribution, and



Chefs surveyed by the National Restaurant Association ranked locally-grown produce as the #1 menu trend of 2010

processing hurdles that impede the expansion of sales of Wisconsin’s food products to local purchasers. The program contributed significantly to many producers, retail markets, school lunches and statewide local produce marketing efforts. In 2010, the program received 37 pre-proposals requesting over \$1.5 million in funds. Five projects were funded, and \$177,700 was awarded. Dane County’s Institutional Food Market Coalition was among the top recipients funded. Additionally, a network of farmers, communities, educators and government entities have come together to form the Wisconsin Local Food Network, an organization focused on connecting and supporting different stakeholders in the local food supply chain.

FIGURE 1: UNMET DEMAND FOR LOCALLY-GROWN FRUITS AND VEGETABLES - \$8 BILLION LEAKAGE



LOCAL MARKET ANALYSIS

According to population-adjusted national labor statistics, consumers in Wisconsin and the Chicago metropolitan area spent \$100 billion on food in 2008. Approximately \$17 billion of this was spent on fruits and vegetables (\$10 billion in wholesale terms).²⁸ Adjusting for tropical varieties, the region is capable of producing 85% of this volume,²⁹ and according to market research firm Mintel, 90% of consumers would buy local produce if it were conveniently available;³⁰ therefore, in 2008 the region could have reaped approximately \$13 billion in revenue from locally-grown fruits and vegetables. Conservative estimates suggest 15% of this is currently produced in Wisconsin (see calculation on page 54 of Appendix), so the potential unmet need for local produce is approximately \$8 billion (\$6 billion in wholesale terms). With 2.2 jobs created for every \$100,000 in local food sales, this represents 175,000 potential jobs.³¹ And while it is unknown how this investment would scale within the food system, there is significant potential for innovation and job creation by directing these resources locally.

Although a relatively small sample compared to the total buyer universe within Wisconsin and northern Illinois, the results from the feasibility study buyer survey reinforce these trends. Respondents indicated demand for local produce ranging from \$18-26 million per year. This represents as much as 40% of their total annual produce purchases, suggesting the large majority of their volume during the six-month harvest season would be local, if available. Additionally and importantly, the survey was not distributed through the Wisconsin Restaurant Association, so a large and profitable segment of the buyer universe is not represented in these projections, nor is the potential for expansion into the Minneapolis market.

FIGURE 2: PROXIMITY TO MAJOR MARKETS



COMPETITIVE LANDSCAPE AND ADVANTAGE

Wisconsin is home to small-scale operators, large-scale distributors and startup ventures focused on connecting wholesale buyers and growers. Each has a varying degree of commitment and success, and none are solely aggregating Wisconsin local. Many of these entities could be perceived as competitors to the Dane County food hub. However, it is common practice, particularly at this stage in the development of a local food system in Wisconsin, for competing intermediaries to work collaboratively during the season, often trading with each other to find markets and fill orders. For this reason, many of these so-called competitors are not currently perceived as threats and could likely serve as highly beneficial partners. This is particularly true given the survey results, which clearly highlight the existing gap in overall supply and available facilities to aggregate and distribute produce for growers in southern Wisconsin. In fact, Sysco, Neesvig’s, R.E. Golden Produce and large produce auctions participated in the packing house meetings and demonstrated a willingness and interest in cooperation.

Specialty produce distributors who could be perceived as direct competitors to the Dane County food hub now or in the future are listed in Table 16 below. At this time, none offer the same products, services and benefits as the Dane County food hub would. National broad line distributors such as Sysco are also potential competitors and many are currently building local food programs.

TABLE 16: SPECIALTY PRODUCE WHOLESALERS IN WISCONSIN

Company Name	City	Sales (\$000)	Employees	Some Local	Diverse Local	Near So. WI Growers
Dane County Food Hub	TBD	TBD	TBD	✓	✓	✓
Potato King	La Crosse	73,656	108	✓		
Dean Kinkaid	Palmyra	68,200	100	✓		✓
A Gagliano Co	Milwaukee	51,150	75			✓
Schroeder Brothers Farm	Antigo	34,100	50	✓		
Appleland	Fredonia	34,100	50	✓		
Loffredo Fresh Produce	Madison	34,100	50	✓	✓	✓
Maglio & Company	Milwaukee	20-50,000	100-249	✓		✓
R.E. Golden Produce	Madison	2,500-5,000	5-9	✓	✓	✓
Catalano Produce	West Allis	2,500-5,000	5-9			✓
Parrfection Produce	Monroe	n/a	n/a	✓	✓	✓
5th Season Coop	Westby	n/a	n/a	✓	✓	
Produce Auctions	Various	n/a	n/a	✓	✓	✓
Alsum Farms & Produce	Friesland	82,000	120	✓		

While the current competitive landscape does not appear to be aggressive, it is important to understand the features that could provide competitive advantages for the Dane County food hub in the future. There are several:

- As the first entrant, the Dane County food hub would have the opportunity to engage and solidify relationships with a chosen group of growers. Given the constraints in supply, a large base of skillful and loyal growers is a key competitive advantage, and potentially more important than secure relationships with buyers.
- The Dane County project enjoys a high level of stakeholder engagement including key partners that can enable rapid scale-up: University of Wisconsin Extension, Wisconsin Potato and Vegetable Growers Association and DATCP to name a few. There are many other very well developed agencies which are not yet organized around this initiative but have strong interest in the initiative and ties to the Project Team and Advisory Board.
- There is a wide network of distributors and market specialists (e.g. Institutional Food Marketing Coalition, Something Special from Wisconsin, Wisconsin Innovation Kitchen) within which to form marketing and distribution partnerships.
- There is also an extensive network of large-volume buyers identified through the collective work of the Project Team. They are interested and ready to begin sourcing local produce.



BUSINESS ANALYSIS

To determine if a food hub in Dane County can operate profitably, a financial model simulating a pro forma profit and loss statement (P&L) was developed. The financial model's structure was based on the operating and business model described below and could differ from the business model chosen by the future owner/operator. Model inputs were derived from the surveys and operating data from analogous food hubs as noted under Methodology on page 8.

OPERATING MODEL

The food hub will have three core functions: packing, marketing and distribution.

- The packing operation receives raw material from growers and packs it according to customer specifications. Depending on the grower's on-farm post-harvest handling capabilities, the product is cooled, washed, graded, packed, palletized and placed in cold storage until it is shipped to or picked up by customers. Farms that field pack may bring pre-packed cases to the food hub for cooling and storage. On-farm pickup will be offered to growers who do not have refrigerated transport.
- The marketing operation consists of buyers and salespeople who negotiate transactions with growers and customers. They may conduct pre-season crop planning with both groups to more consistently match supply and demand throughout the season.
- The distribution operation handles logistics of farm and customer pickups and deliveries. This function is often outsourced and is not included as a profit center in the business model.

The initial phase of the project assumes packing, marketing and distribution of U.S. Grade No. 1 produce only. Since focus is a key success factor in entrepreneurial strategy, this limitation in scope is to allow the operator to master buying, packing and marketing the largest and most profitable product line. Over time the team can introduce new offerings such as leased storage, private labeling, seconds, retail facility, organic, proteins, processing and more. These future opportunities are not reflected in the business model.

BUSINESS MODEL

The packing operation earns revenue by charging a flat fee for cooling and packing. The fee schedule covers direct costs which vary based on packaging and cooling required for each crop, indirect costs and a profit margin. The marketing operation will handle two types of sales: consignment and direct purchase. In a consignment sale the food hub facilitates the sale to a buyer on a commission basis but does not purchase the product from the grower. In a direct purchase the food hub buys the product from the grower at a set price and strives to sell it to a customer at a profit.

As a general practice, product packed at the food hub is sold on commission and product packed by the grower is purchased directly. In the first case, the grower receives the remainder of the price paid by the customer less commission and packing fees. This transaction can take a few weeks to settle. In a direct purchase, the Perishable Agricultural Commodities Act requires that the grower receive payment within 10 days of delivery to the food hub unless other terms are agreed to in writing.

This for-profit business model incents the food hub to maximize price and volume, and to boost profit margin by minimizing direct and indirect overhead costs. Growers are incented to improve quality to attract a higher price and increase percent pack-out for product graded and packed at the food hub.

FACILITY

The ideal facility is located close to a core group of committed grower-suppliers and near a major transportation route leading to a large customer base. The interior will have zoned refrigeration, ambient storage, a packing floor and offices. The exterior will have at least two raised loading docks that tractor-trailers can easily access for shipping and receiving and a back lot or access road for truck overflow. Technical requirements include commercial or industrial zoning, access to an abundant supply of clean water, adequate electrical service, preference for natural gas and adequate weight limits on access roads.

If an existing structure in an ideal location with refrigeration can be leased, it may be advantageous to begin operations as a leaseholder to minimize capital expense and location risk should the core group of growers change its locus of concentration in the first few years of operation. The Dane County Planning and Development Department issued a request for information (RFI) to all Dane County communities regarding existing facilities of 10,000 to 25,000 square feet that meet specific criteria. Presented below is a summary of responses and additional sites from commercial listings researched by the Project Team. Some may be well matched to the requirements. Site visits will be conducted in the business planning phase to determine the viability of these and other possible locations. The RFI is included on page 71 of the Appendix.

