



Lakes to Land Regional Initiative

UNIQUE REGION. UNIQUE COMMUNITIES. SHARED VISION.

Farm and Food System Assessment

AUGUST 20, 2014

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ACKNOWLEDGEMENTS



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Cover photo: Kamil Kleczar

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1. Barn in Gilmore Township

Introduction

The Farm and Food System project grew from the Lakes to Land Regional Planning Initiative, a joint planning effort among sixteen (16) townships, villages, and cities in northwest Lower Michigan.

The Lakes to Land Region

The Lakes to Land Regional Planning Initiative encouraged each participating community to define their unique identity in individual master plans that detail the community's vision for the future. Then the collaboration began with a shared vision for the region's future. The region from Manistee north along the coast to Lake Township and east to Honor is home to 20,348 year-round residents according to the 2010 U.S. Census. Although the Lakes to Land (L2L) region is less than half of the combined area of Benzie and Manistee counties, it is home to just about half of the combined county's residents. Also, the L2L region has very little ethnic or cultural diversity; as only 8.8% of the region's residents are non-white.

The community is older, depicted by the average median age of 50.1 years; significantly older than the state of Michigan where the median age is 38.9 years. Within the communities however, the median age varies from 38.0 in the small village of Honor with only 328 residents to 64.3 years in

Lake Township, where there are more seasonal homes than actual residents.

Shelter for the region's 8,545 households is provided by 13,809 housing units according to the 2008-2012 American Community Survey. About 30% of these housing units are for seasonal, recreational, and occasional use, and 10% are vacant and may be for sale or rent. More than half of the seasonal homes can be found in Crystal Lake, Lake, and Onekama townships alone. The large percentage of seasonal housing highlights the seasonal changes in population. The population increases significantly during the summer months as seasonal residents and visiting tourists head "Up North".

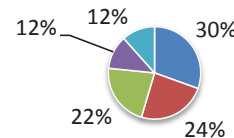
When not enjoying a vacation themselves, the year-round civilian employed population of 8,095 people, less than half of the region's total population, is working in occupations that reflect the state of Michigan's economy. Overall, the average household income is \$56,930 with median levels ranging from \$28,438 to \$61,250.

In the region known for its natural assets, it is not surprising that a greater percentage of people have occupations in natural resources, construction, and maintenance when compared to the state of Michigan. The service industry employs the second most people in the region; which highlights the impact of tourism.

As the participating rural communities that comprise the Lakes to Land region joined forces to identify regional assets, they acknowledged the area's agricultural resources. The agricultural parcels map depicts the large amount of land in agriculture with concentrations in Blaine, Joyfield, Arcadia, Pleasanton, Onkama, Bear Lake, and Manistee Townships.

Occupation

- Management, business, science, and arts occupations
- Service occupations
- Sales and office occupations
- Natural resources, construction, and maintenance occupations



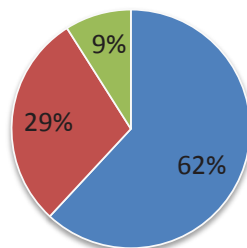
3. Occupations chart

Source: 2010 U.S. Census

The 3.5% of the L2L population with an occupation in agriculture reported by the U.S. Census does not include those who farm as a secondary occupation or those who are self-employed in agriculture.

Housing

- Occupied housing units
- Season, recreational, occasional use
- Vacant - for sale, for rent, etc.

