UMore Park
Local Foods Project

Final Report
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I. Executive Summary

In order to promote awareness, healthy lifestyles, and engage the community with UMore Park’s sustainability principles, the Office for UMore Park Academic Initiatives asked the Carlson Ventures Enterprise (CVE) to research the feasibility of utilizing acreage for growing vegetables and fruit before any construction begins onsite. The Office for UMore Park Academic Initiatives believes that the combination of locally grown food, together with education and knowledge about healthy lifestyle, cooking, and nutrition will provide valuable benefits to schools, restaurants, grocery stores, health care providers, and residents living in the area.

The CVE team incorporated secondary research and conducted interviews with representatives from key stakeholder groups, including farmers, CFANS faculty members, restaurant managers, Dakota County Technical College horticulture program faculty members, City of Rosemount officials, local foods experts, and other people involved in the local foods system. We evaluated the feasibility of UMore Park as a grower of local foods and as an incubator for the local foods movement. In addition to financial sustainability, models were assessed on social attributes and alignment with the mission of UMore Park, including community engagement and promotion of healthy lifestyles.

The CVE team evaluated potential revenue and expenses from local foods grown on UMore Park in four models: community supported agriculture (CSA), wholesale to food co-operatives, agritourism, and establishing a farmer’s market. If UMore Park were to enter the local food market in a growing capacity, the CVE team suggests a CSA model with recognition that profitability of this model is highly dependent on marketing and labor costs. If the labor cost can be subsidized by some other entity, rather than the UMore Park CSA venture itself, the model has the potential to be profitable (excluding capital expenses) in its first year. The CSA model could be supplemented by sales through co-ops and a farmer’s market. Given the time needed for land preparation, consumer recruitment, and farmer recruitment, a CSA would not be feasible until Spring 2013. However, due to the uncertain acceptance of such venture started by UMore Park (growers viewing UMore Park CSA as competition rather than partner) and due to all the assumptions needed to make the model successful, the risks of starting a CSA outweigh its benefits. Therefore, the CVE team explored other models that would not require UMore Park to grow food by itself and still add value to the local food community.

During evaluation of the growing models, the CVE team identified unmet needs in the regional local food system such as land access, distribution and food processing. The CVE team recognized that
UMore Park lacks expertise in these areas and could not currently offer solutions to any of these independent needs. However, given UMore Park’s mission for Outreach, Research, and Education, we have recognized a unique opportunity for UMore Park to address these needs with low risk and high probability of generating awareness and support for UMore Park’s mission. The CVE team recommends that UMore Park serves as an incubator organization to foster innovation in local foods from local growers, entrepreneurs, and organizations. Upon identification of key insights to gain, UMore Park will solicit proposals for entrepreneurial enterprises from individuals/organizations currently involved in the local foods system. In addition to the sharing knowledge and resources, these individual enterprises will create opportunities for experiential learning for University of Minnesota students and attract people to the Rosemount region. The incubator model proposed by the CVE team offers advantages to all stakeholders: agripreneurs, students, Rosemount community, local food system, and UMore Park. Specifically, UMore Park can utilize the outcomes of the incubator enterprises when planning the incorporation of local foods within the sustainable community.

II. Statement of Problem

UMore Park is a 5,000 acre tract of land south of Rosemount that is owned by the University of Minnesota. Originally sold to the University by the Federal government, the current vision is to build a sustainable community at the site over the next 30 years that will serve as a model for other similar developments in the future. Sustainability will be incorporated in many ways, including building practices, site planning, commerce, and green spaces for recreation, gardens, and local foods.

In order to promote awareness, healthy lifestyles, and engage the community in UMore Park’s sustainability principles, the Office for UMore Park Academic Initiatives has asked the Carlson Ventures Enterprise (CVE) team to research the possibility of devoting some amount of acreage for growing vegetables and fruits even before any construction begins. The Office for UMore Park Academic Initiatives believes that the combination of locally grown food, together with education and knowledge about healthy lifestyle, cooking, and nutrition will provide valuable benefits to schools, restaurants, grocery stores, health care providers, and residents living in the area. Other advantages of this venture include special events focused on local foods and healthy lifestyles to engage citizens in the region.

The CVE team identified the following goals for the project:

- Gain a clear understanding of the local food movement and how UMore Park could participate
- Perform stakeholder analysis
• Develop potential models that fit and are suitable for UMore Park's vision
• Identify potential partners for UMore Park that would help guide the initiative forward
• Provide a recommended approach to developing local foods at UMore Park

III. Research Process

Two types of models were evaluated in this project: Growing Models and Alternative Models.

• Growing Models: The CVE team explored four models that concentrate on UMore Park starting a farm on its own and selling through a CSA, Pick-your-own, Farmers’ market or a Co-Op.
• Alternative models: During the research, the CVE team learned about unmet needs in the local food system in which UMore Park could add value without necessity of growing food. These models include processing, land access, and distribution.

The following process and methodology were utilized in evaluating the models above.

• Secondary Research: The CVE team explored national local food initiatives, examples of existing models that engage community around growing food as well as analyzed best practices behind local foods movement and how to apply them to UMore Park’s initiative. See Appendix A for complete list of sources.

• Interviews: The CVE team consulted with farmers, restaurant managers, CFANS faculty members, Dakota County Technical College horticulture program faculty members, local food experts, food co-operatives, and other people involved in the local food movement. Interview notes can be found in Appendix C.

• Financial Analysis: Start-up costs as well as annual operational costs for a three acre farm have been calculated and are presented in Appendix D.

• Real-Win-Worth: The CVE team analyzed several opportunities for UMore Park engaging in local food and answered essential questions about them: Is it real? Can we win? Is it worth it?
IV. Stakeholder Analysis

It was important for the CVE team to initially identify the key stakeholders as well as their role in the success of the initiatives:

- **Rosemount citizens and members of neighboring communities**: Local citizens in the UMore Park area will be crucial to the acceptance and success of local food at UMore Park, especially if any food growing or selling is present in the area.
- **Farmers**: Other farmers in the area can see UMore Park as a competitor for the customer rather than a partner.
- **Restaurants**: Food grown at UMore Park can possibly be sold at the restaurants in the area.
- **Schools**: Partnerships as well as traffic from local schools like Dakota County Technical College can bring awareness as well as customers.
- **CFANS faculty**: Professors from the College of Food, Agricultural and Natural Resource Sciences can provide the required expertise in food production. However, they may also be resistant to development of land.
- **Minnesota Institute for Sustainable Agriculture (MISA)**: MISA can provide expertise and a possible partnership to develop and promote the local food initiative.
- **University of Minnesota students**: Many majors at the university require an experiential learning component and the initiative at UMore Park could fit this requirement well.
- **Dakota County Community College**: The CVE team consulted landscape Horticulture faculty at DCTC to determine and possibly establish a relationship between UMore Park and the College.

V. Growing Models

The CVE team began the analysis of UMore Park as a grower by assuming an initial growing area of 3 acres. Initial capital investment of $100,000 was assumed based on information from the Steven Lott. Each model below considers this growing area and capital expenditures in the financial analysis.
A. Community Supported Agriculture

Community Supported Agriculture (CSA) is a form of direct marketing in which members (customers) pay an upfront fee at the beginning of the growing season and farmers commit to produce the food and deliver it to the members on a weekly basis once the harvesting season has started.

Advantages

- Upfront money before the season
- Consistent income, takes the gambling out of farming as opposed to rainy farmer's markets when sales are low
- Price advantage over selling wholesale
- Create relationship with the customer
- No food goes to waste because it can be distributed to the members during bountiful harvests

Disadvantages

- Need for experienced farmer
- High labor costs
- Marketing may become costly
- High competition (market may be becoming saturated)

Critical Factors about a CSA

Experienced farmer

After speaking to seven different CSA farms that cater to the Rosemount area either by having a farm or a drop-off location within 20 miles of Rosemount (Appendix B), it became clear that a CSA farm needs to be run by an experienced farmer. The farmer has to be able to plan and project the entire produce yield before any planting begins. The farmer needs to have an accurate idea of how much to grow, when to expect to start harvesting, and for how long a certain plant will produce.

CSA Season

Most CSA farm seasons start delivering their basket from mid-June and end in late October. The planting, however, starts as early as April Some farms like the Featherstone Farm (Appendix B),
differentiate themselves by offering CSA shares during winter. These farms, however, are already well established CSA farms with a large loyal customer base and with many years of experience.

**Diversity**

Fruit and vegetable diversity is crucial to a CSA farm. Nobody likes to eat the same thing for 20 weeks in a row, so the greater the variety of vegetables grown means more diverse weekly offerings. The farms researched grow around 40 different spring, summer, and fall fruit and vegetable types with around 30 to 150 varieties.

**CSA Basket**

The amount of produce and diversity in a basket changes throughout the season. Keeping track of what goes into a CSA basket each week is very important. It ensures that the members do not receive the exact same items each week and that they are not overwhelmed with the amount of produce they are getting. Most CSA usually include 9 to 15 items that fill up 1/2 bushel or 3/4 bushel box.

**Example of basket contents**

<table>
<thead>
<tr>
<th>Early Season</th>
<th>Mid-season</th>
<th>Late season</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pound snap peas</td>
<td>3-4 tomatoes</td>
<td>1 butternut squash</td>
</tr>
<tr>
<td>250g mesclun salad mix</td>
<td>1 pound green beans</td>
<td>1 head garlic</td>
</tr>
<tr>
<td>1 greenhouse cucumber</td>
<td>2-3 field cucumbers</td>
<td>1 bunch beets or turnips</td>
</tr>
<tr>
<td>250g spinach or baby chard</td>
<td>2 bell peppers</td>
<td>1 head cabbage</td>
</tr>
<tr>
<td>1 bunch of beets with tops</td>
<td>2 zucchini</td>
<td>3-4 storage onions</td>
</tr>
<tr>
<td>1 bunch green onions</td>
<td>1 head lettuce</td>
<td>250g mesclun mix</td>
</tr>
<tr>
<td>1 bunch sweet hakurei turnips</td>
<td>1 bunch carrots</td>
<td>1 big daikon radish</td>
</tr>
<tr>
<td>1 kohlrabi</td>
<td>3-4 fresh onions</td>
<td>1 stalk brussels sprouts</td>
</tr>
<tr>
<td>1 bunch salad radishes</td>
<td>1 broccoli</td>
<td>2 pounds potatoes</td>
</tr>
<tr>
<td>1 large bunch of basil</td>
<td>1 cantaloupe</td>
<td>choice of thyme or rosemary</td>
</tr>
<tr>
<td></td>
<td>1 bunch fresh cilantro</td>
<td></td>
</tr>
</tbody>
</table>

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1 [http://shootingstarcsa.com](http://shootingstarcsa.com)
Delivering the Basket

Encouraging the members to pick up their shares at the farm will save on transportation costs, while allowing the member to see how the farm works and possibly create a loyalty. Another option is to set up a central location in an area where most of the CSA members live. Lot of farms encourage or ask members to serve as a pick up hub. Other farms set up their drop off locations at farmer's markets they sell at or at locations where they sell wholesale.

Pricing

Most farmers charge a set amount and then give members a share of produce which would cost them the same amount if they bought it elsewhere. This set amount is usually based on the local farmer's market and most farmer's provide a 10% discount as a thanks for the customer’s commitment.

Recruiting and Retaining Members

The best advertising for a CSA is positive word of mouth. In fact, all CSA farms interviewed said that it was one of their greatest strengths and recruiting tools. Most CSAs we spoke to do not engage in any marketing strategies except creating their own website and registering at three CSA websites: LocalHarvest.com, MinnesotaGrown.com, and LandStewardshipProject.com. Brochures are another great way to inform potential customers about a CSA farm. These brochures should contain the concept of CSA; the benefits of CSA; the story, vision, and goals of the CSA; what products members can receive (how, when, where); share price; how members can join; and whom to contact for more information. The brochures should be distributed at local churches, farmer's markets, grocery stores, or coffee shops.

Retaining members is a challenge for all CSAs. One way to retain members is through weekly newsletters that should extend over the winter so that members are still connected. These newsletters should educate people on importance of local sustainable agriculture and what it means to be environmentally, socially, and economically sustainable, include recipes that use the items in the basket, show photos to illustrate what happens on the farm, and conduct surveys to refine the program. Other retention techniques include special events like educational workshops, farm tours, hands-on experiences, or seasonal festivals.

The Possibility of a CSA at UMore Park

A CSA model provides a great way to connect with the community and push the local food initiative and the entire idea among members and non-members through positive word of mouth or
newsletters that can accompany each basket every week. The farm receives immediate cash flows before anything is even planted, which takes some risk out of farming because the farmer does not have to worry if he will be able to sell the produce through wholesale. An experienced farmer can plan the entire produce and resources needed depending on the amount of members that signed up, so the model is very scalable and the farmer can plant appropriate amount of produce from year to year if the demand for shares increases or decreases. Also, there is little waste because if more food is grown, it can be distributed among members. Lastly, CSA would be a great way to incorporate students from CFANS majors to work on the food production, marketing, or other farm operations.

The CVE team has spoken with seven different CSA farms in the Rosemount area (Appendix B) to determine the possible revenues and costs associated with a CSA model as well as the feasibility of such model at UMore Park.

Revenue

The table below provides information on the amount of shares sold for each CSA farm in their first season and in their latest season.

<table>
<thead>
<tr>
<th>Farm</th>
<th>CSA Since</th>
<th># of Shares Sold in the 1st Year</th>
<th># of Shares Sold in 2011 Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crazy Boy Farm</td>
<td>2008</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Fazenda Boa Terra</td>
<td>2010</td>
<td>22</td>
<td>First Year = Last Year</td>
</tr>
<tr>
<td>Featherstone</td>
<td>1994</td>
<td>20</td>
<td>850</td>
</tr>
<tr>
<td>Fresh Earth Farm</td>
<td>2003</td>
<td>25</td>
<td>105</td>
</tr>
<tr>
<td>My Minnesota Farmer</td>
<td>2009</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on the information above, the CVE team estimates that UMore Park CSA would be able to sell approximately 20 shares in its first year of existence. My Minnesota Farmer is more of an outlier in this case because they already had a successful Agritourism/ Pick Your Own" farm with numerous customers that they had no problem converting into CSA members.

The season for the farms we interviewed is between 16-20 weeks and the overall basket value to the customer is between $20 to $40, therefore the CVE team estimates that the CSA season at UMore Park would run for 18 weeks and the value of the basket would be approximately $30. From this information, the CVE team estimates the revenue for the first CSA season at UMore Park to be:
18 weeks * $30 basket value * 20 shares sold = $10,800 for the first year

Cost

The greatest concern with this model is that a CSA requires a very experienced farmer who can plan the entire season’s produce before anything is even planted. The growth plan for a CSA is extremely complex and in many cases requires succession planting. UMore Park would need to hire this farmer, whose salary would be between $30,000 to $50,000 a year excluding any benefits according to the farmers interviewed. In Appendix D, the CVE team estimated that total operating costs that include cost of crops, soil amendments, nutrients, utilities, maintenance, marketing supplies, fuel, insurance, office supply, organic certification and other miscellaneous expenses to be around $14,000 for a 3 acre farm. This value excludes labor and depreciation on capital equipment. Since the UMore Park CSA would be able to sell about 20 shares in its first year, the farm would only require 1 acre to grow the required amount of fruits and vegetables. Based on the operational costs from the 3 acre farm, the approximate operational costs for a 1 acre farm would be about ($14,000 ÷ 3) $4666. If this also assumes that the farmer will require no additional paid help outside of volunteers and that he/she will receive a salary of $30,000 due to the small size of the farm, then the total annual cost would be:

$4666 operational costs + $30,000 in farmer’s salary = $34,666

If UMore Park is only able to earn $10,800 in revenue, but incur $34,666 in annual costs, then the total loss for the first year would be around $23,866. In fact, UMore Park would need to sell at least 63 shares in its first year to break even with the assumed costs. The earliest UMore Park would be able to sell 63 shares would be in year 3 of its existence based on the growth of other CSAs researched. As the CVE team spoke to the owner of Fazenda Boa Terra, a farm that is located in Farmington, who sells CSA shares and who has experience of being a farm manager, he said that hiring a farm manager does not make financial sense for a CSA or really for any type of farming until the farm is well over 30 to 40 acres and at least $300,000 to $500,000 in revenue. Keep in mind that as the CSA grows in size, UMore Park will need to hire additional seasonal employees to help out with labor. The 3 acre University of Minnesota student-run organic farm (Cornercopia) hires 4 part-time interns, who work for $10/hour for about 25 to 30 hours a week for the entire season in order to manage the amount of work required to run the farm. This amounts to about $11,000 to $12,000 in labor costs for Cornercopia and even though
the farm had over $18,000 in sales for their last season, they still failed to break even. The labor cost, however, is the only eliminating factor in starting a CSA.