TABLE 17: SITE SPECIFICATIONS FROM RFI SUBMISSIONS

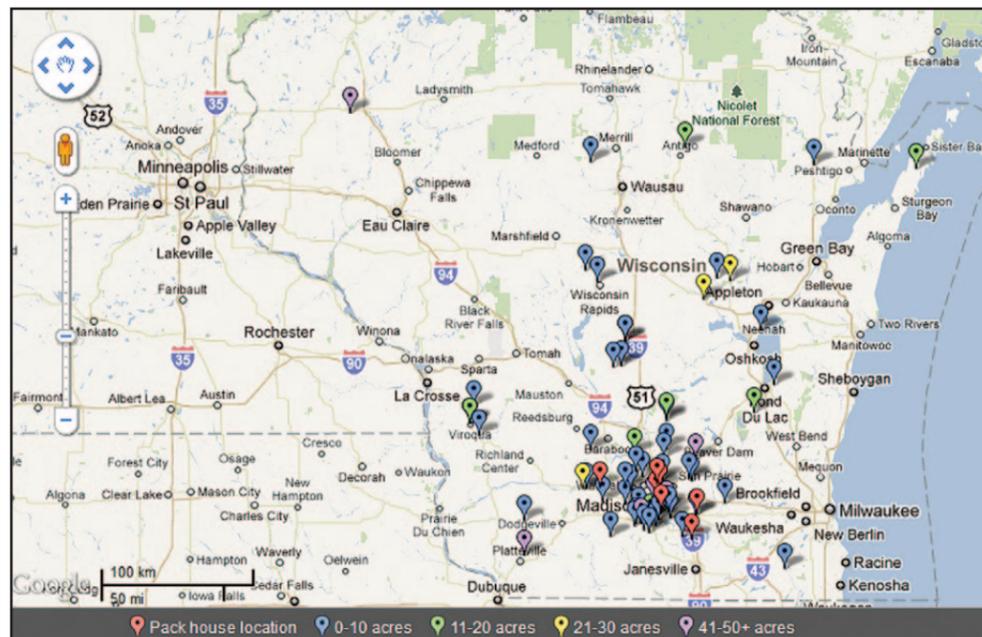
Community/Address	Size	Cost	Advantages	Comments
Cambridge 520 Verburg Street (East of Madison)	1,000- 50,000 sf	\$6.10 per pallet per month	Refrigerated warehouse space in a 5 year old facility. Landlord pays all utilities and keeps temperature at 38 degrees. Slightly farther highway access, but located in between major highways (39/90 and 94).	Warehouse space charging by pallet, additional of \$6.00 per pallet for moving in and out of storage.
De Forest 4355 Duraform Lane (North of Madison)	Up to 41,440 sf available for lease	\$3.55/sf	Ample space for lease, 5 dock doors, semi and office parking available, plenty of utility capacity. Agriculture-based/supported community, located in industrial park close to major highways (39/90/94) that lead to major cities.	Does not have refrigeration currently available. Current tenant is warehouse/ food distributor with refrigeration and freezer, so adding refrigeration may be possible.
De Forest North Towne Corporate Park (North of Madison)	Build to suit	\$128,502- \$189,486 per acre	New construction, built to suit. Plenty of utility capacity with new well system online in 2011. Agriculture-based/supported community. Located in industrial park close to major highways (39/90/94) that lead to major cities.	No existing facility. Commercial lots for sale ranging from 36,000 - 1 million sf. Currently agricultural land planned to convert to corporate park.
De Forest De Forest Business Park - Burton Blvd (North of Madison)	Build to suit	Negotiable	New construction, built to suit. Plenty of utility capacity with new well system sited and approved. Agriculture-based/supported community. Located in industrial park close to major highways (39/90/94) that lead to major cities	No existing facility. Currently agricultural land planned for industrial use.
De Forest 4160 Anderson Road (North of Madison)	35,000 sf (2 adjacent buildings 17,500 sf each)	\$3.00- \$7.00/sf	Agriculture-based/supported community. Close to major highways (39/90/94) that lead to major cities.	Existing facility with 1 dock door. May require additional utility capacity. Adjacent commercial zoned parcel of 6.63 acres also available.
Edgerton Edgerton Business Park (Southern Dane County)	Build to suit	Negotiable; list \$29,900 per acre	New construction, built to suit. Agriculture-based/supported community, supportive of business development and expansion. Close to major highways (39/90) that lead to major cities. Southerly position favorable for access to Chicago and farms with earlier harvest	No existing facility; commercial lots for sale ranging from 3.0 - 15.5 acres (flexible lot sizes). Currently agricultural land converting to corporate park. Will require additional sewer capacity.
Edgerton 111 Interstate Blvd (Southern Dane County)	15,000 sf	Unknown	Close to major highways (39/90) that lead to major cities. Southerly position favorable for access to Chicago and farms with earlier harvest.	Existing Energy Star certified facility with office and warehouse space with 3 dock doors.
Mazomanie 711 Synergy Place (Northwest of Madison)	24,000- 348,000 sf	\$2.00/sf	Large facility with 19 dock doors, large office space, own rail spur and loading doors. Agriculture-based/supported community.	15 miles away from highway (90/94). Formerly corporate headquarters for Sunny Industries (printing press).
McFarland 4412 and 4414 Terminal Drive (Just south of Madison)	23,850 and 49,560 sf	\$4 million for 18 acres; willing to subdivide	Reestablish business in vacant facility. Close to major highways (39/90 & Beltline Hwy) that lead to major cities.	Currently used as lumber yard; would require rezoning. Only has 1 loading dock door.

Presented below are maps of the facility locations and interested growers at the county and state level. Food hub locations are plotted in red and farm locations are color-coded by the acreage that could be made available to the food hub in 2012.

FIGURE 3: COUNTY MAP OF POTENTIAL SITES AND FARMS



FIGURE 4: STATEWIDE MAP OF POTENTIAL SITES AND FARMS



FINANCIAL MODEL

The following assumptions were used to create a financial model simulating a P&L pro forma of the food hub in steady state. Steady state is the point at which the business has broken even and is operating at a self-sustainable level. Sensitivity analyses were run to model the effects of volume and price on net income to simulate performance during scale-up and supply/pricing shocks.

Volume and Facilities: Facility size imposes a constraint on volume, so demand and supply were analyzed to determine the optimal size of the food hub. Buyers identified approximately 750,000 pounds/week of demand for whole local produce. This represents 30 million pounds over the 40-week local season. One acre yields an average of 25,000 pounds of the top crops mentioned in the survey, and approximately two-thirds of the yield is U.S. Grade No. 1; therefore, approximately 1,800 acres would be required to meet 100% of customer requirements. Growers identified approximately 1,000 acres that could be planted for the food hub in 2012. The growers most interested in doing business with the food hub identified 700 acres. Since volume is more constrained by supply than demand, the facility should be scaled to the acreage likely to be supplied.

Facility size is determined by the resources needed during peak season. The food hub will handle 75% of its volume in the 14 weeks between the summer solstice and autumnal equinox (late June to late September). Cooler capacity is the greatest resource constraint, so the cooler is scaled to accommodate peak case volume, and the total facility is scaled to accommodate the cooler. The cooler can accommodate an average of four cases per square foot per week, and the cooler accounts for approximately 20% of the total facility area. (This deployment of space assumes the food hub is processing large volumes through its packing lines. If the operation handles mostly farm-packed cases, a greater proportion of area should be allocated to coolers.) Using these metrics, the chart below shows a range of facility sizes up to the maximum needed to satisfy 100% share of customer requirements (SOR).

TABLE 18: FACILITY SIZE AND THROUGHPUT

Acres	Facility Size (sf)	Annual Pounds	Annual Cases	Customer SOR
150	5,500	2,512,500	100,500	8%
300	11,000	5,025,000	201,000	17%
500	18,000	8,375,000	335,000	28%
700	25,500	11,725,000	469,000	39%
1,500	54,000	25,125,000	1,005,000	84%
1,791	64,500	30,000,000	1,200,000	100%

A facility of 25,500 square feet was selected for the financial analysis because it can handle 700 acres of supply, 30% less than the total identified through the survey. This acreage will be confirmed with growers during the business planning phase to ensure it represents a goal achievable within 2-3 years of operation. A facility of this size can accommodate approximately 12 million pounds or 470,000 cases per year, roughly 40% of customer requirements, suggesting the food hub can expand its existing footprint or open a second location in the future.

Mix: Based on grower survey responses regarding on-farm packing capabilities, it is assumed that 50% of cases are packed at the food hub and 50% are farm packed. Sales mirror this ratio: 50% commission and 50% direct purchase.



Commission, Fees and Margin: Packing and cooling fees are estimated at approximately \$5.20 per case including 20% margin. Commission is fixed at 10%, although this may range from 5% to 15% depending on the volume and complexity of sales handled for each grower. Margin on direct purchases is fixed at 20% but this will also fluctuate from 0% to more than 50% depending on market conditions. The average observed in the industry ranges from 18%-25%.

Price: An average case price of \$18.00 was used in the financial model. This is based on the \$20.00 twelve-month trailing average (July 2010 to June 2011) of Chicago terminal market prices for the top 10 crops mentioned in the survey, less \$2.00 to account for the difference in transportation cost vs. product shipped from border states and abroad. This transportation differential can be as much as \$6.00 per case. The cost to transport produce from the Dane County food hub to local customers will be far less, and how the surplus will be shared is subject to negotiation. That Wisconsin-grown produce can be purchased below terminal market prices may be one of the primary advantages for buyers; however, the food hub should negotiate to capture the majority or all of the transportation differential, if not more, on the basis of longer shelf life, better overall quality, consumer demand for local and a values-based transaction that provides a greater share of the proceeds to the grower.

Revenue: For purposes of the pro forma each case marketed through the food hub is recorded as revenue at the full case price. According to accounting principles this is applicable only to direct purchases; revenue from consignment sales would be recorded as commission and fees. Returns are estimated at 2% of gross sales to account for product that is rejected by customers or invoices that are not paid.

Cost of Goods Sold (COGS): The cost components of the packing operation are materials, direct labor and indirect overhead (plant utilities, maintenance, taxes and insurance). These total approximately \$4.15 per case when the facility is operating at a steady state (including 20% margin yields a total fee of \$5.20). The largest cost component is the price paid to the grower. On consignment sales this is the remainder after packing fees and commission are deducted: \$11.00 in the base case (\$18.00 less 10% commission less \$5.20 packing fee). On direct purchases it is the agreed upon case price: \$14.40 in the base case (\$18.00 less 20% margin).

Selling, General and Administrative Costs (SG&A): These costs include salaries and benefits, office expenses, professional services fees, liability insurance, licenses and marketing. The model assumes the operation employs three people at startup – CEO, warehouse/quality manager and salesperson/buyer – and at specific sales thresholds increases staff such as additional salespeople, buyers, bookkeepers and managers. SG&A represents 7% of sales, slightly lower than industry standards.

Financing, PP&E and Startup Costs: Although the facility may be rented at the outset, in steady state it may be advantageous to own the property. Comparing \$3.50 per square foot lease rate to the cost of financing (which is offset by the tax benefits of depreciation and interest), there is financial advantage to ownership if USDA-backed financing can be secured below the market rate of interest. The financial model assumes the purchase of \$2.8 million in PP&E (property, plant and equipment), 80% financed at 5% interest. Property cost is assumed \$500,000 for five acres. Plant cost is assumed \$110 per square foot built to suit. Equipment cost is estimated at \$185,000 for vehicles, plant equipment and furnishings. Startup costs include a 20% down-payment of \$700,000. The amount of working capital required through breakeven is additional and will be determined during business planning because it is dependent on sales forecasts made by the operating team.

Profit and Loss Statement: The pro forma P&L for the food hub in steady state shows net income of \$637,000 and cash from operations of \$708,000. Based on an equity investment including the \$700,000 down-payment plus working capital to be determined, this suggests sufficient cash flow for a return of capital to investors. Ten-year projections with breakeven and IRR analysis will be completed in the business planning phase.

TABLE 19: P&L PRO FORMA

	Annual	% Sales
Revenue		
Volume (Cases)	469,000	
Average Price/Case	\$18.00	
Sales	\$8,442,000	
Returns	\$(168,840)	2%
Net Revenue	\$8,273,160	
Cost of Goods Sold (COGS)	\$(6,490,146)	
Gross Margin	\$1,783,014	21%
Sales, General and Administrative	\$(548,756)	7%
Depreciation & Amortization	\$(112,280)	
Operating Income	\$1,121,978	13%
Interest Expense	\$(142,000)	
Taxable Income	\$979,978	
Tax @ 35%	\$(342,992)	
Net Income	\$636,986	8%
Cash from Operations	\$708,317	

Volume Sensitivity Analysis: The food hub will incur losses as it scales its operation. The chart below shows the effect on cash and net income as volume increases from one million to the target 12 million pounds. It also shows that the facility will have the capacity to exceed 12 million pounds; it is operating at 35% of annual capacity at that level of volume. Storage volume can be added with temporary cooling (e.g. reefer trailers). Produce volume can be increased through seasonal extension growing techniques and importing from out of state during the off-season if desired. At full capacity, the facility can achieve more than \$20 million in sales.