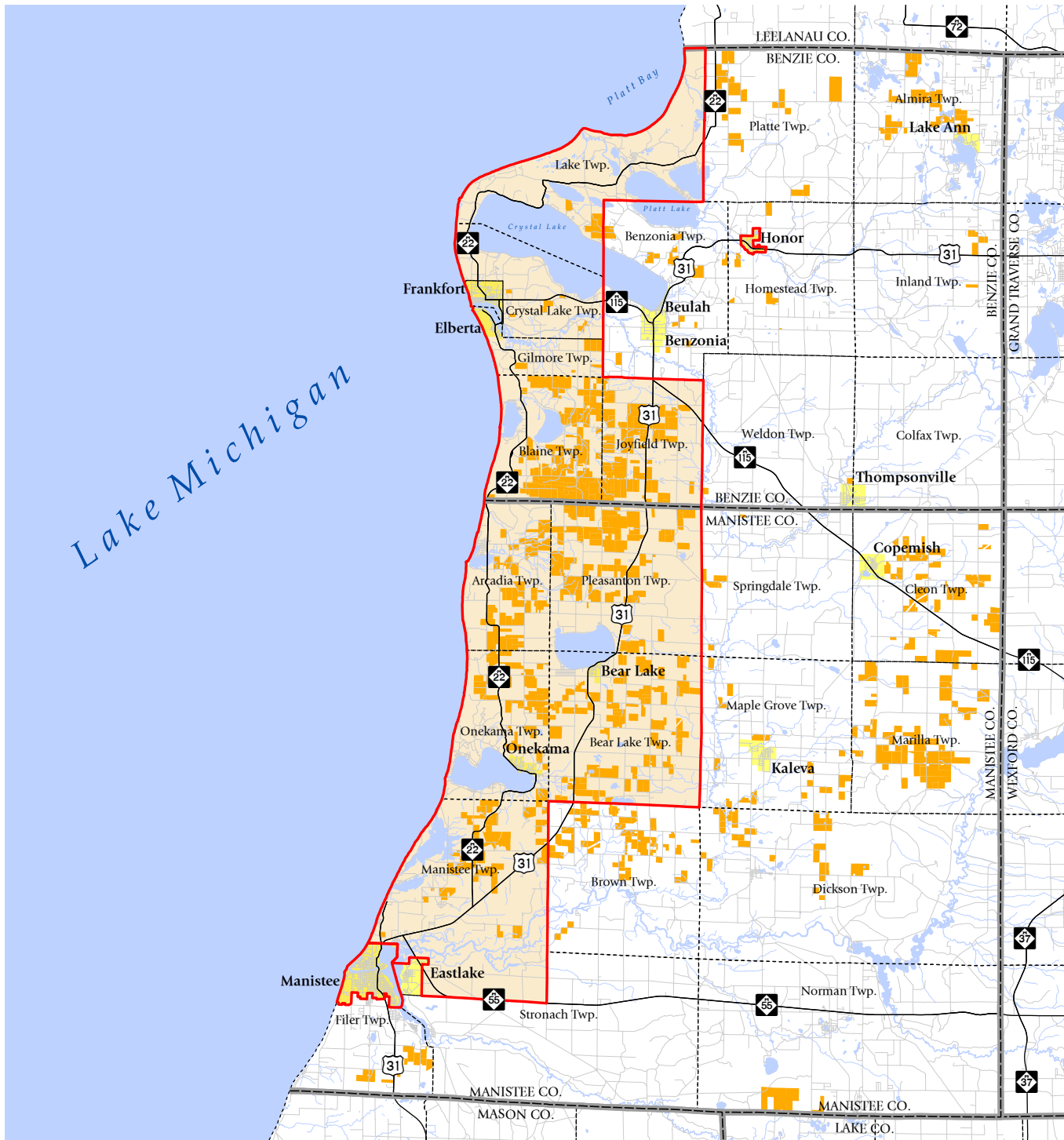


2. Housing chart

Source: 2010 U.S. Census

Considering the amount of agriculture land, the reported 3.5% of the L2L population with an occupation in agriculture, forestry, fishing, hunting and mining may not be an accurate value. The number does not reflect the large percentage of the population that farms as a secondary occupation or those that are self-employed in agriculture.

Recognizing the value of a strong agricultural industry and the role that agriculture plays in the region's identity, one of the resulting cornerstones from the L2L collaboration was a need to support the region's agricultural vitality. To support this cornerstone, the group recognized the following goals: encourage farm profitability and vitality, encourage the continuation and growth of small agricultural operations, and sustain and enhance the agricultural economy of the region.



LAKES TO LAND

Agricultural Parcels

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization

- Participating Communities
- Agricultural Parcel
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Farm and Food System

Agriculture is the second largest industry in the state and Michigan has the second most diverse agriculture industry in the nation, behind California.

Michigan farmers produce more than 200 commodities and rank number one nationally in the production of dry black and cranberry beans, blueberries, tart cherries, pickling cucumbers, and squash.

Although some of the top crop items in Benzie and Manistee counties are corn for grain, corn for silage, and Christmas trees; a significant amount of food for human consumption is produced as well. The primary food crop items are tart cherries and apples. Cattle, hogs, and sheep lead the livestock category.