One way to increase revenue would be to extend the number of weeks the CSA plans to deliver the weekly basket or to increase the value of the basket. Both of these options, however, increase costs too since extending the number of weeks requires more green houses and better care as it become hard to grow lot of vegetables outside in the fall. The value of the basket can be increased also, however, this will increase the cost of crops as the farmer is required to grow more to accommodate for the increased basket value. Costs can be decreased by finding a farmer who is willing to work for less salary. Based on the discussion above, the possibility of a CSA farm as short term profitable perspective is unrealistic due to the labor cost associated with hiring an experienced farmer. However, if UMore Park did not incur the high labor cost, the option of a CSA farm at UMore Park is viable.

The reason why the CSA model is so profitable and advantageous for all family farms is that they do not hire any additional farmers or managers to run the farm, therefore they do not incur the $30,000 salary cost that UMore Park would. Their only cost for a family run farm would be the $4666 in operational costs from the model above which would make such farm profitable assuming revenues of $10,800.

**B. Agritourism/Pick Your Own**

Agritourism is a broad term describing farming enterprises that focus not only on the actual growing of the food but on the experiential and entertainment aspect of the farm as well. There are many options for implementation ranging from simple bed-and-breakfasts to complex pick-your-own-operations that include hay rides and activities.

**Advantages:**

- Admission fees produce revenue that supplements revenue gained from food production and is less affected by seasonality and other factors affecting food growth
- Experiential aspect encourages repeat customers and provides a differentiating factor from companies that simply grow produce
- Operations are highly visible and thus can be used as a way to promote the University and its overall mission
• Activities need not be closely tied to food production and can be changed to fit the seasons (ex: hay rides at an apple orchard)

Disadvantages:
• The capital investment is large
• The time before an agritourism venture can become profitable is long
• Successful agritourism depends on established food production that UMore Park currently does not have
• Switching costs from one agritourism model (Example: Pick-Your-Own) to a different agritourism model (Example: Bed & Breakfast) are too high

Critical Factors about Agritourism

Engaging Experience
The overriding factor that makes any agritourism venture successful and different is the experience it provides. A unique and engaging experience is what drives customers to travel long distances regularly and thus the production of food is secondary to the crafting of the “tourist” aspect of the site. Gene Eklin of the Nordic Ridge Gardens sells pumpkins as part of his venture which also includes a corn maze and playgrounds. However, he states that the pumpkins are the least profitable part of the total sale because people really pay for the experience. Thus, in order for an agritourism venture to succeed, a majority of the time and resources spent should be towards developing the land for an engaging customer experience.

Once the site has been properly developed, additional care must be taken to ensure that every aspect of the site is customer-friendly. While farm operations might not have to be aesthetically pleasing to potential visitors, everything from easily marked bathrooms to convenient parking spots to first aid stations must be considered when opening an agritourism venture. It would be likened to combining the efficiency and productivity of a farm with the customer-driven experience of an amusement park.

\[2\] \url{http://agmarketing.extension.psu.edu/Retail/PDFs/marketing_local_food.pdf}
Tourism Value on the Land

In addition to having a well-crafted experience, the area on which agritourism ventures are located on should have an inherent value to them that is not quantified in dollars be it historical, scenic, educational, or otherwise. In a way, the land shapes the subsequent experience offered by the venture. For example, The Broodio, operated by Audrey Arner and Richard Handeen on Moonstone Farm (Montevideo, MN), is situated near birding and hiking trails, boating areas, and local food operations. Thus, it became a successful “bed and bagel” operation due to its location that made it a perfect retreat destination. Thus, what differentiates a successful agritourism venture from a simple amusement park is that its operations are tied to the land, showcasing the value nature provides.

Experienced Staff

In addition to having an experienced farmer who can grow the produce, an agritourism venture requires a more diverse labor force in the form of well-trained tour guides, store managers, and/or craftsmen. In essence, an agritourism that involves food operates using two different business models and requires two different skill sets (growing and experiential aspect). While labor costs may be kept similar to that of a farm by decreasing the number of farmers to offset the relative increase in tourism labor costs, it would not be unlikely to expect an increase due to the more labor intensive nature of attending to visitors’ needs. Visitor hours might also affect farm operations as produce might have to be picked at night when the site is closed. This adds additional labor challenges and thus an experienced staff would be needed to balance the needs of the food and the customers.

Appropriate Product Mix

Agritourism ventures, especially Pick-Your-Owns, are limited in their choice of produce. Produce that is difficult to harvest by hand, requires extensive processing, or hard to eat/cook, would be unprofitable in a business that has the customer purchasing and sometimes picking their own produce. Pick-Your-Owns are often limited to fruits such as berries and apples and a few vegetables. This may affect infrastructure needs when considering seasonality and sometimes forces farmers to work with labor intensive crops. Some crops, such as apples, require a long growing time before they can be harvested at a commercial level, thus making an agritourism venture capital intensive. This factor is

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4 [http://agmarketing.extension.psu.edu/Retail/PDFs/marketing_local_food.pdf](http://agmarketing.extension.psu.edu/Retail/PDFs/marketing_local_food.pdf)
somewhat mitigated in ventures that do not rely on customers purchasing the food and instead has it providing the backdrop for the venture’s primary service.

**Possibility of Agritourism at UMore Park**

With significant brand equity and historical value on the land, an agritourism venture could be successful at UMore Park provided the critical factors listed above are taken into consideration. One example of such enterprise would be a guided historical tour of UMore Park and the role it played during the war. In addition, the University’s research goals and the significant contributions it has made in agriculture could be highlighted. To supplement revenue made through admission fees, a small Pick-Your-Own operation featuring strawberries and apples (varietals bred at the University such as the Honeycrisp would be a perfect match) would provide customers with another dimension to the overall experience.

Strawberries and apples were chosen as they provide a diverse set of growing characteristics with the former only taking a year to produce but also having a maximum of six years in production, while the latter takes as long as seven years until full production and stays as such for up to thirty years.5

Assuming full production, revenue is estimated as:

<table>
<thead>
<tr>
<th></th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberries (20,000 lbs./ 2 acres, $2.5/lb.)⁶</td>
<td>$50,000</td>
</tr>
<tr>
<td>Apples (14,000 lbs./acre, $1/lb.)</td>
<td>$14,000</td>
</tr>
<tr>
<td>Admission (1,500 visitors @ $8 ea.)</td>
<td>$12,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$76,000</td>
</tr>
</tbody>
</table>

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5 [http://agmarketing.extension.psu.edu/Retail/PDFs/marketing_local_food.pdf](http://agmarketing.extension.psu.edu/Retail/PDFs/marketing_local_food.pdf)

Major expenses include labor, infrastructure, and capital expenditures and can be broken down as:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberry plants (see Appendix)</td>
<td>$3,198</td>
</tr>
<tr>
<td>Apple plants (560 trees @ $40 ea.)</td>
<td>$22,400</td>
</tr>
<tr>
<td>Farmhands (4 working 1,400 hrs./yr. @ $12/hr.)</td>
<td>$16,800</td>
</tr>
<tr>
<td>Tour guides (2 working 625 hrs./yr. @$10/hr.)</td>
<td>$6,250</td>
</tr>
<tr>
<td>Manager (salaried)</td>
<td>$30,000</td>
</tr>
<tr>
<td>Marketing</td>
<td>$3,000</td>
</tr>
<tr>
<td>Maintenance (25% of plant costs)</td>
<td>$6,400</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$88,048</strong></td>
</tr>
</tbody>
</table>

While the above model has the potential to become profitable (revenue not too tied with actual growing but on the experience but also assuming the farm is able to scale up, provide new activities, as well as manage labor costs) as well as publicity for the developing community, the CVE team believes it is too capital intensive and costly to implement as a short-term plan. While researching similar ventures, the CVE team found that the major costs include not only the actual growing of the food but in setting up an appealing destination from buildings, displays, etc. as well as hiring experienced farmers AND tour guides/staff. The CVE team believes that the potential revenue is not worth the upfront costs and development time and that there is currently not sufficient publicity or development around UMore Park that an agritourism model would be successful.

To conclude, while agritourism would be a worthwhile opportunity down the road, it will only be successful if there is already an established farm with significant recognition as well as a sustainable model with profits that can be used to jump start the development of the experiential aspect of the destination. Thus, The CVE does not recommend pursuing agritourism in the short-term as it would require large amounts of capital investments and labor costs as well as the additional risks inherent in a “tourist-driven” model.

**C. Sell Wholesale to Co-operatives**

Co-operatives are grocery stores that serve a clientele with a preference toward local, natural, and organic products and offer those consumers an opportunity to support the store through membership purchase. Selling to co-ops presents both advantages and disadvantages to a local food
grower. They are similar to other distribution models that involve wholesale-to-retail sales with middlepeople between the producer and consumers.

Advantages:

- Work with fewer customers
- Possibility for regular, repeat purchases
- “Farmers’ Meetings” during the Winter help to determine what to plant
- No need to staff for working with consumers (nights, weekends require more time)

Disadvantages:

- Wholesale prices are less than retail
- Co-ops already have established relationships with growers
- Lacks relationship with consumers
- Less direct connection between consumers and UMore Park

Critical Factors about Selling to Co-ops

Co-op Purchasing Patterns

Co-ops purchase locally grown food from farmers multiple times per week. Growers email or call in their list of available produce to the co-ops they work with. Co-ops respond to the farmers with their order(s) based on that week’s availability. Many co-ops have preferred farms for different types of produce. Some even have first and second tiers for each type of produce. Larger co-ops typically have more defined systems and are thus harder to get into for new growers.

Pricing

In selling to co-ops, growers typically set pricing. Growers are allowed to set prices for their produce, with co-ops knowingly paying more for produce from some growers due to limited economies of scale or other factors. Co-op buyers seem to understand that the economics of growing vary from one farm to the next, and allow for that variance in their purchasing. Produce is typically purchased at the price set by the grower and given a standard markup for co-op customers. While the buyers contacted for this project did not share specifics about that markup, one felt that the prices he paid for produce to local growers provided the growers almost no profit. The CVE team estimates that the standard markup was at least 50% of the wholesale price, but co-op buyers would need to be consulted by a reputable farmer to verify this estimation.
Produce Selection

The availability of locally grown food in co-ops is dictated by Minnesota’s growing season. Co-op buyers work with growers to provide their customers a variety of produce by holding “Farmers Meetings” during the winter. Each co-op meets with its growers to plan out who is growing what and how much. Co-op buyers do not dictate to farmers what they should grow, so this meeting is likely one where co-ops and farmers come together to develop a plan that is beneficial for all parties. Many co-ops also utilize a “co-op warehouse” that sources food from other regions and countries for produce that is not currently in season locally. Buyers also note that locally grown food is in less demand at co-ops during Minnesota’s peak growing season due to consumers having other options (like farmers’ markets and home-grown).

The Possibility of UMore Park Selling to Co-ops

Starting a farm to sell produce wholesale to co-operatives in the Twin Cities area would be fairly straightforward. As many industry and academic professionals have mentioned, growing the food is not the real challenge for such a venture. The real challenge lies in the sales, marketing, and management aspects. With many co-operatives in the Twin Cities, a new grower should be able to find one or two to work with (provided that the grower has high quality produce), but developing those relationships and increasing sales volumes to include 100% of the grower’s produce could be difficult. Further, selling a high percentage of the farm’s produce as it scales up to 3, 5, or 10 acres could also be a challenge. In general, the wholesale to co-operative market is relatively saturated in the Twin Cities area, so entering the market with significant volume could prove to be a serious business challenge.

Revenue

Revenue from a wholesale operation to co-operatives is very dependent on the volume produced and the volume sold to the co-ops, along with the produce mix. For the purposes of this study, a spreadsheet was created with which the user could enter assumptions about farm acreage, produce mix, and retail-to-wholesale price multiple to estimate the wholesale-to-co-op model’s profitability. An example of such a calculation is below:

Broccoli: 7300 lbs/acre * $2.89/lbs (retail price) * .5 (wholesale multiple) * 5% of the acreage = $509
With a large volume of produce grown and close to 100% sold to co-ops, this model could be profitable. Unfortunately, this model has significant risks that outweigh its chances of profitability. Cooperatives do not offer season-long contracts with growers, so there is uncertainty about whether all the produce grown will actually sell. Co-ops also require the produce they purchase to have a certain appearance to meet consumers’ expectations. (For example, carrots that grow with two tails would not be accepted because of consumer preferences for good-looking vegetables). A model based on sales to co-ops also requires time to establish the necessary relationships, adding another risk in the uncertainty about being able to sell the majority of the produce grown. Relationships with co-ops and co-op demand would also be a limiting factor for future expansion, as sales can only grow as a limited set of demand does. Another risk comes from the competition with other local growers. Produce grown by UMore Park could be seen as competition to other growers, and while this competitive situation may not represent risk in the typical business sense, the possibility of negative publicity represents a risk for UMore Park. Lastly, as with any growing model, risk is inherent in growing the food. Weather and growing conditions are out of a grower’s control, but they have a significant impact on the business.

Cost
Costs are similar to those of the CSA model – with the main activity being growing produce. Other similarities can be found in packaging the food and delivering it to drop off locations (for CSA) or co-operatives (for wholesaling). In Appendix D, the CVE team estimated that total operating costs that include cost of crops, soil amendments, nutrients, utilities, maintenance, marketing supplies, fuel, insurance, office supply, organic certification and other miscellaneous expenses to be around $14,000 for a 3 acre farm, or about $4,666 per acre. This is in addition to the initial capital expenditures required to set up a farm and the farm manager’s annual salary which, as described above, would be at least $30,000 per year for a small farm.

D. Farmer’s Market
A farmer’s market is a form of direct marketing where farmers (vendors) gather at a defined site to sell directly to consumers. Several farmer’s markets in the region offer the opportunity for UMore Park to join as a vendor and generate revenue through direct sales. An additional opportunity exists in starting a farmer’s market on UMore Park. According to the United States Department of Agriculture,
new farmer’s markets across the country grew 17% in 2011, serving as “an excellent indicator of the staying power of local and regional foods”.  

Farmer’s markets offer incentives for grower, consumer. For growers, they can set their own prices with higher returns, they receive immediate payment in cash sales, and they have the opportunity to meet the consumers and assess demand. For consumers, they have access to a selection of local, natural foods from multiple vendors with whom they can meet, they become educated on local foods and regional agriculture, and they have the opportunity to express their food preferences and gain advice on food preparation. For the community, a farmer’s market increases foot traffic to proximal businesses and inspires local support.

Advantages

- Immediate cash flow
- No growing necessary
- Visibility to UMore Park mission
- Opportunity for consumer insights that can be utilized in the phase development of the sustainable community

Disadvantages:

- High Competition
- UMore Park has no experience with a farmer’s market
- Lack of differentiation from other farmer’s markets
- High labor costs and liability
- The ball fields at UMore Park that would drive most of the traffic at the farmer’s market will not be complete until 2013

Critical Factors in Starting a Farmer’s Market

Sponsor

A farmer’s market can be sponsored by vendors, a city/local government, private organizations or charitable organizations. The sponsor collects fees from the vendors and is responsible for necessary licenses, permits and market safety. The owner of the property of the farmer’s market location is not

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7 [http://www.ams.usda.gov/AMSv1.0/farmersmarkets](http://www.ams.usda.gov/AMSv1.0/farmersmarkets)
necessarily the sponsor. In Minnesota, legal organization of a farmer’s market often is done under non-profit status. The sponsor is responsible for day-to-day operations including market season planning, vendor recruiting, accounting, marketing, and market day logistics and management.