TABLE 20: VOLUME SENSITIVITY ANALYSIS

Acres	Facility Size	Annual Pounds	Customer SOR	Seasonal Utilization	Annual Utilization	Net Revenue	Cash from Operations	Net Income
71	25.500	1,184,816	4%	10%	4%	\$836,006	\$0	(\$63,141)
123	25.500	2,058,586	7%	17%	6%	\$1,452,538	\$63,141	\$0
500	25.500	8,375,000	28%	70%	25%	\$5,909,400	\$499,034	\$431,036
700	25.500	11,725,000	39%	99%	35%	\$8,273,160	\$708,317	\$636,986
1,500	25.500	25,125,000	84%	211%	76%	\$17,728,200	\$1,599,483	\$1,507,038
1,791	25.500	30,000,000	100%	252%	90%	\$21,168,000	\$1,930,667	\$1,827,999

Pricing Sensitivity Analysis: The following chart demonstrates the effect of price on grower proceeds, cash and net income. For cases packed at the food hub and sold on commission, the breakeven price per case is \$1.77 for the food hub. In this instance the grower theoretically could owe the food hub because the price paid did not cover the packing fee; however, in practice the product would not be packed in such a down market, nor would a food hub collect from a grower and risk damaging the relationship. Growers and food hub staff should understand the floor price that makes the transaction worthwhile for both parties.

TABLE 21: PRICING SENSITIVITY ANALYSIS

Wholesale Price	To Grower w/Pack/Comm	To Grower Direct Buy	Gross Margin	Operating Margin	Profit Margin	Net Revenue	Cash from Operations	Net Income
\$1.77	\$(2.46)	\$1.42	64%	17%	0%	\$815,247	\$63,141	\$0
\$4.60	\$0	\$3.68	34%	15%	6%	\$2,115,306	\$186,521	\$121,246
\$10.00	\$4.70	\$8.00	24%	15%	8%	\$4,596,200	\$418,887	\$353,612
\$15.00	\$8.78	\$12.00	22%	14%	8%	\$6,894,300	\$611,968	\$543,971
\$18.00	\$11.00	\$14.40	22%	14%	8%	\$8,273,160	\$708,317	\$636,986
\$20.00	\$12.74	\$16.00	21%	14%	8%	\$9,192,400	\$794,415	\$723,084
\$23.00	\$15.25	\$18.40	20%	14%	8%	\$10,571,260	\$917,511	\$842,456



ECONOMIC, SOCIAL, AND ENVIRONMENTAL IMPACTS

As predicted at the outset, there could be significant positive economic, social and environmental impacts if a food hub is developed in Dane County. Based on the scale of the facility in the base case, the following benefits could be realized:

Jobs: In steady state the food hub employs six full-time and 16 part-time employees and require up to 10 third party employees to handle distribution. Employment would increase up to 250% (2.5x) as the facility develops seasonal extension capabilities and reaches capacity. Indirect employment will also result from the enterprise. According to a recent UW-Madison study, 2.2 jobs are created for every \$100,000 in local food sales.³² At the projected \$20 million capacity, the facility could create over 400 jobs in the local economy. Staffing would include positions in management, operations, sales, facilities, production, warehousing, and distribution.

New Markets: According to the average acreage among survey respondents, the facility would provide a new market and new revenue stream for as many as 50 family farm businesses in communities across Dane County and the Southern Wisconsin region, adding value to farmland.

Farm Income: It is not known what crops are currently grown on the acreage that would be committed to the food hub nor what new acreage will be put into production; however, if just 10% of the facility's volume at capacity comes from acreage converted from commodity crops to fresh market vegetables, farm revenue could increase by \$900,000 to \$1.8 million.³³

Economic Multiplier: At a 2.6x multiplier, at capacity and on a retail sales basis, the food hub would inject an additional \$60 million into the local economy (\$20 million wholesale ~ \$26 million retail x 85% not currently local x 2.6 multiplier).³⁴ See page 66 of Appendix for explanation of local procurement percentage.

Environmental Impact: In steady state, the food hub will distribute annually approximately 12 million pounds of produce in 400 tractor-trailer loads over an average distance of 150 miles. This could reduce carbon emissions by 2.4 million pounds per year.³⁵



BUSINESS OPERATIONS AND STRUCTURE

OWNERSHIP STRUCTURE

A for-profit business model will ensure the long term financial sustainability of a southern Wisconsin food hub. Because the success of a food hub depends on a solid core of producers, grower-stakeholders are encouraged to have a strong voice in the ownership structure ultimately chosen for the food hub. The Project Team has explored a number of ownership forms and business model options, and will continue this effort through meetings with grower-stakeholders during the business planning phase of the project. Below is an overview of the business structures currently under consideration and critical considerations associated with each of the models.

Grower Cooperative

A traditional agricultural cooperative (co-op) is exclusively owned and operated by the group of producers who use the co-op and are its members. Profits are distributed to members based on amount of usage. In Wisconsin there is also a hybrid cooperative model in which membership may include non-users. Co-ops elect a board of directors and make major decisions through democratic voting. There are different methods of financing the cooperative:

- Direct contribution through membership fees or stock purchases
- Agreement to withhold a portion of net earnings

- Assessments based on units of product sold or purchased

Many experts believe that the single biggest driver of aggregation center success is the level of investment and support of its growers. Cooperative models inherently lead to stronger grower support, given that they are investors and profit sharers in the business, and have equal voice in decision making.

Considerations: Depending on the structure chosen, there may be restrictions on membership. Producer groups may not be able to generate funding to invest in the necessary infrastructure. Finally, the collaborative nature of cooperatives can slow down and even limit effective decision making processes – key marketing, operations or finance decisions are often made by the group rather than by specialized experts.

Private Corporation

A for-profit venture's primary function is to generate profit for stakeholders. There are several business entity choices for a for-profit:

- **Sole Proprietorship:** Business owned and operated by one individual.
- **Corporations:** Consists of shareholders who finance and own the business, and who elect a board of directors to govern the business. S Corporations and Close Corporations are two common examples.
- **Partnerships:** An association of two or more people who co-own and are personally liable for the company obligations. Limited Liability Companies are partnerships in which partners are personally shielded from company obligations.

Private corporations can more easily attract interested investors to fund the high start-up infrastructure costs. Additionally, with a for-profit structure, owners and board of directors may pursue business strategies that generate more profits for all stakeholders – owners, staff and producers.

Considerations: For-profits are ineligible for most grants, which can help fund necessary start-up costs. Additionally, for-profits are subject to a high corporate tax rate. It is important to seek legal advice to determine what business entity a for-profit should adopt.

Public-Private Entity

Because agriculture forms the basis of many rural economies, there is often public interest in investing in the facilities and infrastructure that will increase rural farmer access to markets. Public-private partnerships can take many different forms. For instance, a municipality could provide needed infrastructure (land, building, packing equipment, etc.) and a private company might manage the facility without seeking full ownership of the entity.

Considerations: A municipality needs to be invested in local food systems and the positive impact of an aggregation center. Additionally, by garnering support from both public and private entities, this business form may be likely to more easily withstand price fluctuations or difficult, less profitable seasons. However, any venture that has some stream of public funding may also be subject to shifts in government budgets and fiscal politics.

MANAGEMENT TEAM/OPERATOR

The ideal operator will have existing relationships with growers and a high level of skill and experience in marketing and sales. The key positions at startup include:

- General manager or chief executive who oversees the marketing, operations and financial functions of the company. This individual will also actively buy and sell with growers and customers. As the company adds staff this individual may become less hands-on, but will continue to be involved in every aspect of the enterprise and may handle key accounts. Bookkeeping staff will be needed fairly early on to assume time consuming office and accounting duties – it is a very paperwork-intensive industry – and in time a controller will be needed to manage growth.
- Salesperson/buyer who will visit farms to build the grower base, meet with buyers to expand the customer base, and negotiate transactions to meet sales targets. This function will eventually split into buying, sales and customer service.
- Warehouse/quality manager who oversees receiving, inspections, packing, order processing, shipping and logistics. This individual hires, trains and supervises floor labor and is responsible for food safety and quality management at the facility. This position will eventually split into dedicated quality management, warehouse management, logistics and human resources management functions.

BUSINESS RISKS AND MITIGATION STRATEGIES

National trends and the survey for this study clearly indicate strong demand which exceeds available supply, so the greatest risk is lack of grower engagement to provide the volume needed to efficiently operate the food hub. There is also the pricing risk inherent in the produce industry which could challenge the food hub from achieving sufficient gross margin to cover its costs.

To mitigate these risks, the operating team should employ the following strategies:

- **Emphasize a strong relationship with growers** and cultivate these to ensure ongoing trusted communication, and a consistent quality supply that will meet demand. This is particularly important in the first few years of the operation.
- **Build a base of business with the highest end customers.** The company should seek customers in channels that are less price-sensitive and can purchase in large quantities. Target customers should include fine dining restaurants, high-end hotels, premium grocery stores and specialty health food stores. Public schools and broad line supermarket and foodservice distributors purchase very large quantities, but will be more price-sensitive. The food hub should seek a mix of customers which emphasizes the higher end of this range.
- **Make it a win for growers even if unprofitable at first.** If it doesn't work for the growers in Year 1 there will not be a Year 2. This means giving growers the price they need even if it cuts into or eliminates gross margin, and ensuring the enterprise is well enough capitalized to cover any initial losses.
- **Secure a management team with experience in marketing and sales.** An experienced manager that oversees buying and selling with a deep knowledge of production, perhaps a former grower, is critical for garnering trust and confidence among growers and buyers. Growers will need assurance that they will be rewarded with a better price if they deliver a better quality product, so the sales staff must be able to effectively gauge and market quality to buyers to ensure an equitable



correlation between quality and price. Depending on the breadth of experience within the management team, transportation and logistics may be outsourced until the team has perfected marketing and sales.

- **Build loyalty for a Wisconsin brand and tell the local story to customers.** There is real value-added in local produce which should command a better price: local produce has a longer shelf life, better taste, is nutritional and many shoppers and diners know the difference and will pay for it. Convey the benefits to consumers at retail through farm identification on signage, cases, PLU codes, and other strategies.
- **Make it easy for distributors' customers to do business with the food hub.** Deliver consistent quality, packed the way customers demand, and offer an assortment that make them a valuable supplier to their clients. In time the business relationship will be based less on price and more on trust and simplicity.
- **Establish a wide and cooperative network of growers.** There should be a core group of growers that participate in pre-season crop planning, but cultivating relationships with a broader range of growers will also increase the likelihood of filling gaps if weather or other unplanned events disrupt supply. These transactional relationships can be the foundation for future partnerships as the business expands.
- **Collaborate with other intermediaries and partners to strengthen the market.** This is a highly interdependent industry, one in which "cooperation" – cooperation with competitors – can expand markets and support prices. As the business and new relationships develop across the local food system, these stakeholders and other intermediaries serving the same market should be open to opportunities that could build efficiencies and strengthen markets. These intermediaries could also become customers, and vice versa, and are a potential means for finding markets and filling orders.