Like many places in the United States, the Lakes to Land region is part of a conventional food system. All residents in the Lakes to Land region must eat and the food they consume comes from somewhere. In a “conventional food system, food production and processing is industrial in scale and relies on advances in bio-technology, food distribution occurs over large distances, disposal of food generates a significant amount of packaging waste, and consumers are removed – physically and metaphorically – from the source of their food” (Raja et al., p. 3). According to the Center for Urban Education about Sustainable Agriculture in California, food for an average meal travels about 1500 miles from farm to plate.

However, regional collaboration, especially in a region with an agricultural industry, presents the opportunity to capitalize on economic growth through food and agriculture-based initiatives. A community food system “emphasizes strengthening and making visible the relationships between producers, processors, distributors, and consumers of food” (Raja et al., p. 3). A community food system is place-based, supports local and regional networks, promotes environmental sustainable practices, advocates for social justice, and provides food security. Although the terms have similar definitions, there has recently been a shift in discussion among planners from a community food system to a

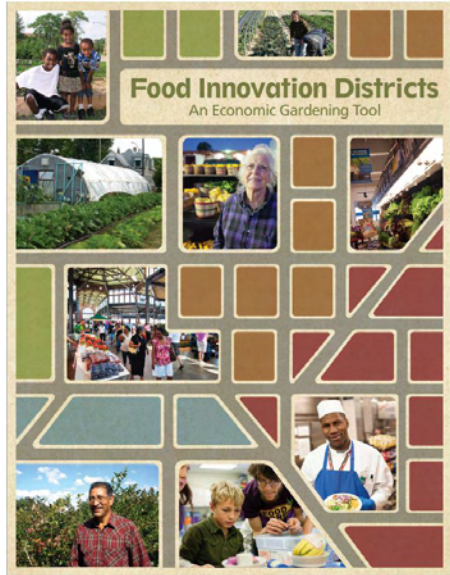
local food system; defined as “food produced, processed, and distributed within a particular geographic boundary that consumers associate with their own community” (as cited in Urban Planning Practicum, 2012, p. 13). Since many of the L2L region’s residents’ careers, businesses, lifestyles, or hobbies involve agriculture or tourism, the food system presents opportunities to be more local.



5. Growing plums

Photo: Kamil Kleczar

Food Innovation District



6. Food Innovation Districts Guidebook

When the idea of a regional food system took root from this need for joint efforts to support agricultural vitality and related food production and processing, the Department of Treasury Competitive Grant Assistance Program issued a grant to the Alliance for Economic Success.

The grant was received to create and initiate implementation of a food innovation district (FID). Defined by the NWMCOG Food Innovation District: An Economic Gardening Tool guidebook, a food innovation district is a “geographic concentration of food-oriented businesses, services, and community activities that local governments support through planning and economic development initiatives in order to promote a positive business environment, spur regional food system development, and increase access to local food” (Contrell et al., 2013, p. 2).

The goal of an FID is to encourage interconnections within a cluster of food and food-related businesses to create jobs, increase the accessibility of healthy food options, and encourage a ‘sense of place’ within the region.

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The activities that occur in these districts include:

- Regional food hubs
- Business incubators
- Farm-to-table retail and restaurants
- Farmers markets
- Food festivals and other events
- Nutrition and cooking education
- Healthy food assistance
- Urban agriculture production
- Community kitchens
- Public spaces, neighborhood uses

The district may include a food hub, defined by the USDA Regional Food Hub Resource Guide as a “business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.” FIDs and food hubs come in many shapes and sizes and could include invisible infrastructures and aggregations, such as improved communication, marketing, or access to expertise and resources.

The first step of the Food and Farm System project was to conduct a food system assessment to determine the appropriate efforts to create and initiate implementation of a food innovation district. Assessments are vital to the success of efforts designed specifically to enhance coordination within the region and include identifying the needs and assets to understand the components and interrelationships of the existing food system (Contrell et al., 2013). The information in this report stems from a regional food assessment, conducted specifically to gather information on the existing food system in Benzie and Manistee counties.

Glossary

Agriculture

Agriculture is the science, art, or practice of cultivating the soil, producing crops, and raising livestock.

Aggregator

An aggregator gathers products from multiple producers and markets the products to buyers or processes them into value-added goods.

Co-packing facility

A co-packing facility manufactures and packages food products for clients for a fee. A co-packer generally uses the client's ingredients, recipe, and packaging materials. Upon completion of the manufacture and packaging of the product, the client markets the finished goods.

Community kitchen

A kitchen that is generally owned by a public entity or a community-based organization, such as a community center or technical college, and is publicly available for use by community members.