**Location**

The location of a farmer’s market is critical to its success. A farmer’s market should be highly visible, easy to locate/park, have access to vendor’s needs (e.g. water, electrical outlet, restrooms), close to other community activities, and clean from debris. Appendix E lists locations and sponsor affiliations for regional farmer’s markets.

**Farmer’s Market Season**

Most farmer’s markets operate from mid-June to late October in open air locations. Several locations have added indoor Winter markets.

**Revenue structure**

There are multiple options for generating revenue through vendor fees. These include:

- Annual membership dues (may slide based on generated revenue)
- Annual membership fee (fee for services; independent of vendor revenue)
- Flat Daily Fee
- Percentage of Daily Sales
- Combination of annual membership + another option

In addition, funding programs, such as the USDA Farmer’s Market Promotion Program, offer grants for direct marketing of local foods.

**Licenses and insurance**

According to the Minnesota Department of Agriculture, any vendor selling or re-selling food must be licensed by MDA, Minnesota Department of Health or a Local Authority. However, “producer-only” vendors may be exempt from licensing if selling products from a farm or garden occupied and cultivated by them (Minnesota Statute 28A.15).

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Liability and property insurance purchased by the sponsor are recommended in the event of injury and accident. Typical minimal coverage is $1 million per occurrence. Furthermore, vendors may be required to have individual insurance policies.

The Possibility of a Farmer’s Market at UMore Park

In February 2011, the City of Rosemount purchased 27.5 acres of land directly south of Dakota County Technical College (DCTC) from UMore Park for $1 in order to build a sports complex consisting of two baseball fields, two softball fields, a parking lot, an access road, rainwater gardens, and pedestrian walkways.\(^9\) Construction began in October 2011 with a portion expected to be available in spring 2012.\(^10\) Recent communication with the City of Rosemount Parks and Recreation Commission confirm that a subset of ball fields will not be available until Spring 2013\(^11\). This sports complex will bring regular traffic to the UMore Park site during league season, providing an ideal opportunity to establish a farmer’s market. In addition to city residents, DCTC will have access to the ball fields. A farmer’s market selling fruits and vegetables across the road (154th and Akron) will provide refreshments while introducing patrons to the UMore Park local food and sustainable community initiatives. Athletes, parents and fans visiting games (estimated 320/wk during summer/fall leagues) plus visitors from DCTC (~150 / wk) suggest traffic of 500 visitors per week. This potential market would be attractive to vendors.

Revenue

Revenue can be generated from two sources: sales of food grown at UMore Park and vendor fees for on-site farmer’s market.

As mentioned earlier, farmer’s markets benefit the grower in allowing direct sales. Thus, prices can be higher than those charged to co-ops and revenue per unit would be greater than that generated from co-ops. As a reference, Cornercopia (University of Minnesota 1.5 acre organic farm) earned $5079 in farmer’s market sales 2011. We estimate that UMore Park could earn a similar amount as a complementary stream to those distribution channels listed above.

In the absence of selling food, revenue can be generated through vendor fees. The table below provides fee structure of regional farmer’s markets. Estimation of revenue is based on assumption of 20 vendors.

\(^9\) http://www.mndaily.com/2011/02/14/rosemount-buys-umore-plot-1
\(^11\) Personal communication with Dan Schultz, Director of Parks and Recreation Commission, 11/30/2011
Annual membership fees and pre-paid seasonal fees allow immediate cash flow to fund upcoming season’s operations. Given that a UMore Park farmer’s market would be most similar to those in Farmington, Eagan, and Hastings, we calculated an average seasonal rate ($250) and anticipate the following revenue from vendor fees:

\[
20 \text{ vendors } @ \$250 \text{ season/vendor} = \text{ $5,000 per season}
\]

**Cost**

Costs associated with establishing a farmer’s market are wages for marketing manager(s), liability insurance, advertising/marketing, and equipment (rental) for market day operations. An example budget is below and represents costs that must be invested prior to initial market opening.

<table>
<thead>
<tr>
<th></th>
<th>Market Manager (36 wks @ 10 hrs/wk @ $15/hr)</th>
<th>Advertising</th>
<th>Market &amp; Office Operations</th>
<th>Equipment Rental for Market (Portable Restrooms)</th>
<th>Insurance</th>
<th><strong>ESTIMATED TOTAL COSTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmington</td>
<td>$5,400</td>
<td>$5,000</td>
<td>$1,000</td>
<td>$1,700</td>
<td>$1,000</td>
<td><strong>$14,100</strong></td>
</tr>
<tr>
<td>Eagan Market Fest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hastings</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Apple Valley</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burnsville</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Inver Grove Heights</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lakeville</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rosemount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Competition**

St. Paul’s Farmer’s Market established a satellite market in Rosemount (13885 So. Robert Trail) during the 2011 season, operating on Tuesdays from July – September. Multiple attempts to gain data on market traffic and statistics from St. Paul Farmer’s Market and City of Rosemount were unsuccessful.


E. Real-Win-Worth Analysis and Recommendation for Growing Models

Real

The need and demand for locally grown food in the Twin Cities is real. Consumer and commercial interest is growing, and many producers are able to sell the majority of their produce every year. Many co-operative grocery stores have long track records of successful sales and recent growth in size, volume, or number of locations. CSAs have also enjoyed a positive response from the Twin Cities community, with over 63 CSAs currently serving the area. Not only are consumers showing increased interest in local foods, businesses are as well. Many local restaurants now feature locally-grown food or serve a menu exclusively made up of seasonal, local food. School and other industrial kitchens are also transitioning to serving more locally-grown food. Some school districts have established programs to work with local growers or specific wording in their mission statement that includes the use of locally grown food. With more people and businesses becoming involved every year, it seems that the need for locally grown food will continue to increase.

Win

The question of whether UMore Park could successfully grow produce in a sustainable manner is easy to answer. With extensive relations with CFANS, local food experts, a new academic program, and access to an organic farm on the U of M campus, a UMore Park farm could certainly grow a variety of produce. The question of whether UMore Park could successfully sell that food is more difficult. At first glance, one might assume the appeal of locally grown, possibly organic food is health and environment driven, but that is not the only motivation for a consumer to purchase such food. While the appeal of fewer chemicals to grow the food and less carbon created in transporting the food are real, many consumers also enjoy a more intangible benefit of locally grown food. That benefit includes a connection with the land, a connection with the grower, and sometimes a declaration of their independence from the mainstream food-purchasing culture. These intangible benefits may often just as powerful to the consumer as the tangible benefits, and that presents a problem for a UMore Park farm. While a UMore Park farm could provide the same connection to the land and the same declaration of counter-culture participation as a “normal” small farm, its connection with the U of M and the large-entity connotations that come with it could hamper those effects in the minds of consumers. It is this possibly negative reaction to locally grown food by a large entity that lessens UMore Park's likelihood of “winning” at growing and selling locally grown food.
Worth

While traditional farming on a large scale can be quite profitable, organic or small-scale farming is often quite the opposite. Many small farms only succeed because they are the farmer’s (and his family’s) hobby or second job – producing less profit than one would need to hire someone to fill the farmer’s role. Local or organic farming has the potential for profitability once it reaches a certain scale and a certain percentage of produce sold. In reality, many small produce farms are profitable, but not so much that they would be considered “investments” instead of “hobbies”. Would UMore Park be able to grow and sell produce such that it would be “worth it” for the company and the University? Possibly – but profitability would be minimal at best. The Office of UMore Park Academic Initiative must consider that most farmers and managers of farmer’s markets might not view UMore Park as a partner, but as a competitor, which can bring negative publicity to the University. On the other hand, UMore Park’s involvement in local foods could also bring positive publicity. A CSA would allow UMore Park to make a difference in its’ members’ lives with every delivery during the growing season. A wholesale operation to co-ops would be less public, but still give UMore Park valuable insight into consumer desires and trends in local food. Agritourism would bring many people to the UMore Park site, and allow the LLC to influence the experience consumers had there. A farmer’s market would be similar – allowing consumers to visit the site regularly during the growing season. Each of these growing models offers varying publicity benefits to UMore Park, many of which could grow to be significant.

Conclusion – Growing Models

The table below provides a summary of revenues and costs for the 4 growing models in their first year that were fully described in their respective sections.

<table>
<thead>
<tr>
<th>Model</th>
<th>Assumptions</th>
<th>Acres</th>
<th>Revenue</th>
<th>Costs</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA</td>
<td>20 shares</td>
<td>1</td>
<td>$10,800</td>
<td>$34,666</td>
<td>($23,866)</td>
</tr>
<tr>
<td>Wholesale</td>
<td>100% sales high-quality</td>
<td>1</td>
<td>$15,000</td>
<td>$34,666</td>
<td>($19,666)</td>
</tr>
<tr>
<td>Agritourism</td>
<td>Provides Experience</td>
<td>3</td>
<td>$76,000</td>
<td>$88,048</td>
<td>($12,048)</td>
</tr>
<tr>
<td>Farmers’ Market</td>
<td>20 vendors</td>
<td>n/a</td>
<td>$5,000 (sales)</td>
<td>$14,100</td>
<td>($4,100)</td>
</tr>
</tbody>
</table>

The costs above do not include the capital costs necessary to start a farm ($70,000 - $100,000).
In addition to financial value, it is critical to evaluate the alignment of each model with respect to the goals set by the Office of UMore Park Academic Initiatives.

<table>
<thead>
<tr>
<th>Models/Goals</th>
<th>LSF 1 Educate residents</th>
<th>LSF 2 Encourage at-home gardening</th>
<th>LSF 3 Maximize local food production on-site</th>
<th>LSF 4 Create green-collar jobs</th>
<th>LSF 5 Reduce food waste</th>
<th>LSF 6 Decrease vehicle miles travelled for food</th>
<th>LSF 7 Strengthen food security</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA</td>
<td>Yes</td>
<td>Yes</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Co-Op</td>
<td>No</td>
<td>No</td>
<td>Possible</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Agritourism</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Farmer’s Market</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The various growing models explored in the sections above have encouraging and discouraging points. The cost/revenue summary table shows that none of these models would be profitable if done separately on a small scale mostly due to the high labor costs associated with hiring a farmer and other expenses described in their respective sections. The CVE team tried to combine the models together and propose a model for a three acre farm selling produce through CSA, co-ops, and farmer's market. This however, did not yield profit either as shown below.

The revenue/cost model for this three acre farm that combines the 3 marketing models is:

**Revenue**
- 1 acre selling CSA share (20 shares) = $10,800
- 1 acre selling through co-ops = $15,000
- 1 acre selling through farmer's market = $5,000
  **Total revenue from the 3 acre farm** = $30,800

**Cost**
- Capital cost = $70,000 - $100,000
- Farmer’s salary = $30,000
- Additional season help* = $10,800
- Operational costs = $14,000
  **Total cost from the three acre farm** = $54,800
*Assumes that 3 part-time interns working for 20 hours/week for $9/hour will be needed to manage the work required to harvest, wash, pack, and deliver the produce. (Interview with Courtney Tchida in appendix C)

Not including the capital costs, this brings a total loss of $24,000 for the first year of the combined venture.

However, the 3 acre model does deliver on all of the goals set up by the Office of UMore Park Academic Initiatives as described below. A CSA and a farmer's market would be a great way to educate residents through CSA newsletters or on-site exhibits during farmer's market. CSA also can encourage at home gardening and food preparation by allowing members to work on the farm in exchange for their weekly basket. CSA and a co-op are also able to maximize the food production on site through offering share and produce during winter through greenhouses and related facilities. Farmer's market would create green-collar jobs. CSA and farmer's market could possibly reduce waste and decrease the vehicle miles that current residents travel for food. Lastly, all three models strengthen food security in the UMore Park community.

If UMore Park were to enter the local food market in a growing capacity with only one model, the CVE team recommends it do so through a CSA model if there is a possibility to decrease labor costs associated with hiring an experienced farmer to manage the farm. A CSA would allow UMore Park to enter the local food market with a small footprint, offering a product that is not otherwise offered in the hyper-local Rosemount, MN area. Further, a CSA also allows a UMore Park farm to collect a predetermined revenue, as CSAs are typically pre-paid by their members at the beginning of the growing season. Thus, a main source of uncertainty (Will the produce sell?) is alleviated before the growing begins. A UMore Park CSA is also very scalable. If the CSA enjoys success and a good consumer response the first year, it would be easy for UMore Park to grow the CSA to meet demand in subsequent years. A CSA represents a way for the company to enter the local food market with minimal risk for economic failure, minimal exposure to negative consumer response, and maximum flexibility to profitably meet consumer demand.

However, the CVE team would not recommend the office of UMore Park Academic Initiatives to grow food on their own at all. With a highly competitive environment made up of smaller businesses and farmers, one must question the wisdom of a large enterprise entering such a market. Many sales are based on well-established relationships, and many of the current players derive a significant portion
of their livelihood from the Twin Cities local food industry. A large enterprise could have difficulty establishing the right relationships to be successful in the market, and it could also create a significantly negative response if its participation in the local foods market harms the profitability of small farmers or businesses.

VI. Interviews

The data that we used to evaluate the feasibility of UMore Park as a grower were collected from interviews with critical partners of UMore Park, including the College for Food, Agriculture and Natural Resource Sciences (CFANS) and Minnesota Institute for Sustainable Agriculture (MISA). In addition to insight on growing models, these interviewers provided comments that suggested alternative options where UMore Park could add value to the local food initiative without growing food. For example:

- CFANS Associate Dean emphasized that “growing is the easy part”, reminding us of the complexity associated with the commercial transactions that occur following harvest.
- A CSA owner questioned the focus of our motivation by saying “I would think that you would want to support local farmers in an inefficient system rather than become another farmer in that inefficient system.”
- A township supervisor indicated frustration, revealing that there is “no system for marketing or financing” available to growers that could maximize the economic value of the grower’s enterprise to its community.
- A restaurateur, who would like to incorporate more local food into his menu expressed, “The biggest problem with local foods is distribution”.
- Dr. Terry Cooper, CFANS associate professor revealed development of a new major “Organic Farm Systems – Local to Global” where students will focus their studies beyond growing organic food to include the commerce and policy involved with local food systems. This major will require experiential learning opportunities and Dr. Co-oper expressed interest in having such opportunities at UMore Park. He was clear to say, “UMore Park is too far away for students to grow food”. However, he would welcome opportunities for students to learn the critical non-growing factors of local foods in partnership with UMore Park.
Although these comments were minor portions of the interviews, collectively they encouraged the CVE Team to consider UMore Park as part of a larger system. Thus, the CVE team evaluated other crucial components of the local food initiative with respect to UMore Park.

**VII. Alternative models**

**A. Commercial Kitchens**

Commercial kitchens that are available for hourly rent are becoming more and more available as various local food initiatives and food-based communities develop across the country. The model is fairly simple – with a commercial kitchen space being available for rent to entrepreneurs who need a commercially certified cooking space for food-based businesses. Renters typically pay hourly for the use of the space and can reserve in advance to ensure its availability. Many facilities have other products and services, like long-term storage space for rent, and classes on a variety of food-based topics.

**Payment/Price**

Commercial kitchens often serve as business incubators because they are funded or developed by non-profit or community groups. This leads to relatively low rental rates, but organizations still intend the rents to fully cover their costs. Kitchens in North Minneapolis, Bemidji, and Chicago have varying rental rates, depending on the time of day and the number of hours rented per month. Kindred Kitchen in Minneapolis rents for $25-$35 per hour, and has two staff members for administration and teaching functions. Kitchen Chicago rents for $14-$22 per hour and has multiple kitchens for different cooking functions like baking or catering. A planned kitchen in Bemidji will rent for $8-$14 per hour and is intended to handle light processing for school lunches. The only kitchen with an online reservation system, Kitchen Chicago, shows regular usage for 15-20 hours per day, 5-6 days per week. The different kitchens have different types of spaces for rent including baking kitchens, catering kitchens, general kitchens, and storage spaces. Kitchen organizations also offer classes for tenant certification and introduction classes to familiarize users with the space. These classes are typically charged for based on the cost the kitchen incurs to host them.