FINANCING OPTIONS

Grants and relatively low interest debt financing would likely be the primary sources of funding to secure and renovate a facility and purchase the storage and cooling equipment needed. However, covering working capital in initial years may require additional funding from equity investments. The following section provides a list of grants, loan providers and sources of equity funding that may be available.

GRANT OPPORTUNITIES

Agricultural Development and Diversification (ADD) Grant Program

- Takes proposals for projects that are likely to stimulate Wisconsin's agricultural economy through the development and exploration of new value-added products, new markets, or new technologies in agriculture. ADD grants are awarded competitively each year.
- Subject to availability of funds within the State budget, in 2011 the program has \$356,700 to award to projects with a maximum grant amount of \$50,000.
- Information: http://datcp.wi.gov/Business/Grants_and_Financial_Aid/index.aspx

Rural Business Enterprise Grant (RBEG), USDA Rural Development

- Grants to public bodies, private non-profit corporations and federally-recognized Indian Tribal groups to finance and facilitate development of small and emerging private business enterprises in rural areas with less than 50 employees and \$1,000,000 in annual revenue, but funds do not go directly to the business.
- Grants are used to establish revolving loan funds, purchase equipment or construct facilities.
- Business must be located in an eligible rural area which is defined as being outside of cities with a population of 50,000 or more and the surrounding built-up areas.
- Information: http://www.rurdev.usda.gov/BCP_rbeg.html

Sustainable Agriculture Research & Education Sustainable Community Innovation Grants

- SARE is a competitive grants program providing grants to researchers, agricultural educators, farmers, ranchers, and students in the US.
- Sustainable Community Innovation Grants award up to \$15,000 for activities that connect or make links between the farm and non-farm parts of a community for the purpose of economic development.
- Information: <http://www.sare.org>

Specialty Crop Block Grant (SCBG)

- Proposals will be accepted from non-profit organizations, producer organizations, government agencies and other organizations related to Wisconsin specialty crops industry.
- The project proposed must be focused on research, education, demonstration or in some way benefit the specialty crop industry. This year's proposal deadline was April 15, 2011.
- Information: http://datcp.wi.gov/Business/Grants_and_Financial_Aid/Specialty_Crops_Grants/index.aspx

LOAN PROVIDERS

Badgerland Financial

- Part of the Farm Credit System, a nationwide network of borrower-owned commercial lending institutions established to provide dependable credit and related services to agriculture and rural America.
- Offer lending, insurance and financial services to residents and businesses of rural Wisconsin.
- Cooperative ownership structure allows member-owners to participate in governance and profits – returned \$30 million in cash to its members from 2004-2008.
- Information: <http://www.badgerlandfinancial.com>

Business & Industry Guaranteed Loan Program (B&I), USDA Rural Development

- Program guarantees loans by commercial lenders to rural businesses.
- Maximum \$10 million aggregate loan amount to any one borrower.
- Must be located in an eligible rural area which is defined as being outside of cities with a population of 50,000 or more and the surrounding built-up areas.
- Requires equity investment on the part of owners. 20% tangible balance sheet equity for new businesses and 10% for existing businesses.
- Information: http://www.rurdev.usda.gov/BCP_gar.html

Whole Foods Market, Local Producer Loan Program

- Applications accepted on a rolling basis through a streamlined process with minimal fees, interest rates and paperwork.
- Target loan amounts between \$1,000 and \$100,000 (maximum \$25,000 for startups), loans not to exceed 80% of total project cost and collateral required. Low fixed interest rates (currently between 5% and 9%).
- One-time nominal processing fee covers administrative expenses, including credit report.
- Existing vendor relationship with Whole Foods Market preferred.
- Information: <http://www.wholefoodsmarket.com/values/local-producer-loan-program.php>

Farm Storage Facility Loan Program, USDA, FSA

- Loans to producers to build or upgrade farm storage and handling facilities for soybeans, peanuts, hay, renewable biomass, pulses and oilseeds.
- Corn, grain sorghum, oats, wheat, barley, fruits and vegetables are also eligible, subject to program requirements.
- Information: <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=prsu&topic=flp-fp>

7(a) Loan Program, SBA

- Provides new and growing businesses with loans of up to \$2 million with an SBA guaranty of 75% to 85%.

- Loans may be used to purchase equipment, inventory, fixtures, leasehold improvements, working capital, debt refinancing for compelling reasons, change of ownership.
- Information: <http://www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/sba-loan-programs/7a-loan-program>

Certified Development Company (504) Loan Program, SBA

- Provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land and buildings.
- Typically, a 504 project includes a loan secured with a senior lien from a private-sector lender covering up to 50 percent of the project cost, a loan secured with a junior lien from the Certified Development Company (CDC) (backed by a 100 percent SBA-guaranteed debenture) covering up to 40 percent of the cost, and a contribution of at least 10 percent equity from the small business being helped.
- Information: <http://www.sba.gov/content/cdc504-loan-program>

ACCION

- A small business lender, ACCION is dedicated to providing financing and business education to small businesses across the country. They offer loans of up to \$15,000 for start-up businesses and \$25,000 for established businesses. They also offer Credit Builder loans between \$200 and \$2,500.
- Information: <http://www.accionusa.org>

Green Choice Bank (and others with sustainability as a core mission)

- GreenChoice Bank's focus is People, Planet and Profits with a Green Sustainable mission.
- Provides credit to commercial businesses and nonprofit organizations.
- Products include working capital lines of credit, letters of credit, term loans and real estate financing.
- Information: www.greenchoicebank.com

Other Commercial Banks

- Some State and National Banks provide agricultural financing. Most of these banks will offer a full range of loans to cover operating, equipment and real estate needs. They will also work with programs offered by USDA and IFA.

EQUITY

Slow Money Wisconsin

- The Slow Money Alliance is attempting to identify and attract capital to support and grow sustainable food and farming enterprises that are committed to the enhancement of local food systems.
- Focused on building a program to support local food system efforts that will include business consulting, private and corporate investment, and financial lending to rural Wisconsin entrepreneurs.
- Information: www.slowmoneywi.org



The Lending Club

- Area growers, local residents and others interested in local food systems may want to provide funding to other individuals willing to give an equity stake in their venture or pay higher returns.
- The Lending Club is a peer-to-peer service provider that helps match these individuals seeking higher returns to aspiring business owners willing to pay higher rates to obtain financing. There are other such providers.
- Information: www.lendingclub.com/home.action

Customer Funding

- In this concept, the basic Community Supported Agriculture (CSA) structure is applied to other food businesses. Businesses issue “shares” of their product to future customers and get upfront funding in return. This has been applied to grocery stores, restaurants, cheese makers, etc.
- Consumer cooperatives are owned by customer members. These businesses raise initial funding by selling member (equity) shares and can also accept member loans. The Dill Pickle Food Co-op in Chicago opened with no outside funding using this method.

Crowdfunding/Internet Funding Platforms

- Donors often get a share of revenue based upon type of contribution.
- Kickstarter and Indie GoGo started to fund arts projects, but several food related enterprises have gotten their projects funded. Profounder is for any kind of business. The platforms are contribution based (i.e. not equity or debt) and projects provide “perks” or a percentage of revenue in return. Both are all-or-nothing funding. If you don’t reach your goal amount in a certain time period, you do not get any of the pledged funds.
- Information: <https://www.profounder.com>

RSF Social Finance (provides debt and equity financing, and makes direct donations)

- Makes investments, provides loans and donates funds to help for-profit and nonprofit ventures cover mortgage, construction and working capital.
- RSF recently instituted a Program-Related Investing (PRI) program that pools funding from multiple foundations to make 5-year recoverable investments of \$100,000 at an annual interest rate of 1%.
- The Fund’s PRI recipients are non-profit charitable organizations and mission-aligned for-profit organizations that will use the borrowed funds on charitable projects and have:
 - a mission that addresses local and sustainable food and agriculture;
 - sustainable approaches to sourcing, manufacturing, and distribution;
 - workforce relations that incorporate fair trade principles; and
 - a capital structure and existing financial partners that reflect commitment to social good and environmental sustainability; and
 - an effective and potentially replicable program to support, evolve and expand sustainable food systems.
- Information: www.rsfsocialfinance.org/

TAX CREDITS

While tax credits will not help establish the Dane County food hub, they will decrease the total amount owed to the state or federal government in corporate taxes. By taking advantage of tax credits, the Dane County food hub can maximize its net income and available cash flow.

Wisconsin Food Processing Plant and Food Warehouse Investment Credit

- Refundable tax credit for businesses who have invested to modernize or expand food processing plants or food warehouses in Wisconsin and who have been certified by the Wisconsin Economic Development Corporation.
- Eligible expenses include building construction and renovations; food or raw material intake and storage equipment; packaging and handling equipment, including cleaning, sealing, bagging, boxing, labeling, conveying and product movement equipment; warehouse equipment, including storage racks and loading and unloading equipment.
- Information: www.commerce.state.wi.us/bd/BD-FPTC.html

The Economic Development Tax Credit

- Must be applied against a certified business’s Wisconsin income tax liability. In the case of an S-Corporation, LLC or other pass-through entity, tax credits flow through to the owners in the same way as the income.
- Eligible activities include: job creation, capital investment, employee training, moving corporate headquarters to Wisconsin.



RECOMMENDATIONS FOR NEXT STEPS

The Project Team outlined key next steps and should work toward the following milestones subsequent to the publication of this report:

Q3 2011:	Follow-up grower-stakeholder meeting in October to continue to identify core group of growers which will form the supply basis for the food hub, and possibly its ownership basis;
	• Issue a request for proposal for a business plan consultant;
	• Issue a request for proposal for an owner/operator to join with grower-stakeholders and the Project Team as the new company’s entrepreneurial management team.
Q4 2011:	Identify owner/operator, complete business plan and begin fundraising.
Q1 2012:	Identify funding and close on facility.
Q2 2012:	Prepare for launch in June 2012.

APPENDIX

PROJECT TEAM BIOS

Olivia Parry, Project Director - Dane County Sr. Economic Development Specialist. Since 2006, she has lead the Institutional Food Market Coalition (IFM), www.ifmwi.org, whose purpose is to conduct strategic research, outreach and education to develop institutional markets for Dane County and regional growers, and increase WI local food sales. IFM works with stakeholders throughout the supply chain to develop organizational and distribution networks and infrastructure. In 2009, in partnership with Community Action Coalition, farmer Robert Pierce, and Common Wealth Development, she created the Program for Entrepreneurial and Agricultural Training (PEAT). This program provides employment and entrepreneurial training in agricultural production to disadvantaged youth in Madison, Wisconsin. Olivia is also responsible for facilitating site selection for businesses interested in expanding in or re-locating to Dane County; providing technical assistance to Dane County communities on business and economic development; and, is the manager of Dane County's Commercial Revitalization and Economic Development loan funds.