Consumption

All the activities and processes that individuals, society and culture engage in to acquire and use food that has been produced and distributed.

Cottage Food Law

Michigan's Cottage Food Law, PA 113 of 2010 exempts a cottage food operation from licensing and inspection provisions of the Michigan Food Law. A cottage food operation still has to comply with the labeling, adulteration, and other provisions found in the Michigan Food Law, as well as other applicable state or federal laws, or local ordinances. Under the Cottage Food Law, non-potentially hazardous foods that do not require time and/or temperature control for safety can be produced in a home kitchen for direct sale to customers at farmers markets, farm markets, roadside stands or other direct markets. The products can't be sold to retail stores; restaurants; over the internet; by mail order; or to wholesalers, brokers or other food distributors who resell foods.

Distribution and marketing

All activities related to getting raw and processed foods to consumers, including transporting, storing, and retailing. This includes wholesale, retail, direct to consumer, food service, and emergency market channels.

Distributor

A distributor moves goods from producers, aggregators, and/or wholesalers to buyers, including processors, institutions, restaurants, retailers, and consumers. Distributors can be local, regional, national, or international. The particular activities a distributor performs can vary greatly, from merely brokering a sale and arranging for transport to aggregating, marketing, and delivering products.

Incubator kitchen

An incubator kitchen is a licensed commercial kitchen dedicated to startup and early-stage catering, retail, and wholesale food businesses. Clients or incubates rent timeslots in the kitchen to develop a food business, saving them the capital investment in commercial kitchen equipment.

Farm

“Any place that produced and sold, or normally would have produced and sold, at least \$1,000 of agricultural products during a given year” (Hoppe & MacDonald, 2013, p. 2).

Food

Food is any nutritious substance that people eat or drink in order to maintain life and growth.

Food innovation district

“A geographic concentration of food-oriented businesses, services, and community activities that local governments support through planning and economic development initiatives in order to promote a positive business environment, spur regional food system development, and increase access to local food” (Contrell et al., 2013, p. 2).

Food security

“A resident’s access to healthful, affordable, and culturally appropriate foods at all times” (Raja et al., p. 3).

Food system

“The chain of activities and processes related to the production, processing, distribution, disposal, and eating of food” (as cited in Raja, Born, & Russel, 2008, p. 3). A food system encompasses all of the people, processes, and places involved in food.

Food processing

Food processing is the transformation of raw ingredients into food, or of food into other forms. The individual or business that does food processing is a food processor.

Individually Quick Frozen (IQF)

Individually quick frozen refers to a method of producing high quality frozen food. The process of quicker freezing generates smaller ice crystals and maintains the food product’s cellular structure.

Local food system

“Food produced, processed, and distributed within a particular geographic boundary that consumers associate with their own community” (as cited in Urban Planning Practicum, 2012, p. 13).

Production

The cultivation of edible plants and domestication of animals, including rural and urban farms as well as community or school gardens, rooftop gardens, urban and rural greenhouses, edible landscaping, backyard gardening and others.

Processing

All the processes that add value to and/or transform raw commodities into food products, including baking, cooking, freezing, canning, and packaging.

Value-added products

Agricultural products that have been transformed into a new product that has value beyond that of the raw inputs. Freezing, dehydrating, canning, and baking are examples of value-addition activities; sauces, jams and jellies, cheese, and cured meats are examples of value-added products.

Assessment Methodology

The regional food assessment for this report was an open and transparent collaborative process that used a variety of methods to collect information, focused on community assets and strengths, and ensured shared ownership of the process and results by involving stakeholders.

Sources

This report draws on federal, state, and local food systems literature; regional, state, and federal data; and the personal interviews with local food producers, processors, aggregators, distributors, and retailers to assess the Lakes to Land region's local food system. While the literature, data, and interviewees discussed in this report have varying definitions of local food, this report defines local food as: food produced within Benzie and Manistee County boundaries.

Scope

This report's focus is on the townships, cities, and villages in northwest Lower Michigan that are participating in the Lakes to Land Regional Initiative. They include the following: the townships of Arcadia, Bear Lake, Blaine, Crystal Lake, Gilmore, Joyfield, Lake, Manistee, Onekama, and Pleasanton; the Villages of Bear Lake, Elberta, Honor, and Onekama; and the Cities of Frankfort and Manistee. When information is not available for the specific geographic regions of the participating communities, the study area is defined as the areas within the Benzie and Manistee County boundaries recognized by the U.S. Census.