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12 http://www.kindredkitchen.com
13 http://www.kitchenchicago.com
15 http://www.kitchenchicago.com/schedule
The Possibility of a Commercial Kitchen at UMore Park

A commercial kitchen at UMore Park is possible, but with other less-capital intensive options also available, it may not be the best use of funds. Building and outfitting the space would have a greater initial expense than other models, and the business need for such a space is currently unproven. A better plan might be to incorporate such a space in the long-term plans for UMore Park. Having a commercial kitchen available for rent could help to spur local food-based business long-term, and such a building could also serve as a hub for other local food-related initiatives like distribution or coordination of other activities. It could also encourage community development through nutrition and cooking classes, as well as incorporate the applicable expertise from various faculty members and departments of the University. For the time being, though, a commercial kitchen is not advised. With the Kindred Kitchen’s recent opening in North Minneapolis, the current market demand for such a space has likely been fulfilled. UMore Park’s location at the edge of the Twin Cities could also serve as a deterrent for potential users of a commercial kitchen there. If a local food movement was already in place at UMore Park, though, a commercial kitchen could easily serve not as the main component but as an additional feature to an already growing local-food-based ecosystem.

B. Distribution

In order to meet rapidly rising demand for local food, current food systems must be scaled up so that they leverage the developed efficiencies of industrial systems while simultaneously retaining sustainable farming practices. Distribution models attempt to create economies of scale so that individual players are not only able to share knowledge and resources with each other but also gain access to markets previously unavailable to them. In a way, distribution models vary greatly in nature and purpose depending on their geographic location and their specific community’s needs. For example, a home delivery business that brings produce directly to consumers’ homes and an apple packager that collects and co-brands apples from several farms are both distribution systems. However, there are several unifying factors discussed below such as: standardized processes, aggregation, transparent information flow, and an overall more holistic approach compared to a system that lacks a formal structure. When assessing distribution models in the hopes of finding one that suits UMore Park’s potential as well as one able to meet the surrounding community’s needs, it would be helpful to outline similar models already in operation.
Examples of Suitable Distribution Models

Wescott Agri Products

Wescott Agri Products is a grower and distributor specializing in wholesale tree fruits (mainly apples) based in Elgin, MN. It has operated as a grower for 30 years but has only operated its packing and distribution side for 20. It serves 109 customers comprised of retailers and other distributors situated in a five-state region (WI, MN, IA, ND, SD). Besides sourcing from farms ranging from 15 to 200 acres, Wescott also provides on-site technical support, production planning, marketing services, transportation, and other logistical support. Product might not be identified by farm of origin but Wescott fully tracks its products in order to meet wholesale quality standards. By scaling up and diversifying its sourcing base, Wescott is able to lower growing risks such as the risk of a bad harvest and thus spend more time strengthening its relationships and helping start-up farms grow. Such relationships help Wescott cultivate the next generation of growers and provide a stable supply of high-quality products despite prices being set largely by market conditions.

Keewaydin Farms

Located in Viola, WI, Keewaydin Farms is a family-run organic farm that began as a dairy operation before expanding into the part-aggregator/distributor, part-CSA operation it is today. Besides selling CSA shares, it sources from 18 other farms to sell products to retailers in Minneapolis, La Crosse, and Madison. Keewaydin is an excellent example of a farm that has combined profitable opportunities found in growing and selling organic food as well as distributing at a larger scale. As Keewaydin improves its distribution/aggregation operations, it is looking into investing more in transportation, cold storage, and processing facilities. This makes Keewaydin Farms an example of a business in “transition” from one solely focused on growing food to distributing it. This may help serve as a model for business looking into performing similar re-structuring.

Growers Collaborative

Growers Collaborative is a relatively new non-profit organization, starting in 2005 and founded by another non-profit organization, the Community Alliance with Family Farms. Growers Collaborative provides a wide variety of services from aiding large institutions implement food sourcing policies to packaging and washing sourced produce to aiding small farms of a diverse cultural background in growing their business. The collaborative sources from 125 suppliers though a majority of them sell less
than 5% of their product to the collaborative. It also emphasizes the importance of small, minority-led farms and how their business model can provide such farms access to the growing institutional market for local produce.

Growers Collaborative faces numerous challenges in the form of more efficient, mainline distributors who represent their competition. Such competition has caused Growers Collaborative difficulties in becoming financially sustainable. Thus, the collaborative is looking at restructuring itself into becoming an aggregator. Doing so allows them to no longer compete with similar distributors but become their partner by providing the product volume distributors require in branded, packaged, and fully traceable forms. The collaborative is in a unique situation in that it is seeking to fill the two-fold community (i.e. local growers') need of aggregation as well as access to larger markets as a non-profit organization. With approximately 20% of the collaborative’s funding being grant-based, it shares some similarities with UMore Park and its ties to the U of M. This shows that it may be possible to not only provide a larger market with local food and develop close relationships with hundreds of smaller farms but also do so as a non-profit organization.

**Critical Factors for the Distribution Model**

**Provide consistent quality**

With different farms and producers providing the food that flows through the system, a distribution model needs to create an infrastructure that would assure consumers of the quality of the produce regardless of source. In effect, the consumer should not be able to tell the difference between the produce from one farm and another in terms of quality. This would require building centralized grading/packing facilities that is able to provide co-labeling and certification benefits to all participants in the system.

**Forecast supply-and-demand**

Currently, one of the biggest problems food systems face is the inability to forecast the supply and demand of specific products. Due to a lack of pre-season planning between producers and consumers, production is inefficient. Coupled with few outlets for blemished and unsold products, a lack of a distribution system prevents consumers from buying the crops they want and farmers from selling all their produce. By creating such a system, participants can buy and sell the right amounts as well as safeguard themselves from unwanted disasters such as inclement weather since these risks will be collectively assessed as a whole.
Acquire sufficient capital for development

One of the reasons distribution models are hard to create and maintain are the enormous capital investments required and the fact that no one organization has the ability to rally enough resources to initiate a distribution model. The idea organization would not only have access to large reserves but also make use of grants as short-term infusions. These resources would be used not only to build the tangible buildings and infrastructure but also to invest and gather the expertise required to continuously develop the system once started. Examples of this would include hiring external consultants to improve the business model or partner with educators to help teach new entrants on best farming practices.

Make information flow more transparent

The survival of a distribution model hinges on the ability of the various participants to communicate effectively with each other. Rather than a system that looks like a “hub” where information is controlled by a minority of participants, the ideal system would be likened to a web where farmers would not only share best practices with each other, but both producers AND consumers exchange information equally. This is in order for the former to gain better insights into consumer preferences and for the latter to make better buying decisions.

Possibility of a Distribution Model at UMore Park

The UMore Park and the University as a whole would be a viable choice as a major player in a distribution system as its strengths and capabilities directly address the key factors listed above. With access to financial resources as well as industry experts who have already made significant contributions to the local foods movement, UMore Park would be able to bring together the components of a successful distribution system, namely one that specializes in aggregation. In addition, it would, like the Growers Collaborative outlined above, become a partner within the system, aiding smaller farms that don’t have the scale or expertise to effectively sell to the larger market while supplying distributors who don’t have the ability to store and pack local food.

Several individuals we have interviewed, including Helene Murray and Chef Lenny Russo have stated that a major need of the local food movement is an efficient distribution and processing model. With its location, UMore Park may answer that need through several ways. It can become the site of a central warehouse where produce from different farms are stored for later purchase. While farmer
cooperatives have been able to aggregate at some level, few central storage facilities currently exist. The Cooperative Partners Warehouse located in St. Paul, MN is a prime example where goods are aggregated and subsequently distributed. Its central location decreases the distance food travels from producer to consumer, allows for local produce to reach a larger market, and increases the return to the growers. While this proves that a distribution model already exists, the fact that there is still a stated need for a better distribution system shows that UMore Park can definitely fulfill a need.

In conclusion, the local food system in the Rosemount area lacks a central organizing system that can make overall operations more efficient. UMore Park is in an advantageous position to fill this need with its access to resources, expertise, and connections to the community. However, such a model requires UMore Park to create strong relationships with a variety of participants from all parts of the local food system from farmers to governmental institutions. This may not be an immediate model that UMore Park can implement in the short-term but it would definitely be a step that it can take in the future as the local foods industry grows.

C. Land Access/ Leasing

Land leasing is an agricultural production system in which a landowner (UMore Park) contributes land and often a measure of operating income and management, while the tenant farmer contributes labor along with various amounts of capital and management.

**Critical Factors in Leasing Farmland in Minnesota**

**Lease**

A verbal real estate (land) lease is sufficient for rental term of less than one year. This type of verbal lease agreement is as valid as a written lease and is legally enforceable. To avoid confusion and other disputes, it is still advisable to sign a written agreement. Any lease for more than 12 months must be in writing, especially if the crop year is more than 12 months. A formal contract is not always required as a written lease. As long as the basic terms are included, a letter or a memorandum can be enforceable as a formal lease agreement.\(^\text{16}\)

**Payments/Price**

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\(^{16}\)Leasing Farm Land in Minnesota: http://www.flaginc.org/topics/pubs/arts/LeasingFarmLandMN.pdf
Price is set by many factors including how much land is being rented, the amount that is tillable, the quality of the land, irrigation availability, demand for the land, return on investment for the landowner, profit margins of the farmer tenant and so on.

The table below shows the historical cropland rental rates for the Dakota county:

<table>
<thead>
<tr>
<th>County</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Avg</th>
<th>Median</th>
<th>10th Pctile</th>
<th>90th Pctile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dakota</td>
<td>$100</td>
<td>N/a</td>
<td>$121</td>
<td>$125</td>
<td>$185</td>
<td>$144</td>
<td>$90</td>
<td>$219</td>
</tr>
</tbody>
</table>

The information is gathered by the USDA National Ag Statistical Service and reports averages of actual rents paid by farmers for the year listed.\(^{17}\) All row crop acres, small grain acres, canning crop acres, etc. are included. Not included in the analysis are acres allocated to pasture, aftermath grazing, all hay and haylage acres, CRP acres, fallow, and prevented planted acres.

The numbers above should serve as a benchmark and a good starting point in determining land rental rates. The information is not, however, supposed to establish, determine, set, or fix what the actual rents should be. The actual rental rates should be determined by negotiations between tenants and landowners and based on the factors mentioned above.

The two most common rent payments for a farm lease are cash and crop share leases. Cash lease involves a set amount of money that the tenant pays to the landowner for the use of the land. Under the crop share lease, the landowner gets a share of the proceeds of the crop as rent. Many farmers do a combination of both.

**Types of Leases:**

- Tenancy for years: Lease for a fixed period, but does not have to be for a year. It can be anything from 90 days, to 7 months to 4 years, but not more than 21 years in Minnesota.
- Tenancy at will: Lease with no fixed term. The term ends by a proper notice from one of the parties.

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\(^{17}\) Cropland Rental rates for Minnesota Counties: [http://www.cffm.umn.edu/Publications/pubs/FarmMgtTopics/RentalRates.pdf](http://www.cffm.umn.edu/Publications/pubs/FarmMgtTopics/RentalRates.pdf)
Possibility of Land Leasing at UMore Park

Land leasing at UMore Park is highly possible. In fact, UMore Park already engages in a form of land leasing by renting land to Hmong farmers. Based on the recent postings from the LandStewardshipProject.com website, there is a demand for farming land in the Dakota County from farmers looking to rent anywhere between 1 to 100 acres. Some of the potential renters would require no capital investment from UMore Park, however, most of them are looking for a house, barn, sheds, well, as well as other outbuildings.

In order to ensure that that UMore Park goals are met, each potential tenant would be asked what they want to grow, how they want to grow it, where they want to sell their produce, and how they are going to add to the local foods community. Once the tenant is approved, UMore Park would contribute some of the capital expenses to support the tenant’s start and engagement in the local foods community. The CVE team has come up with a preliminary capital expenses that should/could be provided by UMore Park and capital expenses that should not be provided by UMore Park:

<table>
<thead>
<tr>
<th>Should/Could provide</th>
<th>Should not provide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment shed, tool shed, refrigeration, rototiller, fixed irrigation, greenhouses, tractor, and tractor add-ons</td>
<td>Truck, non-fixed irrigation, small tools, operational expense (seeds, nutrients...)</td>
</tr>
</tbody>
</table>

The table above is a good starting point, however, the actual capital expenses that UMore Park ends up providing should be consulted with the tenant. After speaking with the farmer, the University could also supply some of the labor through students looking to get credit for experiential learning.

D. Real-Win-Worth Analysis and Recommendation for Alternative Models

Real

Exploring one of the alternative models is definitely real. As the CVE team conducted interviews with restaurateurs, farmers, and other local foods experts, it has been suggested that there is a real need for commercial kitchens, food sourcing, or actual agricultural land for rent in the Twin Cities area. Based on the success of Kindred Kitchen, located in Northern Minneapolis and two other kitchens in Chicago and Bemidji and the fact that there are no other commercial kitchen in the near vicinity of Rosemount, the market for commercial kitchen is very attractive and sufficient to support such venture
at UMore Park. Due to the increased interest in local foods and the amount of food entrepreneurs who do not have access to affordable commercial kitchen to produce their products or guidance to obtain proper licensing, a commercial kitchen at UMore Park could potentially become very successful.

Sourcing or distribution of local food for restaurants or Co-ops is another unfulfilled need in the local foods movement. Since there is currently no entity that would tackle this problem, the opportunity for UMore Park is real. The market is also very attractive since many grocery stores or restaurants that want to buy local food and also many farmers who try to sell to those mainstream markets lack some formal sourcing model, so their interest in this idea is high.

The need for agricultural land is also something that UMore Park could successfully add to the local foods initiative. There are over 100 acres of land that farmers are currently looking for in the Twin Cities area, therefore the need obvious.¹⁸

Win

Even though the need for sourcing and commercial kitchens is high, it is also capital intensive. Both models will require substantial initial cost in order to become successful. Also, since UMore Park and the University of Minnesota have no previous experience or knowledge of such ventures and have no previous involvement in the local foods initiative, farmers and other stakeholders might be reluctant to trust UMore Park. Leasing the land to local farmers might not necessarily be capital intensive, but if UMore Park become a typical landlord with tenants, it will not be delivering on its goal to involve the community in local foods.

Worth

At this point, it is not worth for UMore Park to pursue one of the alternative models except the possibility of land leasing. These models should be considered once UMore Park gets some experience with local foods and establishes itself as a valuable partner for all stakeholders in the local foods community.

Conclusion- Alternative Models

As it has been mentioned above, the alternative models should not be pursued at this point, but could become viable in later stages of the UMore Park local foods project. However, because of the real need of distribution model, commercial kitchens, and agricultural land as well as the UMore Park's goals

to add value and promote local foods in the community, the CVE team explored a possibility of combining the growing and alternative models into one that would expose UMore Park to the local community, support its mission of educating people about local foods, and potentially help out with one of the bigger problems in the local foods like sourcing. The CVE team calls this model the UMore Park Incubator.

**VIII. Incubator of Local Food Innovation**

Consideration of the alternative models independently led to “failure” of the R-W-W analysis. However, reflection to interviewees’ insights encouraged evaluation in a new perspective. Specifically, when the CVE team asked Helene Murray if the local food communities would accept UMore Park as a new member, she responded, “Not UMore Park, but maybe UMore Park-supported enterprises”.

**UMore Park as an Incubator for Local Food Initiatives**

Given UMore Park’s mission for Outreach, Research, and Education, we have identified a unique opportunity for UMore Park to participate in the region’s local food initiatives with low risk and high probability of generating awareness and support for UMore Park’s mission.

The CVE team recommends that UMore Park serve as an incubator to foster innovation in local foods from local growers, entrepreneurs, and organizations. UMore Park will solicit applications that fulfill specific initiatives that may educate on developing a local food component in its sustainable community. UMore Park will select participants, growers and non-growers, and offer them competitive leasing rates, shared farming resources, academic relationships through experiential student learning, and participant-driven “think tank” sessions.