Dr. Alvin J Bussan, Project Consultant - Associate Professor for Horticulture at the University of Wisconsin. As an Extension Specialist, he develops and conducts educational programming in commercial and fresh market potato and vegetable production systems, working with many of the leading vegetable growers in Wisconsin. His research activities include: precision management of potato & vegetables; influence of management & climate on growth & development of potato & vegetables; improving sustainability & economic value of vegetable production systems; refinement of production practices including seeding rate, timing & methodology, mulching, cover crops & green manures; increasing earliness in vegetable production; storage of crops; and, improving crop quality.

Carrie Edgar, Project Consultant - Dane County UW Extension Department Head & Community Food Systems Educator. Carrie's work is focused on supporting a diverse and inclusive community food system that is economically viable, environmentally sound and socially just for the Dane County region. She also serves as staff for the Dane County Food Council. She came to Dane County in 2010 from Quincy, IL where she served as County Director for University of Illinois Extension in Adams and Brown Counties. A great deal of her past work focused on local food systems and organizational & community capacity building and she was a member of the Illinois Food Farms and Jobs Task Force. Carrie coordinated the Locally Grown program in western Illinois. Carrie has a Masters degree in Child, Family and Community Services from University of Illinois and a Bachelors degree in Communications from Quincy University.

Kathy Nyquist, Project Consultant - Principal at New Venture Advisors LLC, a consultancy providing business development services for local food system entrepreneurs and investors. With FamilyFarmed.org, she has led multiple feasibility studies investigating the commercial viability of local food system infrastructure projects. As a result, three food hubs were launched in 2011 and three are poised to open in 2012. Kathy has ten years of food industry experience at Kraft Foods, where she most recently led integrated marketing planning for a \$5 billion product portfolio.

She previously managed accounts at the nation's top two advertising agencies where she developed national campaigns for Coca-Cola, Keebler, Frito-Lay and Miller Brewing. Kathy graduated from the University of Chicago Booth School of Business where she earned an MBA with honors in Strategic Management, Finance and Entrepreneurship and an academic award in strategy.

Jim Slama, Project Consultant - Founder and President of FamilyFarmed.org which encourages the production, marketing and distribution of locally grown and responsibly produced food and goods. FamilyFarmed.org expands the market for local farmers and food producers, by advancing the Community Supported Agriculture (CSA) movement, supporting farmers markets, and playing an integral role in public policy in the state and region. Jim works with many of the leading trade buyers for local food in the Midwest including Whole Foods Market, Goodness Greenness, Chartwells Thompson Hospitality, Chipotle, Compass Group, Lettuce Entertain You, SYSCO, Irv and Shelly's Fresh Picks, Natural Direct, and more. FamilyFarmed.org hosts the annual FamilyFarmed EXPO, a food festival, trade show, and financing conference. Jim is the editor of Wholesale Success: A Farmers Guide to Selling, Post Harvest Handling, and Packing Produce. The manual gives small to mid-size growers technical assistance to help them develop the skills to sell produce into wholesale markets. FamilyFarmed.org also created the On-Farm Food Safety Project which is working with the FDA, USDA, food buyers, and advocates for small to mid-size growers to create an online tool giving farmers the ability to create an On-Farm food safety plan. Jim played a key role in developing and helping to pass the Illinois Local Food, Farms, and Jobs Act. The law created the Illinois Local, Food, Farms and Jobs Council which is charged with developing local food systems in the state.

LOCAL PROCUREMENT ESTIMATE FOR WI

TABLE 22: CALCULATION FOR EXPENDITURES ON FRUITS AND VEGETABLES IN WI AND CHICAGO MSA, 2008

Figure	Description	Source
\$657	2008 Average annual expenditures of all consumer units: Fruits and vegetables at home	(U.S. Bureau of Labor Statistics 2009)
\$3,744	Food at home (total)	(Ibid)
17.5%	Percent fruits & vegetables of all food at home	$\$657 / \$3,744 * 100$
\$2,698	Food away from home (total)	(Ibid)
\$473	Fruits & vegetables away from home	$\$2,698 * 17.5\%$
\$1,130	Total fruits & vegetables home & away	$\$657 + \473
15,197,234	2008 Population of WI & Chicago MSA	(U.S. Census Bureau 2011)
\$17.2 billion	2008 Retail expenditures on fruits & vegetables in WI	$\$1,130 * 15 \text{ million}$

TABLE 23: CALCULATION FOR % OF WI & CHICAGO MSA FRUIT & VEGTABLE SALES PRODUCED IN WI, 2008

Figure	Description	Source
\$17.2 billion 27%	2008 Retail expenditures on fruits & vegetables in WI Farm value compared to retail value (%)	Table 22 above Derived from (Swenson March 2010, 35)
\$4.6 billion \$858,888,000	2008 Farm share of retail sales (\$) 2008 Cash receipts to WI farmers for vegetables and fruits	$\$17 \text{ billion} * 27\%$ (USDA NASS 2009)
(\$180,000,000)	2008 WI international exports, vegetables and preparations	(USDA Foreign Agricultural Service 2009)
\$678,888,000	Net cash receipts to WI farmers for locally grown produce	$\$858 \text{ million} - \180 million
14.6%	Percentage of WI and Chicago MSA fruit and vegetable sales produced in WI <i>(Note: overstated by the unknown portion of cash receipts from domestic out-of-state customers)</i>	$\$678 \text{ million} / \$4.6 \text{ billion} * 100$

Grower Survey - Summary of Responses

Overall: 241 completed surveys

1. Do you currently grow fresh market produce?					2. Would you like to diversify your farm in order to grow produce?				
	# responders	% responders	# responders	% responders		# responders	% responders	# responders	% responders
Yes	104	43%	104	44%	Yes	41	17%	41	34%
No	130	54%	130	56%	No	80	33%	80	66%
Blank	7	3%			Blank	120	50%		
Total	241	100%	234	100%	Total	241	100%	121	100%

3. How would you describe your level of interest in selling wholesale produce into a packinghouse facility in Dane County? (Crosstab with Q9 Acreage)

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/responder
Extremely Interested	13	5%	13	11%	8	41
Very Interested	27	11%	27	22%	21	18
Somewhat Interested	51	21%	51	42%	30	10
Not Very Interested	11	5%	11	9%	4	3
Not At All Interested	20	8%	20	16%	0	
Blank	119	49%				
Total	241	100%	122	100%	63	16

4. How long have you been a produce grower?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders	# Responding	Low End - Acres	High End - Acres	Avg per Respondent - Acre
0-5 years	34	14%	34	33%	31	116	149	4
6-10 years	24	10%	24	24%	24	577	579	24
11-20 years	21	9%	21	21%	21	111	121	6
21-30 years	10	4%	10	10%	10	49	84	7
31-50 years	11	5%	11	11%	11	71	101	8
50+ years	2	1%	2	2%	2	10	15	6
Blank	139	58%						
Total	241	100%	102	100%	99	939	1054	

Crosstab with Q3 Interest

	Extremely Interested	Very Interested	Somewhat Interested	Not Very Interested	Not At All Interested	Any Interest #	Any Interest %
0-5 years	4	8	15	27	33%	4	0
6-10 years	3	5	12	20	25%	1	3
11-20 years	1	8	9	18	22%	2	1
21-30 years	0	2	5	7	9%	2	1
31-50 years	1	3	4	8	10%	1	2
50+ years	0	1	0	1	1%	1	0
Blank	4	0	6			0	13
Total	13	27	51	81	100%	11	20

Crosstab with Q3 Interest & Q9 Acreage

		Count	Acres Avg
6+ years experience	Extremely Interested	5	326
6+ years experience	Very Interested	19	371
Total		24	697

5. Do you grow Grade 1, Grade 2, or both?

	# responders	% responders	# responders	% responders
Grade 1	16	7%	16	18%
Grade 2	4	2%	4	4%
Both Gr. 1 and Gr. 2	69	29%	69	78%
Blank	152	63%		
Total	241	100%	89	100%

6. What quantities of the following crops could you make available for the packinghouse in 2012? [This was an open text field in which respondents used a variety of units. The quantities given cannot be auto-summed, so the number of respondents citing each crop was summed.]

	# Responders	% of 77 total responders		# Responders	% of 77 total responders
Fruit			Vegetables		
Apples	17	22%	Zucchini	22	29%
Strawberries	16	21%	Cabbage	21	27%
Watermelon	14	18%	Carrots	19	25%
Blueberries	8	10%	Cherry tomatoes	19	25%
Honeydew	5	6%	Onion	19	25%
Vegetables			Broccoli	18	23%
Butternut squash	32	42%	Corn	18	23%
Acorn Squash	31	40%	Potato	16	21%
Other (specify)	29	38%	Cantaloupe	14	18%
Tomatoes	29	38%	Lettuce	13	17%
Cucumber	27	35%	Peas	12	16%
Peppers	26	34%	Cauliflower	10	13%
Pumpkins	26	34%	Kale	10	13%
Beets	22	29%	Spinach	10	13%
			Asparagus	9	12%

7. What quantity of the crops you just identified for 2012, could you potentially supply for 2013? [Same crops as above]

8. What are your current average year harvest dates for these crops? [This was an open text field which can be analyzed as needed in the business planning phase]

9. How many total acres could you make available to the packinghouse facility?

	low end	high end
Total Acres	939	1054
# Responders	71	71
Ave. Acreage/Responder	13.2	14.8
Median	3.0	5.0

10. Which of the following statements best describes you?

	# responders	% responders	# responders	% responders
I have some produce grown in seasonal extension structures	33	14%	33	41%
I do not use seasonal extension to lengthen the growing season on my farm.	47	20%	47	59%
Blank	161	67%		
Total	241	100%	80	100%

11. What quantities of these crops do you grow in seasonal extension structures? [Open text field]

12. What are the estimated harvest dates for the crops that you grow in seasonal extension structures? [Open text field]

13. If demand were identified, would you invest (or further invest) in farm equipment or structures to extend the growing season?

	# responders	% responders	# responders	% responders
Yes	52	22%	52	69%
No	23	10%	23	31%
Blank	166	69%		
Total	241	100%	75	100%

14. What other crops (not identified in the previous question) would you grow in seasonal extension structures?

	# Responders	% of 28 total responders		# Responders	% of 28 total responders
Fruit			Cucumber	7	25%
Strawberries	6	21%	Onion	7	25%
Blueberries	2	7%	Carrots	6	21%
Apples	1	4%	Kale	6	21%
Cantaloupe	0	0%	Beets	5	18%
Honeydew	0	0%	Zucchini	5	18%
Watermelon	0	0%	Cauliflower	4	14%
Vegetables			Peas	3	11%
Tomatoes	15	54%	Asparagus	2	7%
Lettuce	14	50%	Cabbage	2	7%
Spinach	12	43%	Acorn squash	1	4%
Peppers	10	36%	Butternut squash	1	4%
Cherry tomatoes	8	29%	Corn	0	0%
Broccoli	7	25%	Pumpkins	0	0%
			Potato	0	0%

15. What quantities of these crops would you grow in seasonal extension structures? [Open text field]

16. What would be the estimated harvest dates for these crops? [Open text field]

17. Would you deliver your produce to the packinghouse?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders	# responders also providing acreage	Ave. acreage/responder
Yes	52	22%	52	68%	9	15
No. I would require pick-up for delivery to the packinghouse.	25	10%	25	32%	4	9
Blank	164	68%				
Total	241	100%	77	100%	11	13

18. Would you use a refrigerated delivery truck?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders	# responders also providing acreage	Ave. acreage/responder
Yes	16	7%	16	27%	6	25
No	44	18%	44	73%	5	4
Blank	181	75%				
Total	241	100%	60	100%	11	15

19. Are you familiar with USDA grading standards?

	# responders	% responders	# responders	% responders	# responders also providing acreage	Ave. acreage/responder
Yes	41	17%	41	51%	7	13
No	40	17%	40	49%	15	7
Blank	160	66%				
Total	241	100%	81	100%	22	9

Crosstab with Q9 Acreage

	Low End	High End	Avg per respondent
Yes	92	92	13
No	79	141	7
Blank	768	821	19
Total	939	1054	

Crosstab with Q3 Interest in Packing House

	Yes	No
Extremely Interested	3 14%	2 8%
Very Interested	1 5%	6 25%
Somewhat Interested	9 43%	8 33%
Not Very Interested	2 10%	6 25%
Not At All Interested	6 29%	2 8%
Blank	20	16
Total	21 100%	24 100%

20. Do you have washing facilities for all of your produce?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/responder
Yes	44	18%	44	55%	8	9
No	36	15%	36	45%	13	10
Blank	161	67%				
Total	241	100%	80	100%	21	9

Crosstab with Q9 Acreage

	Low End	High End	Avg per respondent
Yes	64	82	9
No	102	146	10
Blank	773	826	19
Total	939	1054	

Crosstab with Q3 Interest in Packing House

	Yes	No
Extremely Interested	4 15%	1 5%
Very Interested	1 4%	6 32%
Somewhat Interested	8 30%	10 53%
Not Very Interested	7 26%	1 5%
Not At All Interested	7 26%	1 5%
Blank	17	17
Total	27 100%	19 100%

21. Do you have storage capacity for all of your produce?

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/responder
Yes	44	18%	44	54%	11	14
No	38	16%	38	46%	11	4
Blank	159	66%				
Total	241	100%	82	100%	22	9

Crosstab with Q9 Acreage

	Low End	High End	Avg per respondent
Yes	128	190	14
No	43	43	4
Blank	768	821	19
Total	939	1054	

Crosstab with Q3 Interest in Packing House

	Yes	No
Extremely Interested	4 16%	1 5%
Very Interested	2 8%	5 24%
Somewhat Interested	10 40%	7 33%
Not Very Interested	5 20%	4 19%
Not At All Interested	4 16%	4 19%
Blank	19	17
Total	25 100%	21 100%

22. Do you currently have GAP certification on any of your crops?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/responder
Yes	6	2%	6	7%	1	2
No	76	32%	76	93%	21	10
Blank	159	66%				
Total	241	100%	82	100%	22	9

Crosstab with Q3 Interest in Packing House

	Yes		No	
Extremely Interested	1	33%	4	10%
Very Interested	-	0%	7	17%
Somewhat Interested	-	0%	18	43%
Not Very Interested	-	0%	9	21%
Not At All Interested	2	67%	4	10%
Blank	3		34	
Total	3	100%	42	100%

23. Which of your crops are GAP certified?

	# responders of 6 total		# responders of 6 total
Potato	4	Corn	1
Cucumber	3	Honeydew	1
Peppers	3	Kale	1
Tomatoes	3	Lettuce	1
Butternut squash	2	Onion	1
Cantaloupe	2	Peas	1
Zucchini	2	Spinach	1
Acorn squash	1	Watermelon	1
Beets	1	Other	1
Broccoli	1	Apples	0
Cabbage	1	Asparagus	0
Cauliflower	1	Blueberries	0
Carrots	1	Pumpkins	0
Cherry tomatoes	1	Strawberries	0

24.If there was demand, would you consider getting GAP certified so that you could sell into the packinghouse?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/ responder
Yes	52	22%	52	73%	10	15
No	19	8%	19	27%	8	5
Blank	170	71%				
Total	241	100%	71	100%	18	11

Crosstab with Q3 Interest in Packing House

	Yes		No	
Extremely Interested	3	12%	-	0%
Very Interested	4	15%	3	25%
Somewhat Interested	9	35%	8	67%
Not Very Interested	7	27%	1	8%
Not At All Interested	3	12%	-	0%
Blank	27			
Total	26	100%	12	100%

25. Are you familiar with standard safe handling, washing and packing protocols?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/ responder
Yes	50	21%	50	63%	12	11
No	29	12%	29	37%	9	8
Blank	162	67%				
Total	241	100%	79	100%	21	10

Crosstab with Q3 Interest in Packing House

	Yes		No	
Extremely Interested	5	19%	-	0%
Very Interested	1	4%	5	28%
Somewhat Interested	11	42%	6	33%
Not Very Interested	3	12%	6	33%
Not At All Interested	6	23%	1	6%
Blank	24		11	
Total	26	100%	18	100%

26. Do you currently grow on contract?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/ responder
Yes	9	4%	9	11%	6	22
No	75	31%	75	89%	55	16
Blank	157	65%				
Total	241	100%	84	100%	61	16

Crosstab with Q3 Interest in Packing House

	Yes		No	
Extremely Interested	1	11%	7	9%
Very Interested	1	11%	21	28%
Somewhat Interested	6	67%	28	38%
Not Very Interested	1	11%	8	11%
Not At All Interested	-	0%	10	14%
Blank	9		75	
Total	68	100%	41	100%

27. What percentage of your total output is grown on contract?

	10%	25%	40%	45%	50%	90%	Total
# answering	1	1	1	1	2	3	9

28. Which of the following statements best describes you?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/responder
I would prefer to grow only on contract for the packinghouse.	4	2%	4	6%	4	28
I would prefer to grow on contract, with the ability to sell additional produce to the packinghouse without a contract.	19	8%	19	28%	16	31
I would prefer having a contract, but I would grow for the packinghouse without one.	13	5%	13	19%	11	9
I would like to grow for the packinghouse, but not on contract.	32	13%	32	47%	26	10
Total	241	100%	68	100%	57	17

29. What would make you more likely to participate in the packinghouse?

Crosstab with Q9 Acreage

	# responders	% of total responders	# responders also providing acreage	Avg acreage per responder
The packinghouse is grower-owned	19	25%	15	9
The packinghouse is owned by WI residents or WI business	15	19%	14	10
The packinghouse is a grower-owned cooperative	26	34%	24	16
You are offered the opportunity to become an investor in, or part owner of, the packinghouse	16	21%	12	27
None of the above matters as long as you get a fair market price for your produce	45	58%	33	18

Crosstab with Q3 Interest in Packing House

	Grower-owned	WI business	Grower-owned cooperative	Investor/part owner	None of the above matters
Extremely Interested	0	0	0	0	0
Very Interested	0	0	0	0	26
Somewhat Interested	15	14	24	13	17
Not Very Interested	0	0	0	0	0
Not At All Interested	0	0	0	0	0
Blank	4	1	2	3	2
Total	19	15	26	16	45

30. Would you be willing to participate in preseason crop planning with the packinghouse and other growers to schedule the type, quantity, and approximate timing of the produce?

Crosstab with Q9 Acreage

	# responders	% responders	# responders	% responders also providing acreage	# responders also providing acreage	Ave. acreage/responder
Yes	61	25%	61	78%	53	17
No	17	7%	17	22%	4	6
Blank	163	68%				
Total	241	100%	78	100%	57	17

31. What concerns do you have that would prevent you from selling wholesale produce to the packinghouse?

Crosstab with Q3 Interest in Packing House and Q9 Acreage

	# responders	% of 80 total responders	#Citing also Extremely	# Citing with 40+ acres
Interested				
Doubtful that the price will be high enough to make it profitable	50	63%	5	7
Lack knowledge about GAP certification	30	38%	5	3
Lack of farm storage	28	35%	1	1
Lack of farm labor to harvest	27	34%	5	3
Unsure if I grow enough to sell into a packinghouse	26	33%	4	2
Unsure about liability insurance and my responsibility for insurance	23	29%	0	0
Lack of transportation for delivery to packinghouse	22	28%	2	1
Cannot afford GAP certification	21	26%	1	0
Other	19	24%	2	4
Unsure about signing a contract	15	19%	3	2
Lack of information about labor laws and farm labor management	10	13%	2	1
Unsure about when to harvest for a packinghouse	8	10%	3	3

32. If you are not currently a fresh produce grower, but would like to diversify your farm, please check the box below so that we can be aware of your interest.

Checked box	42
% of 80 answering "No" to Q2	53%

33. Can we contact you about the packing house?

	# responders	% responders	# responders	% responders
Yes	37	15%	37	82%
No	8	3%	8	18%
Blank	196	81%		
Total	241	100%	45	100%

34. Contact Info

	# responders	% responders
Provided contact info	174	72%
Did not provide contact info	67	28%
Total	241	100%

Buyer Survey - Summary of Responses

1. Do you buy produce for retail sales, foodservice, both retail sales and foodservice, a group of retailers, or not at all?

	# responders	% responders
Retail Sales	7	8%
FoodService	48	56%
Both	22	26%
A Group of Retailers	4	5%
Not at all	4	5%
Total	85	100%

Crosstab with Q2 Interest in Packing House

	Extremely Interested	Very Interested	Somewhat Interested	Not Very Interested	Total
Retail sales	1	3	3	0	7
	14%	43%	43%	0%	100%
Foodservice	14	15	19	0	48
	29%	31%	40%	0%	100%
Both	6	8	6	2	22
	27%	36%	27%	9%	100%
A group of retailers	1	2	0	0	3
	33%	67%	0%	0%	100%
Not at all	0	0	0	0	0
	0%	0%	0%	0%	0%
Total	22	28	28	2	80
Sum of Retail	8	13	9	2	32
	25%	41%	28%	6%	100%
Sum of Foodservice	20	23	25	2	70
	29%	33%	36%	3%	100%

2. How interested would you be in buying from the packing house?

	# responders	% responders	# responders	% responders
Extremely Interested	22	26%	22	28%
Very Interested	28	33%	28	35%
Somewhat Interested	28	33%	28	35%
Not Very Interested	2	2%	2	3%
Not At All Interested	0	0.0%	0	0%
Blank	5	6%		
Total	85	100%	80	100%

3. Which types of whole local produce would you buy (either directly or through a distributor) from this packing house in 2012?