The CVE team has identified numerous potential target participants, including public schools, community organizations, small-scale growers, immigrant growers, social entrepreneurs, academic institutions, and commercial groups. Projects could represent a wide range of activities that occur within the local foods movement, including small scale organic farming, farm-to-school hands-on learning for school districts, business development of local foods aggregation and distribution models, or free-range grazing. A summary of the key incubator characteristics are below:

- Identification of key objectives that contribute to sustainable communities
- Selection of projects among proposals from entrepreneurial growers and non-growers
- “Rent” in exchange for common resources
• Matching of undergraduate experiential learning with enterprises
• Integration of results across participants to accelerate advancement/change in local food systems and discover application to sustainable communities

As celebrity food columnist and author Mark Bittman’s recently said, “A farm incubator … is the way of the future, and is a direction we all have to move in” 19.

Several models exist to serve as case studies.

**Social Entrepreneurship, Environmental Design and Stewardship (SEEDS) Farm - Northfield, MN**

This 50-acre farm, donated by St. Olaf College alumni in 2009, serves as an “outdoor laboratory where students could gain hands-on experience in everything from sustainable farming to social innovation” 20. SEEDS Farm goals revolve around understanding and discovering factors around sustainable agriculture that include, but do not focus on growing the food. In its first year of operation (2009), student interns established a Commercial garden (selling to local farmers markets, schools, and colleges), a charitable garden (providing Northfield Community Action Center), and a community garden (rental plots to local residents), a beekeeping start-up, and a permaculture perennial plant study. In the second year, a SEEDS CSA was established and coupled with the Junior Farming Program, a communal garden allowed novices to gain experience, the Rural Enterprise’s Agripreneur Training Center introduced Latino farmers to raising free-range poultry, an orchard guild was created, and children’s camps were welcomed. The third year anticipates a root cellar, greenhouse, pizza oven, construction of poultry processing plants, and 35 laying hens.

**Intervale Center – Burlington, VT**

Established in 1986, Intervale Center is a sustainable agricultural community that provides land and business resources for individual enterprises that support a local food system. Current activities include a Farms Program, Success on Farms business planning, Food Hub, Consulting, Conservation Nursery and Land Stewardship. Intervale Center has a partnership with University of Vermont that promote collaboration with faculty and students, “including internships, research, and community outreach” 21.

21 http://www.uvm.edu/~ofsct/?Page=intervale.html&SM=partnershipsubmenu.html
Tufts University New Entry Sustainable Farming Project - Boston, MA

The New Entry project was the first incubator project to support commercial farm training of immigrants and refugees. The goal of the project is to promote sustainability and local foods by promoting small-scale agriculture.

North Carolina State University CEFS Farmer Incubator Project

Recognizing the aging farmer population, the Center for Environment Farming Systems (CEFS) has initiated a project to foster beginning farmers and encourage the community to devote 10% of their food dollars to local foods. The Incubator Farm Project provides access to land, operations support and business education to apprentice farmers in return for food donations or other food-related services.

COSTS AND REVENUE

It is difficult to assess costs and revenue given the anticipated variation in incubator enterprises. As a base assumption, we refer to the costs and lease revenue previously described in the Tenant Farming section. In addition, the incubator model may qualify for numerous grants as demonstrated by the case studies listed above. Further research is required to identify potential funding mechanisms from the University, government, non-profit organizations and private foundations.

REAL-WIN-WORTH ANALYSIS

With respect to the R-W-W analysis, a UMore Park Incubator for Local Food Innovation incorporates the recognized need established in the previous considerations. By shifting UMore Park’s role to that of an organizer/initiator, and focusing on the established passion, expertise and structure of the participants, the Incubator model has greater potential to succeed (“win”) and grow. As this model fosters and combines motivation and innovation from multiple stakeholders, advantages are recognized that may not have been possible if each stakeholder pursued an independent venture.

Advantages of Incubator for Local Foods across Stakeholders

<table>
<thead>
<tr>
<th>Incubator Participants</th>
<th>U of Mn Students</th>
<th>Local Food System</th>
<th>UMore Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Shared resources</td>
<td>● Experience in real-world projects</td>
<td>● Attention/Visibility issues</td>
<td>● Visibility</td>
</tr>
<tr>
<td>● Less initial CAPEX</td>
<td>● Multi-disciplinary functions across operations</td>
<td>● Integration</td>
<td>● Reinforcement of mission</td>
</tr>
<tr>
<td>● Access to university</td>
<td>● Establishment of professional network</td>
<td>● Opportunity for new ventures</td>
<td>● Risk management</td>
</tr>
<tr>
<td>● Student talent</td>
<td></td>
<td>● Network effects</td>
<td>● Integration with sustainable community</td>
</tr>
<tr>
<td>● No need for long-term commitments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Knowledge-sharing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
These collective advantages have high probability of leading to synergistic outcomes that will benefit regional efforts in local food and UMore Park’s phase development of a sustainable community, representing the value and worth of the UMore Park as an Incubator.

**IX. Execution and Summary**

Our evaluation indicates that growing food at UMore Park is feasible. Short-term, the team can envision producing a small volume for Summer 2012 to sell at regional and established farmer’s market. This would bring visibility to UMore Park as a grower as well as opportunity to promote the development of the sustainable community. Fall 2012 can begin the preparation for a CSA, including recruitment of experienced farmer(s) and implementation of marketing efforts. Also, during this period, relationships with co-ops can be explored. If communication with City of Rosemount confirms availability of ball fields in Spring 2013, then recruitment of a farmer’s market manager and potential vendors must take place. Thus, the advantages of the growing models determined in this evaluation could be realized during the Summer 2013 season.

However, the CVE Team cautions UMore Park against being a grower due to perceived competition with established local growers, significant costs of labor, dependency on relationships with co-ops, reliance on high CSA share sales, and assumption of ball field traffic at farmer’s market. Collectively, these assumptions provide high barriers to entry as a grower and significant risk to UMore Park.

We recommend that UMore Park act as an incubator for local foods innovation because it offers the positive aspects of contributing to local foods while limiting the risks described above. Short-term actions:

- Investigate other incubator models associated with universities for best practices
- Introduce the incubator model concept in the community to develop relationships
- Identify incubator objectives and recruit eligible agripreneurs and organizations
- Collaborate with CFANs to develop plan for experiential learning
- Determine resources to be offered to accepted incubator participants

In conclusion, the CVE Team recognizes that UMore Park has a unique opportunity to add value to the local foods movement by being more than just a grower.
Appendix A: Secondary Research

**Agritourism**
Marketing Local Food, Minnesota Institute for Sustainable Agriculture, p 33 – 48 2007
http://agmarketing.extension.psu.edu/Retail/PDFs/marketing_local_food.pdf
Moonstone Farm (The Broodio)
http://www.prairiefare.com/moonstone/farmstay.html
Nordic Ridge Farms
http://nordicridge.com/
Fruit and Tree Nuts Outlook, United States Department of Agriculture 05/27/11

**Commercial Kitchen**
Kindred Kitchen
http://kindredkitchen.org/
Kitchen Chicago
http://kitchenchicago.com/
Minnesota Public Radio
City Pages
MinnPost
http://www.minnpost.com/communitysketchbook/2011/10/20/32531/charity_pie_baker_does_her_part_to_change_the_world
MinnPost
CBS Minnesota
http://minnesota.cbslocal.com/2010/10/30/kindred-kitchen-minneapolis/

**Community Supported Agriculture (CSA)**
Minnesota Department of Agriculture
http://www3.mda.state.mn.us/mngrown/
Local Harvest (Online Local Purchasing Resource)
http://www.localharvest.org/
Land Stewardship Project
http://www.landstewardshipproject.org/csa.html
North Carolina Cooperative Extension (Chatham County Center)
http://www.ces.ncsu.edu/chatham/ag/SustAg/csaguide.html
Three Springs Farm
http://www.threespringsfarm.com/blog/?cat=14
Harmony Valley Farm (Viroqua, WI)
Distribution
Scaling Up: Meeting the Demand for Local Food, UW – Madison Center for Integrated Agricultural Systems (12/09)

Keewaydin Farms
http://www.keewaydinfarms.com/

Community Alliance with Family Farmers
http://caff.org/

Wescott Agri Products, Inc.
http://www.wescottorchard.com/

Map of Distribution Models
http://maps.google.com/maps/ms?ie=UTF8&hl=en&oe=UTF8&msa=0&msid=104511720847065487696.00045a794f015d67ddb7a&source=embed&ll=44.21371,-100.898437&spn=82.766867,117.246094&z=3

Co-op Partners Warehouse
http://www.cooppartners.coop/

Farm to School
Minnesota Campus Connect
http://www.minnesotamonthly.com/media/Minnesota-Monthly/Guides-Resources/Living-Green/Farm-to-School-Initiative/

University of Minnesota Toolkit
http://www.extension.umn.edu/farm-to-school/toolkit/

Farmer’s Market – General Info and Comparisons
Central Minnesota Growers Association
http://www.mplsfarmersmarket.com/AboutUS.php

Eagan MarketFest
2011 Vendor Guide

General business structure
Coss, D. Maple Grove Farmers’ Market: A Case Study, Minnesota Farmer’s Market Manual, University of Minnesota Extension

Foord, K. The Economics of a Farmer’s Market, Minnesota Farmer’s Market Manual, University of Minnesota Extension

Establishing a Farmer’s Market, Idaho Farmer’s Market Manual, Idaho State Department of Agriculture

Starting a Farmer’s Market, Minnesota Grown, Minnesota Department of Agriculture

Operational Guidelines for Farmer’s Market Vendors, Minnesota Grown, Minnesota Department of Agriculture

Pacific Grove Farmer’s Market Annual Budget

United States Dairy Association Agricultural Marketing
http://www.ams.usda.gov/AM Sv1.0/farmersmarkets

Urban Farming
Buying Local Takes on a Different Meaning, Business and the Environment, Sept 2011, Vol 12(9)
Farmer’s Market – Rosemount Area
City of Rosemount Ball Fields
   Parks & Recreation Commission, Regular Meeting Minutes, 9/26/2011
Fox Farm Market
Minneapolis Local Food System
Minnesota Farmer’s Market Association
   http://www.mfma.org/
Northfield Riverwalk Fair
   Reynolds, B., Hansen, M., Gurtcheff, A. et al. Local Food Infrastructure: Collaboration with Market Fair, St. Olaf Community Based Research, 5/22/2010
St. Paul’s Farmer Market
   http://www.stpaulfarmersmarket.com/
   http://ww2.startribune.com/projects/farmersmarkets/
St. Paul’s Farmer Market – Rosemount Location
   http://rosemount.patch.com/articles/annual-rosemount-farmers-market-returns-this-week
University of Minnesota Farmer’s Market
   http://www1.umn.edu/ohr/wellness/nutrition/farmersmarket/index.html

Food Co-operative
North Dakota State University
Cornell University
   http://www.neon.cornell.edu/training/ppts/OrganicFarmYieldandProfitability.pdf
University of Kentucky
   http://www.uky.edu/Ag/CDBREC/introsheets/pumpkinintro.pdf

Incubator/Cooperative Model
Agriculture and Land-Based Training Association (ALBA) (Salinas, CA)
   http://www.albafarmers.org/index.html
California Farm Stewardship Association
   Final Report 4/20/2009
Cultivate Kansas City
   http://www.cultivatekc.org/
Fifth Season Cooperative (7 Rivers Region, WI)
   http://fifthseason.coop/
Intervale Center (Burlington, VT)
   http://www.intervale.org/
North Carolina State University Incubator Farm Project
Penns Corner Farm Alliance
   http://www.pennscorner.com/
SEEDS Farm (Northfield, MN)
http://www.stolaf.edu/services/cel/students/Innovation_Scholars/Carlson_SEEDS_Scholar.html

Tufts University – New Entry Farm Project (Boston, MA)
http://nesfp.nutrition.tufts.edu/

University of North Carolina Warren Foodworks
http://www.hpdp.unc.edu/research/current-projects/warren-foodworks-and-produce-packs-project

Leasing land
Farmers’ Legal Action Group, Incorporated
http://www.flaginc.org/topics/pubs/arts/LeasingFarmLandMN.pdf

University of Minnesota Extension
http://www.extension.umn.edu/distribution/businessmanagement/df2593.html

Wikipedia

Land Stewardship Project
http://www.landstewardshipproject.org/fb/land_clearinghouse.html

Center for Farm Financial Management
http://www.cffm.umn.edu/Publications/pubs/FarmMgtTopics/RentalRates.pdf

Misc.
The Heartland Restaurant
http://www.heartlandrestaurant.com/index2.php
Appendix B: CSA Research

**CSA farms interviews**

CSA Farms and their basket drop off locations in 20 mile radius from Rosemount. All prices, number of shares sold, location etc... are provided by the contact people mentioned below and are based on their most recent season (2011) unless stated otherwise.

**Contact Information**

<table>
<thead>
<tr>
<th>Farm</th>
<th>Contact Person</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crazy Boy Farm</td>
<td>Amy Doeun</td>
<td>(651) 330-1034</td>
<td></td>
</tr>
<tr>
<td>Driftless Organics</td>
<td></td>
<td>(608) 624-3735</td>
<td></td>
</tr>
<tr>
<td>Fazenda Boa Terra Farm</td>
<td>John Middleton</td>
<td>(952) 469-2278</td>
<td></td>
</tr>
<tr>
<td>Featherstone Farm</td>
<td>Margaret Marshall</td>
<td>(507) 459-5209</td>
<td></td>
</tr>
<tr>
<td>Fresh Earth Farm</td>
<td>Christopher James</td>
<td>(651) 436-2778</td>
<td></td>
</tr>
<tr>
<td>Gullywash Gardens</td>
<td>Barbara Pumper</td>
<td>(952) 873-2534</td>
<td></td>
</tr>
<tr>
<td>My Minnesota Farmer</td>
<td>Jean Braatz</td>
<td>(612) 245-6271</td>
<td></td>
</tr>
</tbody>
</table>

**Farm Location**

<table>
<thead>
<tr>
<th>Farm</th>
<th>Farm’s distance(^1)</th>
<th>CSA drop off distance(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crazy Boy Farm</td>
<td>23 miles</td>
<td>Bloomington- 13.7 miles</td>
</tr>
<tr>
<td>Driftless Organics</td>
<td>184 miles</td>
<td>Eagan- 9 miles</td>
</tr>
<tr>
<td>Fazenda Boa Terra Farm</td>
<td>16.3 miles</td>
<td>Inver Grove Heights- 9.4 miles</td>
</tr>
<tr>
<td>Featherstone Farm</td>
<td>115 miles</td>
<td>Minneapolis- 14.5 miles</td>
</tr>
<tr>
<td>Fresh Earth Farm</td>
<td>24.1 miles</td>
<td>Eagan- 9.6 miles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hastings 13.5 miles</td>
</tr>
<tr>
<td>Gullywash Gardens</td>
<td>46.2 miles</td>
<td>Prior Lake- 18.9 miles</td>
</tr>
<tr>
<td>My Minnesota Farmer</td>
<td>52.2 miles</td>
<td>Farmington- 7.6 miles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prior Lake 18.9 miles</td>
</tr>
</tbody>
</table>

1. The distance of the farm from Rosemount
2. The distance of the closest drop off location of the particular farm.
Drop Off Locations
The farms have different number of CSA basket drop off locations depending on their size. The farm owners had a hard time recalling how many shares or baskets they deliver to a certain location, but few provided some useful information that gives an idea about how many shares they deliver to the drop off sites that are closest to UMore Park.