	# responders	% of 85 total responders
Apples	61	72%
Carrots	61	72%
Peppers	61	72%
Cucumber	58	68%
Tomatoes	57	67%
Onion	55	65%
Broccoli	54	64%
Strawberries	53	62%
Melon: Cantaloupe	52	61%
Cherry Tomatoes	51	60%
Potato	50	59%
Melon: Honeydew	48	56%
Melon: Watermelon	48	56%
Corn	47	55%
Lettuce	47	55%

	# responders	% of 85 total responders
Asparagus	46	54%
Cabbage	45	53%
Spinach	44	52%
Blueberries	43	51%
Cauliflower	42	49%
Squash: Zucchini	41	48%
Peaches	37	44%
Squash: Butternut	34	40%
Squash: Acorn	32	38%
Beets	31	36%
Peas	31	36%
Kale	25	29%
Pumpkins	23	27%
Collards	18	21%
Other	14	16%

4. Which of the following crops would you source if they were available off season / year round?

	# responders	% of 85 total responders
Apples	65	76%
Carrots	60	71%
Tomatoes	59	69%
Onion	54	64%
Peppers	54	64%
Potatoes	51	60%
Cabbage	48	56%

	# responders	% of 85 total responders
Lettuce	45	53%
Spinach	42	49%
Butternut squash	37	44%
Beets	32	38%
Acorn squash	31	36%
Pumpkins	19	22%

5. Please estimate the average number of POUNDS PER WEEK of the following types of whole local produce you would buy from this packing house in 2012.

	Sum of Averages		Sum of Averages
Potato	123.840	Asparagus	10.637
Apples	105.940	Strawberries	10.445
Onion	70.455	Melon: Honeydew	9.125
Cucumber	63.914	Squash: Acorn	7.615
Broccoli	62.468	Blueberries	7.423
Cauliflower	46.650	Squash: Butternut	7.150
Cherry Tomatoes	45.237	Kale	5.995
Cabbage	24.665	Squash: Zucchini	5.915
Carrots	24.101	Spinach	4.679
Tomatoes	22.857	Pumpkins	2.572
Melon: Watermelon	21.345	Collards	2.165
Peppers	20.734	Beets	1.697
Melon: Cantaloupe	12.685	Peas	1.155
Lettuce	12.655	Other	50
Corn	12.595	Total	757.713
Peaches	10.949		

6. Which types of processed local produce would you buy from this packing house in 2012?

	# responders	% of 85 total responders		# responders	% of 85 total responders
Carrots	30	35%	Blueberries	17	20%
Lettuce	28	33%	Corn	16	19%
Peppers	27	32%	Potato	16	19%
Onion	26	31%	Cherry Tomatoes	16	19%
Broccoli	25	29%	Peas	15	18%
Melon: Cantaloupe	25	29%	Asparagus	14	16%
Cauliflower	23	27%	Peaches	12	14%
Apples	23	27%	Squash: Acorn	10	12%
Melon: Honeydew	22	26%	Squash: Butternut	9	11%
Tomatoes	22	26%	Squash: Zucchini	9	11%
Cucumber	19	22%	Beets	8	9%
Melon: Watermelon	19	22%	Kale	7	8%
Cabbage	18	21%	Collards	4	5%
Spinach	18	21%	Pumpkins	3	4%
Strawberries	18	21%	Other	2	2%

7. Please estimate the average number of POUNDS PER WEEK of processed local produce you would buy from this packing house in 2012.

	Sum of Averages		Sum of Averages
Lettuce	11.810	Squash: Butternut	605
Cabbage	9.255	Strawberries	530
Broccoli	4.710	Beets	515
Onion	3.530	Squash: Zucchini	480
Cauliflower	2.490	Cherry Tomatoes	370
Melon: Cantaloupe	2.210	Blueberries	365
Carrots	2.200	Peaches	315
Apples	2.095	Asparagus	310
Melon: Honeydew	2.000	Peas	240
Potato	1.980	Spinach	210
Melon: Watermelon	1.900	Collards	100
Corn	1.640	Pumpkins	100
Peppers	1.275	Kale	10
Cucumber	1.090	Other (specify)	0
Tomatoes	750	Total	53,690
Squash: Acorn	605		

8. Please estimate your total ANNUAL produce purchases by checking a range below:
Range is \$46-145 million/year

	# responders	% responders		# responders	% responders
Less than \$10,000	11	19%	\$500,000 - \$1,000,000	3	5%
\$10,000 - \$50,000	15	25%	\$1,000,000 - \$2,000,000	3	5%
\$50,000 - \$100,000	8	14%	\$2,000,000 - \$3,000,000	3	5%
\$100,000 - \$150,000	2	3%	\$3,000,000 - \$4,000,000	1	2%
\$150,000 - \$200,000	1	2%	\$4,000,000 - \$5,000,000	0	0%
\$200,000 - \$250,000	1	2%	\$5,000,000 and above	6	10%
\$250,000 - \$350,000	2	3%	Total	59	100%
\$350,000 - \$500,000	3	5%			

Crosstab with Q1 Respondent Type, Q2 Interest in Packing House

	# responders	% responders	Retail Sales	FoodService	Both	A Group of Retailers	Not at all	Extremely interested	Very Interested	Somewhat interested	Not Very interested	Not At All interested
Less than \$10,000	11	19%	2	7	2	0	0	1	3	7	0	0
\$10,000 - \$50,000	15	25%	2	5	7	1	0	3	6	5	1	0
\$50,000 - \$100,000	8	14%	0	7	1	0	0	3	3	2	0	0
\$100,000 - \$150,000	2	3%	0	2	0	0	0	1	0	1	0	0
\$150,000 - \$200,000	1	2%	0	1	0	0	0	0	1	0	0	0
\$200,000 - \$250,000	1	2%	0	1	0	0	0	0	0	1	0	0
\$250,000 - \$350,000	2	3%	0	1	1	0	0	1	1	0	0	0
\$350,000 - \$500,000	3	5%	1	1	0	1	0	2	1	0	0	0
\$500,000 - \$1,000,000	3	5%	1	1	1	0	0	1	1	1	0	0
\$1,000,000 - \$2,000,000	3	5%	0	3	0	0	0	1	1	1	0	0
\$2,000,000 - \$3,000,000	3	5%	0	3	0	0	0	1	1	1	0	0
\$3,000,000 - \$4,000,000	1	2%	0	0	1	0	0	1	0	0	0	0
\$4,000,000 - \$5,000,000	0	0%	0	0	0	0	0	0	0	0	0	0
\$5,000,000 and above	6	10%	0	3	3	0	0	3	2	1	0	0
Total	59	100%	6	35	16	2	0	18	20	20	1	0

9. Next we would like to ask about how much you would spend on local Wisconsin produce if available from the packing house in 2012.

Range is \$18-26 million/year

	# responders	% responders		# responders	% responders
Less than \$10,000	16	28%	\$350,000 - \$500,000	2	3%
\$10,000 - \$50,000	17	29%	\$500,000 - \$1,000,000	3	5%
\$50,000 - \$100,000	7	12%	\$1,000,000 - \$2,000,000	1	2%
\$100,000 - \$150,000	4	7%	\$2,000,000 - \$3,000,000	1	2%
\$150,000 - \$200,000	2	3%	\$3,000,000 - \$4,000,000	1	2%
\$200,000 - \$250,000	1	2%	\$4,000,000 - \$5,000,000	2	3%
\$250,000 - \$350,000	1	2%	\$5,000,000 and above	0	0%
\$350,000 - \$500,000	2	3%	Total	58	100%

Crosstab with Q1 Respondent Type, Q2 Interest in Packing House

	# responders	% responders	Retail Sales	FoodService	Both	A Group of Retailers	Not at all	Extremely Interested	Very Interested	Somewhat Interested	Not Very Interested	Not At All Interested
Less than \$10,000	16	28%	3	8	5	0	0	2	3	10	1	0
\$10,000 - \$50,000	17	29%	2	10	4	1	0	6	6	5	0	0
\$50,000 - \$100,000	7	12%	0	5	1	1	0	2	3	2	0	0
\$100,000 - \$150,000	4	7%	0	4	0	0	0	1	1	2	0	0
\$150,000 - \$200,000	2	3%	1	1	0	0	0	1	1	0	0	0
\$200,000 - \$250,000	1	2%	0	1	0	0	0	0	1	0	0	0
\$250,000 - \$350,000	1	2%	0	0	1	0	0	0	1	0	0	0
\$350,000 - \$500,000	2	3%	1	1	0	0	0	1	1	0	0	0
\$500,000 - \$1,000,000	3	5%	0	1	2	0	0	1	2	0	0	0
\$1,000,000 - \$2,000,000	1	2%	0	1	0	0	0	1	0	0	0	0
\$2,000,000 - \$3,000,000	1	2%	0	0	1	0	0	1	0	0	0	0
\$3,000,000 - \$4,000,000	1	2%	0	1	0	0	0	0	1	0	0	0
\$4,000,000 - \$5,000,000	2	3%	0	0	2	0	0	1	0	1	0	0
\$5,000,000 and above	0	0%	0	0	0	0	0	0	0	0	0	0
Total	58	100%	7	33	16	2	0	17	20	20	1	0

10. When are you interested in sourcing Wisconsin local produce?

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# responders of 85 total	41	41	41	43	47	38	38	39	52	49	44	41

11. How important to you is sourcing CERTIFIED ORGANIC produce?

	# responders	% responders	# responders	% responders
Extremely Important	3	4%	3	5%
Very Important	8	9%	8	14%
Somewhat Important	23	27%	23	40%
Not Very Important	17	20%	17	30%
Not At All Important	6	7%	6	11%
Blank	28	33%		
Total	85	100%	57	100%

12. Which of the following other sourcing requirements are relevant to you?

	# responding	# Yes	% Yes	# No	% No	# Blank	% Blank
Traceability?	56	52	93%	4	7%	29	34%
Liability Insurance?	55	50	89%	5	11%	30	35%
GAP Certification?	48	27	48%	21	52%	37	44%
HACCP Certification?	53	40	71%	13	29%	32	38%
Farm Food Safety Plan?	55	49	88%	6	12%	30	35%
Compliance with farm labor requirements?	54	47	84%	20	16%	58	68%

Any other sourcing requirements? (Please specify in box below)

Yes - sized, graded, on time, competitive price
Yes - If delivery by truck what type of truck and is truck refrigerated
Yes - Hydro-cooled, USDA inspected for grade
Yes - Delivery
Yes - Certified Organic only
No - don't know of any now

13. As a means of securing local supply, how interested are you in purchase contracts that specify product, price, timing, and delivery requirements?

	# responders	% responders	# responders	% responders
Extremely Interested	11	13%	11	19%
Very Interested	23	27%	23	40%
Somewhat Interested	16	19%	16	28%
Not Very Interested	6	7%	6	10%
Not At All Interested	2	2%	2	3%
Blank	27	32%		
Total	85	100%	58	100%

14. As a means of securing local supply, how interested are you in participating in pre-season crop planning to formally arrange products, quantities, packaging, and timing of deliveries?

	# responders	% responders	# responders	% responders
Extremely Interested	6	7%	6	11%
Very Interested	17	20%	17	30%
Somewhat Interested	22	26%	22	39%
Not Very Interested	10	12%	10	18%
Not At All Interested	1	1%	1	2%
Blank	29	34%		
Total	85	100%	56	100%

15. How interested are you in private labeling any produce items?

	# responders	% responders	# responders	% responders
Extremely Interested	0	0%	0	0%
Very Interested	10	12%	10	18%
Somewhat Interested	13	15%	13	24%
Not Very Interested	19	22%	19	35%
Not At All Interested	13	15%	13	24%
Blank	30	35%		
Total	85	100%	55	100%

16. If offered, in which other opportunities would you be interested?

Crosstab with Q9 Annual Local Sales

	# choosing	% of 85 total responders	# purchasing <\$2M/yr local	# purchasing \$2M+/yr local
Investment	6	7%	2	1
Ownership	4	5%	2	1
Management	10	12%	7	3
Not Interested	44	52%	35	7
Blank	27	32%		

17. May we contact you regarding your interest in the packing house?

	# responders	% responders	# responders	% responders
Yes	46	54%	46	75%
No	15	18%	15	25%
Blank	24	28%		
Total	85	100%	61	100%

SITE REQUEST FOR INFORMATION

The following RFI was sent out to all Dane County City, Village and Town Clerks and Administrators, and any Dane County economic development professionals representing those jurisdictions to determine interest and available sites or buildings for the food hub.



**Dane County Planning and Development Dept.
Dane County, WI - Project Fresh**

May 9, 2011

Contact: Olivia Parry, Sr. Econ Dev. Specialist
608-266-4270, parry@co.dane.wi.us
<http://www.dane-econdev.org>

Request for Information

Project Fresh is looking for an existing building for the purpose of developing a WI only fresh market vegetable packing house (Phase 1). In the first phase, the facility will pack, aggregate and market WI produce and products. Phase II will process WI produce.

Phase I

1. Project timeline: 12-18 months to open
2. Job creation: 20-25 at capacity, plus hourly labor for washing and packing; salaried positions include distribution and logistics, management, finance, sales, office staff, and operator.
3. Site: 2.5 - 3 acres
4. Zoning: Commercial
5. Facility: Food grade or certified food facility preferable, (not required).
6. Building and site requirements:
 - 10,000-25,000 sq feet.
 - Refrigeration (not freezer), at least 20% of total size
 - Approx. 1000 sq. ft. office space
 - 2 loading docks for semis
 - Ceiling height 30 feet approx.
 - Bay size 20 feet approx.
7. Ownership: Lease preferred, 3-5 years, option for renewal. Will consider purchase.
8. Water: Facility will require high volume of potable water usage in peak season, do you have high volume capacity? Does your community have opportunity for land application of waste water? Other water sources than municipal?
9. Utility: 440 electrical 3 phase service to the site. Natural gas should be available.
10. Parking: enough space for a semi-truck to turn around, plus staff parking. Please describe.
11. Other: The site will route 18 to 25 tractor trailers a week during peak growing season, and needs access to major transportation routes. What are the weight limits on the access roads and variances during the year, if any?
12. Would your community support this type of activity?

Phase II would require an additional 1,000-5,000 square feet of refrigerated space for processing produce.

BIBLIOGRAPHY

Black, Jane. "Senate passes child nutrition bill." *The Washington Post*. August 5, 2010. <http://voices.washingtonpost.com/all-we-can-eat/food-politics/senate-passes-child-nutrition.html> (accessed August 13, 2010).

Day-Farnsworth, Lindsey, Brent McCown, and Michelle Miller. *Scaling Up: Meeting the Demand for Local Food*. Joint effort of The Center for Integrated Agricultural Systems (CIAS), College of Agricultural and Life Sciences and The Agricultural Innovation Center, Wisconsin Cooperative Extension, University of Wisconsin-Madison, Madison: Board of Regents of the University of Wisconsin System, CAIS, December 2009, 30.

Euromonitor International. *Fresh Food in the US*. Market Research, London: Euromonitor International, 2011.

Huang, Sophia Huang and Kuo. "Increased U.S. Imports of Fresh Fruit and Vegetables FTS-328-0." *USDA Economic Research Service Publications*. September 2007. <http://www.ers.usda.gov/Publications/fts/2007/08Aug/fts32801/fts32801.pdf> (accessed February 12, 2011).

IBISWorld. *Fruit & Vegetable Wholesaling*. December 1, 2010. <http://www.ibisworld.com/industry/default.aspx?indid=978> (accessed February 12, 2011).

Institutional Food Market Coalition. *2010 Program Report*. Annual Report, Madison: Dane County Department of Planning and Development, 2010.

Martinez, Steve, et al. *Local Food Systems: Concepts, Impacts, and Issues*. Economic Research Report Number 97, Washington DC: USDA Economic Research Service, May 2010, 87.

Meter, Ken. "Local Food as Economic Development." *Crossroads Resource Center*. October 2008. <http://www.crcworks.org/lfced.pdf> (accessed June 30, 2010).

Mintel Group. *Local Procurement - US - February 2009*. February 2009. http://oxygen.mintel.com/sinatra/oxygen/search_results/show&&set_access_filter=all-ZUS/display/id=393577 (accessed June 30, 2010).

National Agricultural Statistics Service. *2010 State Agricultural Overview: Wisconsin*. Census, Washington, D.C.: USDA, 2010.

National Restaurant Association. "Chef Survey: What's Hot in 2010." *National Restaurant Association*. October 2009. http://www.restaurant.org/pdfs/research/whats_hot_2010.pdf (accessed June 30, 2010).

—. "Industry Forecast Predicts Trends in Healthier Options and "Greener" Restaurants in 2009." *National Restaurant Association Press Release*. December 18, 2008. <http://restaurant.org/pressroom/pressrelease/?ID=1726> (accessed June 30, 2010).

Neal, Arthur. *USDA Blog: Online Resource Helps Producers Get Products to Market, Bolster Local and Regional Economies*. July 12, 2011. <http://blogs.usda.gov/2011/07/12/online-resource-helps-producers-get-products-to-market-bolster-local-and-regional-economies/#more-34007> (accessed July 29, 2011).

Organic Trade Association. "Industry Statistics and Projected Growth ." *Organic Trade*

Association. June 2010. <http://www.ota.com/organic/mt/business.html> (accessed February 12, 2011).

Pirog, Rich. "Checking the food odometer: Comparing food miles for local versus conventional produce sales to Iowa institutions." *Leopold Center for Sustainable Agriculture*. July 2003. http://www.leopold.iastate.edu/pubs/staff/files/food_travel072103.pdf (accessed August 24, 2011).

Swenson, David. *Selected Measures of the Economic Values of Increased Fruit and Vegetable Production and Consumption in the Upper Midwest*. Research, Department of Economics, Iowa State University, Ames: Leopold Center for Sustainable Agriculture, March 2010, 67.

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

The Food Channel editorial staff. *Food Channel Looks Back at the Decade in Food*. Edited by Kay Logsdon. 2009. <http://www.foodchannel.com/stories/2292-food-channel-looks-back-at-the-decade-in-food> (accessed June 30, 2010).

Thrive. *Thrive here in the Madison Region: Industries and Companies - Agriculture*. 2011. <http://www.thrivehere.org/industries-companies/agriculture/> (accessed July 22, 2011).

U.S. Bureau of Labor Statistics. "Consumer Expenditures in 2008." *Consumer Expenditure Survey*. October 6, 2009. www.bls.gov/cex/csxann08.pdf (accessed June 30, 2010).

U.S. Census Bureau. *2007 Economic Census*. July 23, 2010. <http://factfinder.census.gov> (accessed February 12, 2011).

—. *State & County Quick Facts: Wisconsin*. June 3, 2011. <http://quickfacts.census.gov/qfd/states/55000.html> (accessed July 27, 2011).

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

UC Davis. "US Fruits and Vegetables." *Rural Migration News*. July 2007. http://migration.ucdavis.edu/rmn/more.php?id=1231_0_5_0 (accessed February 12, 2011).

USDA Agricultural Marketing Service. *GAP/GHP Audit Verification Program: Wisconsin*. July 7, 2011. <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STE LPRDC5091877> (accessed July 27, 2011).

USDA Foreign Agricultural Service. *Trade and Agriculture: What's at Stake for Wisconsin? WTO State Fact Sheet*, Washington D.C.: USDA, 2009.

USDA NASS. *Cash Receipts from Farm Marketing, by Commodities, Wisconsin 2004-2008*. *Wisconsin 2009 Agricultural Statistics*, Washington, D.C.: USDA, 2009.

Weise, Elizabeth. "Is organic always the best pick when it comes to buying food?" *USA Today*. December 22, 2010. http://www.usatoday.com/yourlife/food/2010-12-21-Organics21_CV_N.htm (accessed February 12, 2011).

ENDNOTES

- ¹(Neal 2011)
- ²(Institutional Food Market Coalition 2010)
- ³(National Agricultural Statistics Service 2010)
- ⁴(Meter 2008)
- ⁵(U.S. Environmental Protection Agency 2005) (The Diesel Technology Forum 2010)
- ⁶(Neal 2011)
- ⁷(Thrive 2011)
- ⁸(Day-Farnsworth, McCown and Miller December 2009)
- ⁹(Meter 2008)
- ¹⁰(National Agricultural Statistics Service 2010)
- ¹¹(Pirog 2003)
- ¹²(U.S. Environmental Protection Agency 2005) (The Diesel Technology Forum 2010)
- ¹³(USDA Agricultural Marketing Service 2011)
- ¹⁴(IBISWorld 2010)
- ¹⁵(U.S. Census Bureau 2010)
- ¹⁶(Euromonitor International 2011)
- ¹⁷(Organic Trade Association 2010)
- ¹⁸(Weise 2010)
- ¹⁹(UC Davis 2007)
- ²⁰(Huang 2007)
- ²¹(Mintel Group 2009)
- ²²(Mintel Group 2009)
- ²³(National Restaurant Association 2009)
- ²⁴(The Food Channel editorial staff 2009)
- ²⁵(National Restaurant Association 2008)
- ²⁶(Martinez, et al. May 2010, iv-v)
- ²⁷(Black 2010)
- ²⁸(U.S. Bureau of Labor Statistics 2009)
- ²⁹(Huang 2007)
- ³⁰(Mintel Group 2009)
- ³¹(Institutional Food Market Coalition 2010)
- ³²(Institutional Food Market Coalition 2010)
- ³³(National Agricultural Statistics Service 2010)
- ³⁴(Meter 2008)
- ³⁵(U.S. Environmental Protection Agency 2005) (The Diesel Technology Forum 2010)

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