<table>
<thead>
<tr>
<th>Farm</th>
<th># of drop off Locations¹</th>
<th>Closest Location share sales²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crazy Boy Farm</td>
<td>4</td>
<td>Bloomington - 0 share sales</td>
</tr>
<tr>
<td>Driftless Organics</td>
<td>12</td>
<td>Eagan- 41 share sales</td>
</tr>
<tr>
<td>Fazenda Boa Terra Farm</td>
<td>2</td>
<td>Inver Grove- some shares</td>
</tr>
<tr>
<td>Featherstone Farm</td>
<td>35 in summer; 20 in winter</td>
<td>N/A</td>
</tr>
<tr>
<td>Fresh Earth Farm</td>
<td>5</td>
<td>Eagan- 6 share sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hastings- 0 share sales</td>
</tr>
<tr>
<td>Gullywash Gardens</td>
<td>4</td>
<td>Prior Lake: 17 share sales</td>
</tr>
<tr>
<td>My Minnesota Farmer</td>
<td>11</td>
<td>Farmington: 10 share sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prior Lake: 30 share sales</td>
</tr>
</tbody>
</table>

1. The number of locations to which farms deliver the CSA baskets for their members
2. The amount of shares (baskets) delivered to the location closest to Rosemount.

Both Crazy Boy farm reported that they did not end up having any baskets delivered to their Bloomington drop off locations. This is not because there was no demand in the area, but because the person, whose house the farm used as a drop off location decided he does not want to do it anymore.

**How did the farms choose a drop off location?**
Crazy Boy Farm, Driftless Organics, and Fresh Earth Farm said that their drop off locations are based on their members' houses. They said that lot of members volunteer to provide their house as a drop off location. Featherstone Farm and Fazenda Boa Terra set up their drop off locations at farmer's markets or co-ops, where they sell produce. My Minnesota Farmer just sets up drop off spots in places where most of their members live.

Fresh Earth Farm said there was no longer enough interest in the Hastings area to keep it as a drop off location.

**Farm Information**

<table>
<thead>
<tr>
<th>Farm</th>
<th>CSA since</th>
<th>Farm Size¹</th>
<th>For CSA²</th>
<th>Offer³</th>
<th>Weeks⁴</th>
<th>Price⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crazy Boy Farm</td>
<td>2008</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>16</td>
<td>$495 full &amp; $295 half</td>
</tr>
<tr>
<td>Driftless Organics</td>
<td>2007</td>
<td>150</td>
<td>15</td>
<td>420</td>
<td>20</td>
<td>$575 full &amp; $350 half</td>
</tr>
<tr>
<td>Fazenda Boa Terra Farm</td>
<td>2010</td>
<td>1.7</td>
<td>1.7</td>
<td>22</td>
<td>20</td>
<td>$575 full &amp; $350 half</td>
</tr>
<tr>
<td>Featherstone Farm</td>
<td>1994</td>
<td>250</td>
<td>30</td>
<td>850</td>
<td>20</td>
<td>$625 full &amp; $480 half</td>
</tr>
<tr>
<td>Fresh Earth Farm</td>
<td>2003</td>
<td>20</td>
<td>8</td>
<td>200</td>
<td>18</td>
<td>$700 full &amp; $495 half-$45 delivery fee</td>
</tr>
<tr>
<td>Gullywash Gardens</td>
<td>2001</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>16</td>
<td>$530 full &amp; $300 half-$50 delivery fee</td>
</tr>
<tr>
<td>My Minnesota Farmer</td>
<td>2010</td>
<td>40</td>
<td>3</td>
<td>100</td>
<td>18</td>
<td>$495 full &amp; $295 half</td>
</tr>
</tbody>
</table>
1. Farm size in acres
2. Amount of acres dedicated to CSA
3. Number of shares offered for 2010/2011 season
4. Length of the CSA season in weeks
5. Price for full and half share for the entire season

Farm Information continued

<table>
<thead>
<tr>
<th>Farm</th>
<th>Shares per acre</th>
<th>Basket Size</th>
<th>Basket Value</th>
<th>Vegetable varieties</th>
<th>First Year share sales</th>
<th>2010/2011 share sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crazy Boy Farm</td>
<td>30</td>
<td>3/4 bushel box</td>
<td>$40</td>
<td>40 vegetables-many varieties</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Driftless Organics</td>
<td>28</td>
<td>5/9 bushel box</td>
<td>$32</td>
<td>40 vegetables-150 varieties</td>
<td>N/A</td>
<td>420</td>
</tr>
<tr>
<td>Fazenda Boa Terra Farm</td>
<td>22</td>
<td>N/A</td>
<td>$35</td>
<td>40 varieties-90 varieties</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Featherstone Farm</td>
<td>N/A</td>
<td>1/2 bushel box</td>
<td>$16</td>
<td>50 vegetables-150 varieties</td>
<td>20</td>
<td>850</td>
</tr>
<tr>
<td>Fresh Earth Farm</td>
<td>25</td>
<td>1-1/9 bushel box</td>
<td>N/A</td>
<td>45 crops-150 varieties</td>
<td>25</td>
<td>105</td>
</tr>
<tr>
<td>Gullywash Gardens</td>
<td>N/A</td>
<td>5/9 bushel box</td>
<td>$30</td>
<td>50 vegetables-Many varieties</td>
<td>N/A</td>
<td>35</td>
</tr>
<tr>
<td>My Minnesota Farmer</td>
<td>N/A</td>
<td>5/8 bushel box</td>
<td>$20</td>
<td>30 vegetables</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

1. Amount of shares the farm estimates to get out of an acre of land
2. The size of a basket in which the produce is delivered. Most CSA fill this box to its capacity
3. The value to the customer that the farmer estimates for their respective basket
4. Tomatoes, carrots, or pumpkins are considered as vegetables (or fruits), however, vegetables and fruits have many varieties. For example: Brandywine Red tomato, Big Boy tomato, Champion tomato, etc...
5. The amount of shares that each farm sold in its first year of operation.
6. The amount of shares each farm sold in its latest season (2010/2011 season)

The farmers talking about their CSA farm's growth and the growth of the CSA market overall.

Crazy Boy farm grew from its first year (12 shares) to their second year (30 shares) and is expecting to sell as much as 60 shares in their third year (next year). My Minnesota Farmer also reports substantial growth for the demand of a CSA share and they actually have to turn away people every year due to reached capacity. Gullywash Gardens said they grew every year except for the last one where they suffered a small step back. Other farms, primarily the farms that have been longer in business, see the growth of the demand for CSA farms differently. Featherstone Farm as well as Fresh Earth Farm said that even though the amount of people interested in buying CSA shares is increasing, the number of CSA farms is growing faster. Fresh Earth Farm attributes to this factor its inability to sell all its shares for the past two years. Driftless Organics told the CVE team that in the recent years the market leveled off. To these farms, the market is becoming saturated. Not only with new CSA's, but also with enormous farms that are changing from wholesale to CSA model because they can sell their produce for more.
How do farms market their CSA?

Five out of the seven farms interviewed do not do any special marketing besides setting up their own website, subscribing to three CSA websites (MinnesotaGrown.org, LocalHarvest.com, and LandStewardshipProject.com), and hoping for a good word of mouth. Driftless Organics attends CSA fair in Minneapolis and Featherstone Farm does some in-person events as well as talking to people at the drop off site.

Employees

Fazenda Boa Terra hires no employees. Crazy Boy Farm, Fresh Earth farm, Gullywash Garden, and My Minnesota Farmer only hire seasonal work. Featherstone Farm hires 10 full time staff and Driftless Organics has 3 business owners and 15 full time employees. Notice, how only Driftless Organics (150 acre farm) and Featherstone farm (250 acre farm) hire full time employees. This is because it is not financially viable for small farms to hire full time employees.
Appendix C: Interviews

Jay Bell, Ph.D., Associate Dean, CFANS
(asked Dr. Bell to provide his opinion on opportunities for UMore Park with respect to local foods)

Undergrad/Grad education
- New major proposed in CFANS: organic farming production
  - Horticulture / agronomy overlap
  - Proposal early spring, implement Spring 2013
  - Want experiential learning (30 credits)
  - Contact: Terry Cooper, CFANS
- CFANS + College of Public Health
  - May be funded by BC/BS
  - Obesity initiative / nutrition
- College of Liberal Arts
  - Food History
  - Considering local foods, collaborating with CFANS?
    - Anne (Walter)
- Humphrey
  - 3+2 program
  - Greg Lindsay
- Consider U of M – Morris as model
  - Vice Chancellor has experience in small community development
  - Similar initiative
- Potential relationship with CSOM

“Growing food is the easy part”
Need to focus on structure & business policy
Frogtown neighborhoods
- local urban farms
- Seitu Jones, artist/activist
EFANS
- Kitchen existing
Tap into Twin Cities-wide plan
- Vision for alternative food system
- Driven by policy changes
- Academically-driven
What are needs of local system?
- <lack of >Commercial kitchens limit inclusion of local foods
- Farm Bill penalizes farmers for local food production
- Year-round food with Hoop Gardens
- Vertical gardens
- Manure need
- Distribution system
- “Local food production is not efficient” – discussion on best use of land
Helene Murray Ph.D., Executive Director, MISA

Can you tell us about MISA’s role in UMore Park’s Local Food Initiative?

- gave brief history of MISA: 5 farmers + 5 faculty + 5 (?board members); organization serves as a “door in & out of the U” to support local farmers
- interaction with UMore Park has been limited to 2-day workshop; admits that she is a skeptic and referred to workshop as “pie in the sky”

In your opinion, what are unmet needs in LFI?

- Demand for farmland (perennials) - Land institute is working on commercially viable perennial wheat plant; General Mills is interested in new product development; Aveda is interested in growing native legumes; Hazlenuts (trees vs bushes)
- Processing capacity
  - consider corn chips; local farmers must go to distant regional processing plants at increased costs (both due to distance and competition)
  - Examples of success: Lorentz in Cannon Falls, New Prague dairy processing
  - Examples of failure: Pastureland Cheese failed due to inability to dispose of byproduct
  - Contact: Mary Hendrickson, expert on consolidation of processing, small & mid land(?)
- Pasture to accommodate grass-fed animals
- Support of entrepreneurs in mixed enterprises
  (Restaurant) distribution
  - Few consolidators/coordinates: examples include Big River Foods. Whole Food Co-op
  - Contact: Heartland - Lenny Russo
  - Contact: Birchwood - Tracy Singleton (purchases beet sugar from North rather than cane sugar from FL; beet sugar bagged by Cargill)
- Farm-to-school programs
  - Limited coordination between food service providers and farmers
  - Example: St. Paul public schools
- Protection of best farmland to maintain local food in 100 yrs

How would you advise UMore Park as it embarks on LFI?

- “not UMore Park, but UMore Park-supported” <reinforcing the support of entrepreneurs>
- recognize the complexity of labor issues on university land liability in food production for consumption
Terry Cooper Ph.D., CFANS Professor
CFANS professor in charge of “Organic Food Systems – Local to Global” major

Three legs of the new major:
Knowledge of growing food
Knowledge of how food is delivered and processed
Knowledge of how to effect change on the current food system

Food security:
Only 2% of food in MN is grown locally, this major should equip students to bring this number up to something more like 52%

How could UMore Park add value to new CFANS major?
Land is too far away for students to grow food
CFANS already has an organic farm and other growing fields on the St. Paul campus
Having plants to watch over that are 30-40 miles away is impractical

Students could perhaps partner with Hmong farmers or other growers on the land, working on the business and entrepreneurial aspects
Students could possibly work with Dakota county schools to further their local food initiatives

If MN consumes $X billion of food every year, how much of that could be spent on food grown in MN? That would create jobs and increase food security

Another issue is food preservation. If food is to be grown locally, people will need to know how to preserve food while it’s fresh.

Farmers’ Markets
Do farmers’ markets have too large of a carbon footprint?
Farmers drive all over in old, inefficient trucks. Consumers also drive all over to go to the markets. Could a system be developed and implemented that lessens the need for all the driving and perhaps has some centralization or reduction of redundancies?
The carbon footprint is large for such a “green” activity

Experiential Learning
Could be all year long for 2 afternoons a week
Could be a summer internship
Internships should be paid so they can be longer and get more priority in a student’s life
(Unpaid internships might be 40 weeks over a few weeks, while a paid internship would be year-long or summer long and have more importance)
Possible funding from agencies like Blue Cross/Blue Shield, USDA, Wilder Foundation
Goal would be to offer interns to organizations like the Rosemount Schools for no cost to those organizations
Free interns (paid for by other organizations) would increase interest for placing interns

Establishing a New Major at the U of M
Currently seeking approval for the major – to be granted in Spring 2012
Takes another 8 months to get Regent’s approval
New students or transfers should be admitted in fall 2013

**Solutions for the UMore Park Team**
Only sees a plan with the land at UMore Park as workable for farmers or some other use if rent is paid like it would be like any other landlord. If not, the plan wouldn’t really be sustainable.
Other plans might include wholesale, retail, school system, food prep, farmers’ markets.

**Four Components/Paths of the new major**
- Food Systems: production to consumption
- Policy and Management
- International/Cultural Food Studies
- Self-Designed
Courtney Tchida, U of M Student Organic Farm Manager

Can you please tell me little bit about the organic student run farm? How did it start?
Started in Spring 2004. Courtney and another student came to MISA and complained about not having the possibility to grow. They started with 20 by 3 feet plot and after some time MISA came and asked if they need more land. Courtney said yes, so today the farm is about 3 acres: 1.5 acres is in production, rest is in cover crops.

Who is in charge? Are they paid? Does that come out of the farm's revenues?
Courtney Tchida manages the day to day operations as well as the student organization and organic farm class at the U. Courtney is paid full time to work on the farm by MISA. The students are supported by UROB and Johnson fellowship. All farm sales come back to cover the expenses, but they would not be sufficient to cover the employee salaries.

Where do you sell (what channels) your produce?
Cornercopia sells at Minneapolis and Saint Paul farmer’s market and is probably one of the more expensive vendors because they are certified organic, grow things other people don’t grow, package differently- allow people to buy one tomato as opposed to a pack of six. They also set up lot of market stands at the U, for example by the meat science building and the science club when they are selling meat and dairy products. Cornercopia also sells Little to UDS, when they have random special events. Also, they send an email to university offices, let them know what they have available, and then people may buy their produce.

The way it usually looks though is that they bring their produce to the Saint Paul and Minneapolis farmer’s markets and whatever they do not sell there goes to the Campus club restaurant. This way, they sell 95% of their produce.

Have you ever looked into some other models like CSA’s? Why or why not?
Courtney is little scared of the CSA model because they do not want or need the pressure of promising something up. They do not need the money up front since they get funded by MISA. Also, a CSA requires an experienced farmer, who can predict the entire farm produce before the season.

Is the farm currently profitable? Why not? What would need to happen to be profitable?
Courtney said that the farm breaks even, but is not necessarily profitable. They sell more every year. Courtney said, however, that the educational opportunities and potential that this farm creates is huge and that it is hard to put a dollar amount on that.

Labor is the biggest factor. They pay 4 part time (25 to 30 hours a week) interns 10 dollars an hour. However, they lack the continuity from workers, meaning that they get new interns every year and need to teach them the same things, same techniques every year. The rest is all volunteer work or class (credit) work.
Can you describe the history of local food initiative in Northfield?

- In 1991, rugged co-op (Blue Planet) and weekly farmer’s market existed; co-op could not be sustained
- Push to establish new co-op in early 2000s; Just Food co-op opened in 2004 (www.justfood.co-op)
- 30 yr Farmer’s market is T, F and Sat mornings with ~ 4-6 vendors. Did not want to expand and re-locate when approached by organizers for Riverwalk Market Fair. <suggestion of politics>
- Riverwalk Market Fair established in 2010 with leadership from St.Olaf college students (see fantastic report posted). Fair features “fine art, local produce, and artisan foods” on Sat along the Cannon River. Part of Minnesota Grown and accepts food assistance
- There exists a local food network via e-community
- City council has built sustainable ag and local food into business plan.
- Rural Enterprise Center is training Latino farmers to raise organic, free-range chickens year round. (<http://www.startribune.com/lifestyle/82429832.html?page=1&c=y>)
- Discussion with Malt-O-Meal about reducing transportation involved in cereal making by local provision of flour (growing and milling) and alternative uses of “sweet water” byproducts
- Multiple residents participated in Blandin Leadership Institute, a leadership program from the Blandin Foundation that promotes sustainability in rural communities. Participants included local restaurant owners and discussed LFI
- Overall, Erica feels that interest and opportunity is high but progress is slow

What are unmet needs in regional LFI (note: region includes Northfield, Waterford, Bridwater, Dundas)?

- Commercial kitchens. Norm Butler tried to open one at 1001 Division but was shut down (or is it? http://1001solutionsllc.com/category/kitchen-at-1001/#.TslWFvLi6So); Erica would like to approach local churches to explore renting kitchen facilities for local food classes or artisan food prep
- Coordination among growers; high concentration of organic and CSA farmers (e.g. Bridgewater, Big Woods); trying to increase Latino farmers
- Coordination within region and Twin Cities initiatives <noticeable annoyed that an LFI is being considered in Rosemount without being contacted>
- Distribution to restaurants and colleges (great overview in St. Olaf report)

Are there any other people that you’d recommend that I contact?

- Co-op and local food network is Joey Robison joeryobison@gmail.com
- Local restaurants using local foods: Norman Butler (owner)and Julie Bixby (manager)
- Regional LFI & sustainable community history/visionary: Glenn Castore Bridgewater Township supervisor gcastore@ll.net
- Riverwalk Market Fair: Dean Kjerland dean@artonwater.com
- Patrick Ganey has said that he would like to be the champion on the council for local food
**Lenny Russo, Chef of Heartland Restaurant**

**Role of U of M in local foods initiative:**
While Russo acknowledges that the U has made great strides in sustainability issues as well as being an integral part in breeding new plant species that make MN farmers more competitive, he also said that the U has some issues that are based on politics/funding. Ex: some departmental funding may be coming from companies that support industrial agriculture (he mentioned Monsanto but not whether they were actually funding the U). He also mentioned that some researchers at the U contradict the LFI (he spoke of a man who proposed irradiating all the food to deem it safe).

**Personal values on LFI:**
Go with the flow: Russo changes menus daily according to what the farmers have to offer. Don’t just buy LF though, go for quality: Russo still declines farmers sometimes as the food doesn’t meet his standards or the price is too high. Still selective on what to get but is assured on quality. Said Organic standards here in MN one of the most stringent. *sits on the Organic Task Force in the Ag. Bd.*
It’s easier to change menu nightly as you don’t face sourcing problems once food goes out of season. Ex: what happens if menu item that was supported in July runs out of ingredients in August? Would you have to buy from farther out or at a lower quality?

**Making LFI work for Restaurant:**
Farmer co-operatives make it easier for chefs like Russo to find ingredients at a more central location (not necessarily physically) or from one farmer who represents the co-operative. See: **Six Rivers Co-op.**
It’s harder to maintain daily changing menu but is much better for the community and the farms. It’s also sustainable and keeps money within local communities. Just need to hire the best people who can adapt.

**Pain points:**
There is a disconnect between the source and the marketplace. Farmers have difficulty bringing produce to the marketplace at the right time...ie disorganized. Russo said we need a central distribution facility where farmers can take goods to and wait for them to be sold at a later date. This solves the restaurant’s problem of running out of ingredients too. Instead of waiting a week for another delivery from the farm, can go to central facility and re-stock during the week. Currently, in farmer’s co-ops, one farmer visits all member farms to collect ingredients. A central facility would eliminate all the transportation costs.
Lack of **public education** around LFI. He asked if maybe the U can gather all supportive departments and facilitate solutions through resource-sharing.

**Misc.:**
Grant money from government goes straight to farmers. Thus, have U help farmers write the grants and partner w/ the farmers directly.
Educate actively! Don’t just research and have students learn but go out to communities.
Glen Castore, Bridgewater Township Supervisor

What are the greatest challenges in the local foods movement?

“No system for marketing and no system for financing local CSAs”. Twenty regional CSAs sell to the 2 local colleges independently. The rest of sales occurs outside the region – not maximizing economic multiplier effect.

Subsidies exist for organic farmers, but few for small-scale non-organic farmers.

Erica Zweifel suggested that I talk to you because you have experience in developing a local foods project. Can you provide details?

SEEDs farm in Bridgewater township.

- Land donated by Greg & Nancy Carlson, St. Olaf grads (to St. Olaf?)
- Farm concept developed and worked by alum/student interns
- Other enterprises supported by Entrepreneurial funds
- Projects to train Latino farmers in poultry raising and processing

These 50-acre family farms are the future
David Hougen-Eitzmann, CSA Owner

What are challenges to starting a CSA?

CSA is hard to do because the variety of vegetables that CSA supporters demand requires complex growing seasons that only an experienced farmer can plan. Such planning starts right now. This variety may not necessarily support a local food initiative because it caters towards preferences and not local needs. (The local food shelter/low income families may benefit from more carrots rather than kumquats, brussel sprouts amid watermelon.) However, he could see value in growing food to solely support local food shelters and schools.

Would another CSA be welcome in the region?

He asked "why not support training of local farmers who have challenges" rather than becoming another farmer. It made more sense to him to support/improve the existing local food system rather than just adding another farm to an inefficient system. He says that he has seen many bright-eyed young people start CSAs and then fail due to naivety. They become burned and less involved in the LFI. What if they channeled that initial excitement and willingness to work in other ways?

David asked if there was an experienced farmer in the organization. in his circles, people start farms because of family tradition or philosophy on lifestyle/issues. He was surprised to hear that an organization (I did not reveal UMore Park) would want to start a farm without an experienced farmer already on board. He recommended looking at the Waldorf School in Wisconsin as an example.

Request to review financials.

There was little time to review financials. He questioned me on the water supply as the type of irrigation depends on water source (well? well capacity?). He said to go to RainBird or Kifco to determine irrigation pricing. He also questioned only $2K for greenhouse. He also said to omit the fence if there is no true threat of deer. He has a farmhouse and several barns that he uses in addition to 2 12X20 greenhouses - so he definitely agreed that buildings would be necessary for packing, sorting, etc. He would not reveal his operating budget and I did not want to push because he is colleagues with my husband. But he said to trust what other CSA farmers had disclosed. He also recommended looking into Gardens of Eagen as far as how their resources of income
Dan Schultz, City of Rosemount Parks and Recreation Commission

AM: What is the status of the ball park complex construction?

DS: Currently starting Phase I which includes 2 ball fields, parking lot and trails. Parking lot will be done in mid-summer 2012 with ball fields ready for Spring 2013.

DS: We had successful farmer’s market this past summer. First time satellite location for St. Paul’s Farmers Market (SPFM). Location close to city offices. SPFM appeared happy with outcome and they plan to do it again.

AM: I have put in a phone call/email to SPFM concerning statistics related to # vendors and foot traffic. Do you have any of this data?

DS: No, they keep that to themselves. We just provided the location.

DS: We also are seeing growth in our community gardens. We opened up plots north of UMore Park along Akron Avenue as Public Community Gardens. This past season 15 people rented 20x30 garden plots. Next year, assuming city council approval, we will offer smaller plots (20x20) based on feedback plus add plots to neighborhood parks.
Matt Brooks and Catherine Grant, Landscape Agriculture faculty at DCTC

Matt’s main interest is in urban agriculture. He will be taking a sabbatical soon to work on developing a certificate program for urban agriculture, with the hope that it will eventually grow into a full degree program.

His (and the faculty’s) current expertise is in growing.

DCTC has an entrepreneurial program that helps students set up small businesses like photography studios. Matt sees this as a possibly-related program to the urban agriculture program he is working on. DCTC is currently only horticulture focused, but Matt and other faculty members wish to expand their growing focus to include food.

See a big problem for small organic farmers in selling their produce and gaining visibility into current market conditions. Matt thought the system needs a website where growers and purchasers can log in to see what’s currently available and who needs what produce. Aside from that, DCTC has no knowledge of the current distribution system for local food. Suggested we talk to large local grocers like Cub Foods to attempt to enter their distribution chain.

DCTC greenhouses are currently used mainly for growing horticulture plants. Mums in the annual mum sale, other plants for selling seedlings and plantings. Greenhouses are also used to grow limited produce for the DCTC cafeteria. They currently use lettuce and a few herbs grown in the greenhouses by DCTC students.

When asked about the DCTC cafeteria, they said that their cafeteria has a mission statement to purchase food as locally as possible and that they cafeteria would most likely be interested in purchasing food grown at UMore Park, especially by DCTC students or DCTC graduates.

When considering DCTC student involvement, teaching, and experiential learning, Matt said that faculty and students would be most interested in getting experience growing – NOT in working on the business aspects of a local or organic farm.

Co-operative Purchasing Managers, Twin Cities Co-ops

The Wedge
10/7/2011

Ryan (purchasing manager)
- Uses the same 6-9 farmers every year
- Some new farmers call most years, and the Wedge is willing to speak with them, but does not guarantee any new business
- Most farmers are Certified Organic, but a few aren’t or are conventional farmers
- The process to become one of their farmers is to call the store, then bring in produce for the Wedge to check out, taste, and test to verify that it is Organic
- Most farmers deliver 1-2 times per week
- Sometimes farmers set the price, other times they ask the Wedge for a reasonable price
- Price must be competitive – buyers compare prices with farmers to what they think the public will pay after adding their standard markup
- Certain farmers have better produce than others, the Wedge leans toward those growers for their specialty items
Harvest Moon
10/7/2011

David (purchasing manager)
- HM is a new co-op – about a year old, so it doesn’t have long relationships with growers. In David’s previous position, the co-op had decades-old relationships with growers
- HM is smaller, so only works with a smaller number of farmers. Farmers email in what they have available and HM emails back its orders
- HM also acts as a CSA drop spot for farmers/members
- Farmers deliver 1-2 times per week
- Process to become a farmer is a conversation and a handshake – farmers call in to introduce themselves, bring in produce for HM to check out
- HM sells $1,000 – 1,500 per day in produce, larger co-ops (Seward, Wedge) sell $7,000 – (9,000 per day)
- Farmers set prices.
- Farmers get much better prices at farmers markets
- David sees farmers as almost doing him a favor to sell to him because farmers don’t make a lot of money selling to HM

Mississippi Market Co-op
10/4/2011

Matt (purchasing manager)
- Has relationship with many local farmers
- Farmers send a list of what they have available twice weekly
- Co-op is open to new local farms
- They prioritize selling local produce
- Farmers set prices, then co-op sets prices for customers
- Produce in stock is typically set by growing season – the season dictates how local the foods are
- They use 4-5 local farms with consistent orders, but no season-long contract

Seward Co-op
9/29/2011

Snow (purchasing manager)
- Used a group of farmers for a long time – started 30 years ago
- Farms are large or small
- Sometimes just buy 1 product from a farm, if it’s that farm’s specialty
- Co-op makes agreement in winter for each farm, but has primary and backup providers per product
- Local foods take priority, with Certified Organic taking further priority
- During the local growing season, Co-op produce sales go down because consumers have other alternatives (farmer’s markets, personal gardens, etc.)
- Co-op will give a new farmer a chance if they have a new/different/unique product offering
- Early or late season products are a good way to get in as well
  - One current farmer got in this way – offered early produce to start building a relationship
o WI growers co-op grows heirloom, tomato, zucchini, green beans in hoop houses and transplants outside in growing season

- Farms typically set pricing unless they ask co-op for guidance
- Smaller farms often charge more for produce because they have to, larger farms charge less because they can
- Both pricing structures get a standard markup at Seward
- Snow recommended looking to sell local food outside of co-ops as larger co-ops can’t purchase a lot more produce than they already do
- Feel free to call back

Eastside Co-op
9/29/2011

Jean (purchasing manager)

- Purchases local organic food on weekly or daily basis
- Purchase from local farms first, then consider warehouses
- Local co-op warehouse that’s owned by co-op partners (Eastside is one owner)
- Warehouse stocks fair trade mango, pineapple, banana.
- She trusts it to make good buying decisions where she doesn’t have the access or information
- Farmers email a list of what they have available, then they call and talk
- Works with a set of 15-16 Amish farmers in WI who have an “English Farmer” call a couple times/week
  - That English Farmer also does deliveries for them
- Sometimes co-op sees bulk sale – farmer wants to get rid of something – offers $5 off/case of tomatoes (ex)
- Co-op tries to spread its buying among the farms it works with
- Farms set prices or ask for guidance from co-op buyers
- Co-op gets calls every year as early as December or January, but has to see the product before purchasing
- Broccoli competition is stiff – typically only purchases broccoli from one farm
- Co-op meets with major farmers to discuss what to grow, what they’ve grown well, what they’re thinking of growing
- Co-op has farmer’s meetings weekly in January to know what to plan for with the farms
- Example purchase from one farmer: 600 lbs. broccoli, 1000 lbs. russet potato
- Eastside sold about 5,000 lbs. of russet potatoes from all farms during that period
Appendix D: Financials

Capital Expenditures for Starting a Farm – Applicable to All Growing Models  
*(based on three acres)*

<table>
<thead>
<tr>
<th>Permanent Infrastructure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fence</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>Irrigation (pump, filters, mainlines)</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Storage/tool shed</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Heavy Equipment storage shed</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Packing facility (washing, coolers...)</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Well</td>
<td>$5,000.00</td>
</tr>
<tr>
<td><strong>Permanent Infrastructure Total</strong></td>
<td><strong>$29,500.00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Big Farm Equipment</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>Tractor</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>Front loader for tractor</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Spade Tiller</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Bedshaper</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Flail Mower</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Sub-Soiler</td>
<td>$350.00</td>
</tr>
<tr>
<td>Walk Behind Tractor &quot;BCS&quot; or &quot;Grillo&quot;</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Rototiller 18”</td>
<td>$500.00</td>
</tr>
<tr>
<td>Furrower</td>
<td>$100.00</td>
</tr>
<tr>
<td>Flail Mower 18”</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Sickle Bar Mower 18”</td>
<td>$800.00</td>
</tr>
<tr>
<td>Utility Trailer (Open)</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Market trailer (Enclosed)</td>
<td>$2,000.00</td>
</tr>
<tr>
<td><strong>Big Farm Equipment Total</strong></td>
<td><strong>$61,650.00</strong></td>
</tr>
</tbody>
</table>
## Farm Operation & Supplies

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Fixed Irrigation (Drip System, sprinklers, hoses)</td>
<td>$900.00</td>
</tr>
<tr>
<td>Shovels, forks, hoes, etc...</td>
<td>$300.00</td>
</tr>
<tr>
<td>Dibble</td>
<td>$20.00</td>
</tr>
<tr>
<td>Right Angle Trow</td>
<td>$25.00</td>
</tr>
<tr>
<td>Wheel hoe</td>
<td>$250.00</td>
</tr>
<tr>
<td>Earthway seeder</td>
<td>$110.00</td>
</tr>
<tr>
<td>Seed broadcaster</td>
<td>$60.00</td>
</tr>
<tr>
<td>Plug trays</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Potting up trays (sheet pots, square pots, carrying trays)</td>
<td>$550.00</td>
</tr>
<tr>
<td>Harvest Containers</td>
<td>$350.00</td>
</tr>
<tr>
<td>T-Pots for trellising</td>
<td>$500.00</td>
</tr>
<tr>
<td>marketing costs (tables, tents, scales, baskets, signage, etc)</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Miscellaneous small tools</td>
<td>$200.00</td>
</tr>
<tr>
<td>Back Pack Sprayer</td>
<td>$100.00</td>
</tr>
<tr>
<td><strong>Farm Operation &amp; Supplies Total</strong></td>
<td><strong>$5,865.00</strong></td>
</tr>
</tbody>
</table>

## Total Starting Farm Expenses

- **$97,015.00**

## Annual Operating Expenses – Applicable to CSA and Co-op Growing Models

*Based on three acres*

<table>
<thead>
<tr>
<th>Cost of Goods Sold</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crops</strong></td>
<td></td>
</tr>
<tr>
<td>Plants and seeds</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Mulch</td>
<td>$200.00</td>
</tr>
<tr>
<td>Potting mix ingredients</td>
<td>$400.00</td>
</tr>
<tr>
<td><strong>Cover</strong></td>
<td></td>
</tr>
<tr>
<td>Cover crop</td>
<td>$200.00</td>
</tr>
<tr>
<td><strong>Foliar Sprays</strong></td>
<td></td>
</tr>
<tr>
<td>Nutrients</td>
<td>$100.00</td>
</tr>
<tr>
<td>organic insect control</td>
<td>$50.00</td>
</tr>
<tr>
<td><strong>Soil Amendments</strong></td>
<td></td>
</tr>
<tr>
<td>Compost</td>
<td>$50.00</td>
</tr>
<tr>
<td>Calcium</td>
<td>$200.00</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>$250.00</td>
</tr>
<tr>
<td>Leachables (Nitrogen, Sulfur, Boron, etc..)</td>
<td>$250.00</td>
</tr>
<tr>
<td><strong>Cost of Goods Sold Total</strong></td>
<td><strong>$4,700.00</strong></td>
</tr>
</tbody>
</table>
### Other expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel &amp; oil</td>
<td>$ 850.00</td>
</tr>
<tr>
<td>Insurance vehicles</td>
<td>$ 400.00</td>
</tr>
<tr>
<td>Maintenance and repair</td>
<td>$ 2,000.00</td>
</tr>
<tr>
<td>Marketing costs (brochures, website)</td>
<td>$ 500.00</td>
</tr>
<tr>
<td>Labels (for fields and pots)</td>
<td>$ 250.00</td>
</tr>
<tr>
<td>Miscellaneous (extra tools, trays, pots, gloves)</td>
<td>$ 1,000.00</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
</tr>
<tr>
<td>Electric (big drain: walk-in refrigeration)</td>
<td>$ 2,000.00</td>
</tr>
<tr>
<td>Gas (big drain: green house heating)</td>
<td>$ 1,000.00</td>
</tr>
<tr>
<td><strong>Administrative Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Organic Certification</td>
<td>$ 750.00</td>
</tr>
<tr>
<td>Soil Tests</td>
<td>$ 160.00</td>
</tr>
<tr>
<td>Postage &amp; Packaging</td>
<td>$ 100.00</td>
</tr>
<tr>
<td>Office Supply</td>
<td>$ 100.00</td>
</tr>
<tr>
<td><strong>Other Expenses Total</strong></td>
<td>$ 9,110.00</td>
</tr>
</tbody>
</table>

**Total Annual Operating Costs** $ 13,810.00

Financials are based on 2 examples of farm financial proposals from Georgia Organics, nonprofit organization devoted to promoting sustainable foods and local farms as well as interviews with farmers and industry experts.

The two proposals can be found here:

- [http://www.georgiaorganics.org/ForFarmers/CropProduction/BusinessMarketing/FarmStartUpCostsHitt.pdf](http://www.georgiaorganics.org/ForFarmers/CropProduction/BusinessMarketing/FarmStartUpCostsHitt.pdf)
- [http://www.georgiaorganics.org/ForFarmers/CropProduction/BusinessMarketing/ProposalBudget.xls](http://www.georgiaorganics.org/ForFarmers/CropProduction/BusinessMarketing/ProposalBudget.xls)

Please, note that the values and costs above should provide a general cost for starting a farm from scratch. They depend on what UMore Park grows and what model (CSA, wholesale...) UMore Park uses to sell its produce. The costs should still be consulted with the future farmer or person in charge of the farm and growing at UMore Park to decide the critical requirements for the farm and what infrastructure Umore needs to successfully start and run a farm.
CSA Three Year Projection

<table>
<thead>
<tr>
<th>Acres Needed</th>
<th>1</th>
<th>1.5</th>
<th>2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Shares Sold</td>
<td>20</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Value of the Basket</td>
<td>$30.00</td>
<td>$30.00</td>
<td>$30.00</td>
</tr>
<tr>
<td>Week</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$10,800.00</td>
<td>$18,900.00</td>
<td>$27,000.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational costs</td>
<td>$4,666.00</td>
<td>$7,000.00</td>
<td>$9,333.00</td>
</tr>
<tr>
<td>Salary</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Additional Seasonal Help</td>
<td>$3,600.00</td>
<td>$7,200.00</td>
<td>$7,200.00</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$34,666.00</td>
<td>$40,600.00</td>
<td>$46,533.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profit/Loss</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>$(23,866.00)</td>
<td>$(21,700.00)</td>
<td>$(19,533.00)</td>
</tr>
</tbody>
</table>

1. Acres needed to grow the amount of produce required to deliver the number shares of shares proposed. Farmers interviewed report to get 20 to 30 shares from 1 acre of land depending on how much produce they plan to give to their members.
2. Proposed number of shares sold. This is assuming that the CSA would be able to grow and attract members through positive word of mouth and marketing. Only theoretical.
3. The value of the basket would not change.
4. The number of weeks in which CSA will deliver the baskets.
5. Revenue = # of shares sold * basket value * weeks.
6. Operational costs are based on the operational costs calculated for a three acre farm and then scaled down to reflect operational costs for acreage needed for each year.
7. Assumes that the farmer's salary won't change as the farm size increases.
8. Assumes that for year 1, the farm will require no additional help. Year 2 will require 1 intern and Year 3 will require 2 interns to help with the amount of work required at the farm.

Calculation: # of interns * 20 hours/week * 20 weeks/season * $9/hour = additional help.
# Agritourism Three Year Projection

## Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberries(^1)</td>
<td>$ -</td>
<td>$37,500.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>Apples(^2)</td>
<td>$ -</td>
<td>$3,500.00</td>
<td>$4,900.00</td>
</tr>
<tr>
<td>Admission</td>
<td>$ -</td>
<td>$10,000.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$ -</td>
<td>$51,000.00</td>
<td>$66,900.00</td>
</tr>
</tbody>
</table>

## Cost of Goods Sold

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crops</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strawberry plants</td>
<td>$3,199.00</td>
<td>$319.90</td>
<td>$319.90</td>
</tr>
<tr>
<td>Apple trees</td>
<td>$22,400.00</td>
<td>$400.00</td>
<td>$400.00</td>
</tr>
<tr>
<td>Mulch</td>
<td>$200.00</td>
<td>$200.00</td>
<td>$200.00</td>
</tr>
<tr>
<td>Potting mix ingredients</td>
<td>$400.00</td>
<td>$400.00</td>
<td>$400.00</td>
</tr>
<tr>
<td><strong>Cover</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover crop</td>
<td>$200.00</td>
<td>$200.00</td>
<td>$200.00</td>
</tr>
<tr>
<td><strong>Labor</strong></td>
<td>$46,800.00</td>
<td>$53,050.00</td>
<td>$53,050.00</td>
</tr>
<tr>
<td><strong>Cost of Goods Sold</strong></td>
<td>$73,199.00</td>
<td>$54,569.90</td>
<td>$54,569.90</td>
</tr>
</tbody>
</table>

## Expenses

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foliar Sprays</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrients</td>
<td>$100.00</td>
<td>$100.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Organic Insect Control</td>
<td>$50.00</td>
<td>$50.00</td>
<td>$50.00</td>
</tr>
<tr>
<td><strong>Soil Amendments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compost</td>
<td>$50.00</td>
<td>$50.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>Calcium</td>
<td>$200.00</td>
<td>$200.00</td>
<td>$200.00</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>$250.00</td>
<td>$250.00</td>
<td>$250.00</td>
</tr>
<tr>
<td>Leachables (Nitrogen, Sulfur, Boron, etc..)</td>
<td>$250.00</td>
<td>$250.00</td>
<td>$250.00</td>
</tr>
<tr>
<td>Other equip.</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td><strong>Farm operation &amp; supplies</strong></td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Shovels, forks, hoes, etc..</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plug trays</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Potting up trays</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Harvest containers</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Trellising</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td><strong>Maintenance &amp; Repair</strong></td>
<td>$1,000.00</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Maintenance &amp; Repair</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td><strong>Marketing Costs &amp; Supplies</strong></td>
<td>$3,000.00</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Tables, scales, brochures, baskets, etc...)</td>
<td>$3,000.00</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$ 1,000.00</td>
<td>$ 1,000.00</td>
<td>$ 1,000.00</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Taxes &amp; Licenses</td>
<td>$ 1,100.00</td>
<td>$ 1,100.00</td>
<td>$ 1,100.00</td>
</tr>
<tr>
<td>Administrative Costs</td>
<td>$ 1,000.00</td>
<td>$ 1,000.00</td>
<td>$ 1,000.00</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$ 18,000.00</strong></td>
<td><strong>$ 17,000.00</strong></td>
<td><strong>$ 17,000.00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$ (91,199.00)</strong></td>
</tr>
</tbody>
</table>


**Strawberry Planting Costs**

<table>
<thead>
<tr>
<th>100 plants</th>
<th>$ 23.99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield (pounds per row-foot of plants)</td>
<td>0.5</td>
</tr>
<tr>
<td>Ft required to get 10000 lbs †</td>
<td>20000</td>
</tr>
<tr>
<td>Plants required</td>
<td>13333.33</td>
</tr>
<tr>
<td>Spacing (between plants)</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Plant Cost</strong></td>
<td><strong>$ 3,198.67</strong></td>
</tr>
</tbody>
</table>

1. Two rows spaced four feet apart, 10,000 feet long

**Wholesale to Co-op Pricing Model**

<table>
<thead>
<tr>
<th>Produce Type</th>
<th>Lbs. / Acre</th>
<th>Co-op Price</th>
<th>Wholesale Price</th>
<th>% of Farm</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beets</td>
<td>10800</td>
<td>$ 2.49</td>
<td>$ 1.00</td>
<td>5.00%</td>
<td>$ 537.84</td>
</tr>
<tr>
<td>Broccoli</td>
<td>7300</td>
<td>$ 2.79</td>
<td>$ 1.12</td>
<td>5.00%</td>
<td>$ 407.34</td>
</tr>
<tr>
<td>Cabbage</td>
<td>13700</td>
<td>$ 1.59</td>
<td>$ 0.64</td>
<td>5.00%</td>
<td>$ 435.66</td>
</tr>
<tr>
<td>Carrots</td>
<td>19400</td>
<td>$ 2.79</td>
<td>$ 1.12</td>
<td>10.00%</td>
<td>$ 2,165.04</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>10800</td>
<td>$ 2.99</td>
<td>$ 1.20</td>
<td>10.00%</td>
<td>$ 1,291.68</td>
</tr>
<tr>
<td>Garlic</td>
<td>9000</td>
<td>$ 9.99</td>
<td>$ 4.00</td>
<td>10.00%</td>
<td>$ 3,596.40</td>
</tr>
<tr>
<td>Onions</td>
<td>19800</td>
<td>$ 1.79</td>
<td>$ 0.72</td>
<td>10.00%</td>
<td>$ 1,417.68</td>
</tr>
<tr>
<td>Peppers, bell, colored</td>
<td>6900</td>
<td>$ 3.49</td>
<td>$ 1.40</td>
<td>10.00%</td>
<td>$ 963.24</td>
</tr>
<tr>
<td>Peppers, bell, green</td>
<td>6900</td>
<td>$ 3.49</td>
<td>$ 1.40</td>
<td>10.00%</td>
<td>$ 963.24</td>
</tr>
<tr>
<td>Pumpkins</td>
<td>20000</td>
<td>$ 1.29</td>
<td>$ 0.52</td>
<td>5.00%</td>
<td>$ 516.00</td>
</tr>
<tr>
<td>Squash, summer</td>
<td>9700</td>
<td>$ 1.29</td>
<td>$ 0.52</td>
<td>5.00%</td>
<td>$ 250.26</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>11000</td>
<td>$ 4.99</td>
<td>$ 2.00</td>
<td>10.00%</td>
<td>$ 2,195.60</td>
</tr>
<tr>
<td>Turnips</td>
<td>12000</td>
<td>$ 2.99</td>
<td>$ 1.20</td>
<td>10.00%</td>
<td>$ 1,435.20</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$ 15,693.56</strong></td>
</tr>
</tbody>
</table>
Wholesale revenue projection is based on 1 acre and a wholesale multiple of .4 times the retail price.

### Projected Income for Wholesaling to Co-ops

<table>
<thead>
<tr>
<th></th>
<th>$15,693.56(^1)</th>
<th>$47,080.68(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold</td>
<td>$1,566.67</td>
<td>$4,700.00</td>
</tr>
<tr>
<td>Gross Income</td>
<td>$14,126.89</td>
<td>$42,380.68</td>
</tr>
<tr>
<td>Labor</td>
<td>$30,000.00</td>
<td>$37,200.00</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>$9,110.00</td>
<td>$9,110.00</td>
</tr>
</tbody>
</table>

| Net Income       | $$(24,983.11)$$ | $$ (3,929.32) $$ |

1. Projections for 1 acre
2. Projections for 3 acres
Appendix E:

Eight communities in Dakota County have established nine local farmer’s markets:

Minnesota Farmer’s Market Association (MFMA)

Downtown Farmington
430 Third Street, Farmington, MN 55024
**Thursdays:** 3:00 pm - 7:00 pm
June 16 - September 15, 2011
Email: cmuller@ci.farmington.mn.us
Website: http://www.ci.farmington.mn.us

16 Vendors
Season Rate – All 14 Weeks
- $125 per 10’ x 10’ booth space lease fee for all 14 weeks.
- $200 for 10’ x 20’ booth space lease fee for all 14 weeks.
- $275 for 10’ x 30’ booth space lease fee for all 14 weeks.
- $30 Electricity (Season Rate)
Daily Rate (purchase space on a week by week basis)
- $20 per 10 x 10 booth space weekly lease fee (weeks must be paid in advance)
- $40 for 20’ x 20’ booth space weekly lease fee (weeks must be paid in advance)
- $5 Electricity (per week)

Eagan Market Fest
Eagan Community Center, Eagan, MN 55121
**Wednesdays:** 4:00 pm - 8:00 pm
June 8 - September 28, 2011
Email: kphillips@cityofeagan.com
Website: http://www.cityofeagan.com/marketfest

2010 Attendance → 2800/wk over 12-wks
60+ vendors
Season Rate – All 17 Weeks
- $225 per 10’ x 10’ single booth space lease fee for all 17 weeks.
- $325 for 10’ x 20’ double booth space lease fee for all 17 weeks.
- $30 Electricity (Season Rate)
Daily Rate (purchase space on a week by week basis)
- $30 per 10 x 10 booth space weekly lease fee (weeks must be paid in advance)
- $50 for 20’ x 20’ booth space weekly lease fee (weeks must be paid in advance)
- $5 Electricity (per week)

Hastings Farm Market
Westview Shopping Center • 1399 South Frontage Road • Hastings, MN 55033
**Tuesdays:** 8:00 am - 1:00 pm
**Saturdays:** 8:00 am - 1:00 pm
Mid June - November 1, 2011
Email: treeguru@juno.com
Website: http://www.hastingsfarmmarket.org

30+ Vendors
St. Paul Farmer’s Market (http://www.stpaulfarmersmarket.com/)
$425 membership + $15 (neighborhood) - $35(downtown) daily stall fee
Apple Valley
  Saturdays: 8:00 AM to 1:00 PM  
  June 18 - October 29, 2011

Burnsville - Mary, Mother of the Church
  Thursdays: Noon to 5:00 PM  
  May 5 - October 27, 2011

Burnsville Transit Station
  Saturdays: 7:00 AM to Noon  
  June 18 - October 29, 2011

Inver Grove Heights
  Veteran’s Memorial Community Center 8055 Barbara Ave Inver Grove Heights 55077
  Thursdays: 3:00 PM to 6:30 PM  
  June 23 - October 6, 2011

Lakeville Market
  208th & Holyoke Lakeville 55044
  Wednesdays: Noon to 5:00 PM  
  June 15 - October 26, 2011

Rosemount Market
  13885 So Robert Tr Rosemount 55068
  Tuesdays: 2:00 to 6:00 PM  
  June 21 - September 20, 2011

Case Study – Maple Grove Farmer’s Market (from Minnesota Farmer’s Market Manual)
Planning started in 2003 to increase availability of locally grown ag products and sense of community
  • Opened in 2004 after market research with other FM managers, decision-making by city staff members, and invitations to growers
  • Run like a city program – staff is 2 mktg coordinators and 1 on-site manager
  • Vendor fees (2006) = $200 for 17-week season
  • 70 vendors (2006)
  • Weekly Traffic = 1700 – 2500
  • All fees (70 x $200 = $14000) went back into market