Numerous business assets and stakeholders with physical addresses outside the Lakes to Land region are also included in this report. Although the business may be located outside the geographical boundary of the study region, the business is included because of its involvement in the L2L food system as a processor, distributor, or resource vital to the greater northwest Lower Michigan food system. The insight offered by the owners and managers could not be overlooked when assessing the opportunities, challenges, and barriers present.

***This report defines local food as:
food produced within Benzie and
Manistee County boundaries.***

Limitations

The focus of this assessment was investigating the local food system involving food intended for human consumption. This study did not encompass the production, processing, distribution and marketing, and consumption of food for animals or plants. The assessment also excludes the evaluation of crop production for products other than food, including greenhouse, nursery, and floriculture production.

The timing of this study offered challenges during completion. The assessment was completed from June through July due to resource availability. The summer however, is a less ideal time of the year for participants. Being the peak growing and harvesting season, the local producers and processors repeatedly communicated their limited availability. Summer also being the peak travel season, the restaurant owners, chefs, and others involved in activities affected by tourism were very busy as well. Many stakeholders were unwilling to participate in surveys and interviews within the assessment time period. Although the busy season offered opportunities to access stakeholders and potential study participants currently active in the community, to ensure a more positive response, future studies would ideally occur during a different time of the year.

Inventory of Assets and Opportunities

The assessment included identifying and mapping assets and opportunities in the region. The intention of compiling such an inventory and map of all food related assets in the region is to provide a “full picture of food sector assets, their interconnections and their gaps, as well as data needs” (North American Food Sector, 2013, p. 19).

Assets are “forms of human, social, financial, physical, and natural/environmental capital that are essential and interactive building blocks for an investment and its wealth generating capacity at varying scales” (North American Food Sector, 2013, p.15). In this study, food system assets are forms of capital related to the production, processing, distribution, disposal, and eating of food. The assets are producer, community, and place oriented (Contrell et al., 2013).

Producer - Oriented

- Farms
- Cottage Industries
- Retail Trade Facilities
- Wholesale Trade Facilities
- Organizations that Provide Coordination/Assistance
- Processing Facilities
- Distributors
- Food Hubs
- Storage Facilities
- Marketing Services
- Farm to Institution Programs
- Infrastructure available
- Industrial Property available
- Business Support Services
- Available loans, grants, and fiscal incentives

Community - Oriented

- Community Gardens
- Community Supported Agriculture
- Farmers Markets
- Community/Incubator Kitchens
- Educational Programming
- Food Assistance Programs
- Community Food Partner Organizations

Place - Oriented

- Placemaking Initiatives
- Supportive Policy – zoning regulations and regional food business incentives
- Events/Agritourism
- Farm-to-fork restaurants

A detailed list, categorized by producer, community, and place-oriented food or food-related businesses was provided for the Lakes to Land Leadership team. Found in the Appendix, a partial list of available infrastructure and loans, grants, and fiscal incentives is provided. The Resources and Contacts section of this report also provides an overview of support programs and services.

Upon conclusion of the assessment, the asset inventory is not comprehensive according to the previously mentioned guidebook's recommendations. The inventory does not include infrastructure and industrial property available. An ideal comprehensive asset inventory would include existing structures, unused refrigerated and freezer space, unfilled dry storage space, available equipment, and other assets in the community. These assets were not identified by the participants possibly as a result of the survey and interview questions not clearly communicating the information that they were intended to gather.

The inventory identified 184 producer-oriented, 25 community-oriented, and 90 place-oriented assets in the L2L Region.

Farms, Farmers, and Food

The following data provides an overview of agriculture in Benzie and Manistee counties according to the USDA 2012 Census of Agriculture.

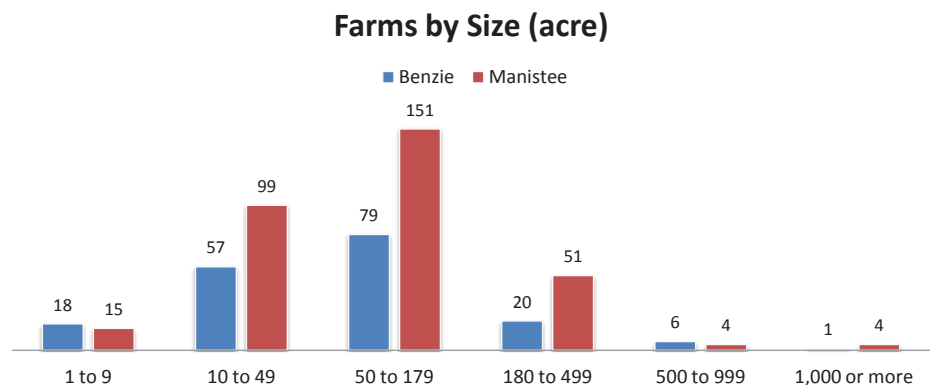
The following crops are harvested in Benzie and Manistee Counties:

Apples
Apricots
Asparagus
Beans
Beets
Blackberries
Blueberries
Broccoli
Cabbage
Cantaloupes
Carrots
Cauliflower
Cherries
Cucumbers
Garlic
Grapes
Herbs
Honeydew Melons
Lettuce
Nectarines
Nuts
Onions
Parsley
Peaches
Pears
Peas
Peppers
Plums and Prunes
Potatoes
Pumpkin
Raspberries
Rhubarb
Strawberries
Squash
Sweet corn
Tomatoes
Watermelons

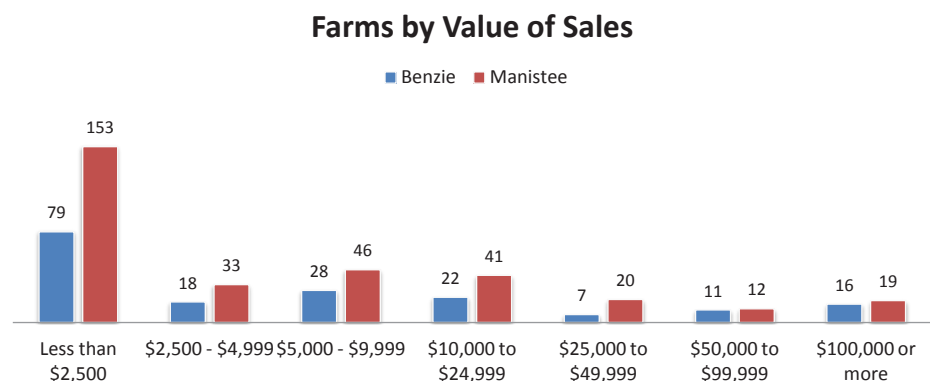
7. Farm facts table

	BENZIE	MANISTEE	TOTAL
Number of Farms	181	324	505
Land in Farms (acres)	20,646	44,298	64,944
Average Size of Farm (acres)	114	137	128
Median Size of Farm (acres)	65	80	74
Total Cropland (acres)	9,818	20,061	29,879
Harvested Cropland (acres)	7,560	13,624	21,184
Land Used for Vegetables (acres)	103	314	417
Land in Orchards (acres)	3,042	1,442	4,484
Land in Berries (acres)	9	93	102

8. Benzie and Manistee farms by size



9. Benzie and Manistee farms by value of sales

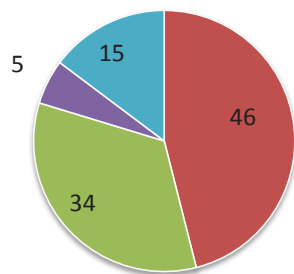


The market value of land and buildings on average per farm is \$422,623 and per acre is \$3,339. Per farm, the market value of all machinery and equipment is \$59,737.

10. Benzie and Manistee land in farms

Land in Farms by Land Use

■ Cro an ■ Woo an ■ Past re an ■ Other ses



12. Farmers market table

Photo: Kamil Kleczar

11. Farms by North American Industry Classification System table

	BENZIE	MANISTEE	TOTAL
Oilseed and Grain	13	36	49
Vegetable and Melon	9	10	19
Fruit and Tree Nut	39	23	62
Greenhouse, Nursery and Floriculture	17	42	59
Hay and All Other Crops	49	114	163
Beef Cattle	15	42	57
Cattle Feedlots	2	3	5
Dairy Cattle and Milk Production	0	3	3
Hog and Pig	4	9	13
Poultry and Egg Production	8	4	12
Sheep and Goat	3	10	13
Animal Aquaculture and Other Animal Production	22	28	50

Local Food Market Channels

The Lakes to Land region offers local and regional marketing opportunities. The market channels identified in this study to capture the local food system are wholesale, retail, direct to consumer, food service, and the emergency market. During the assessment, participating stakeholders identified which market channels their food or food-related businesses use to sell products and the percentage of their product that travels through the channel.

Wholesale

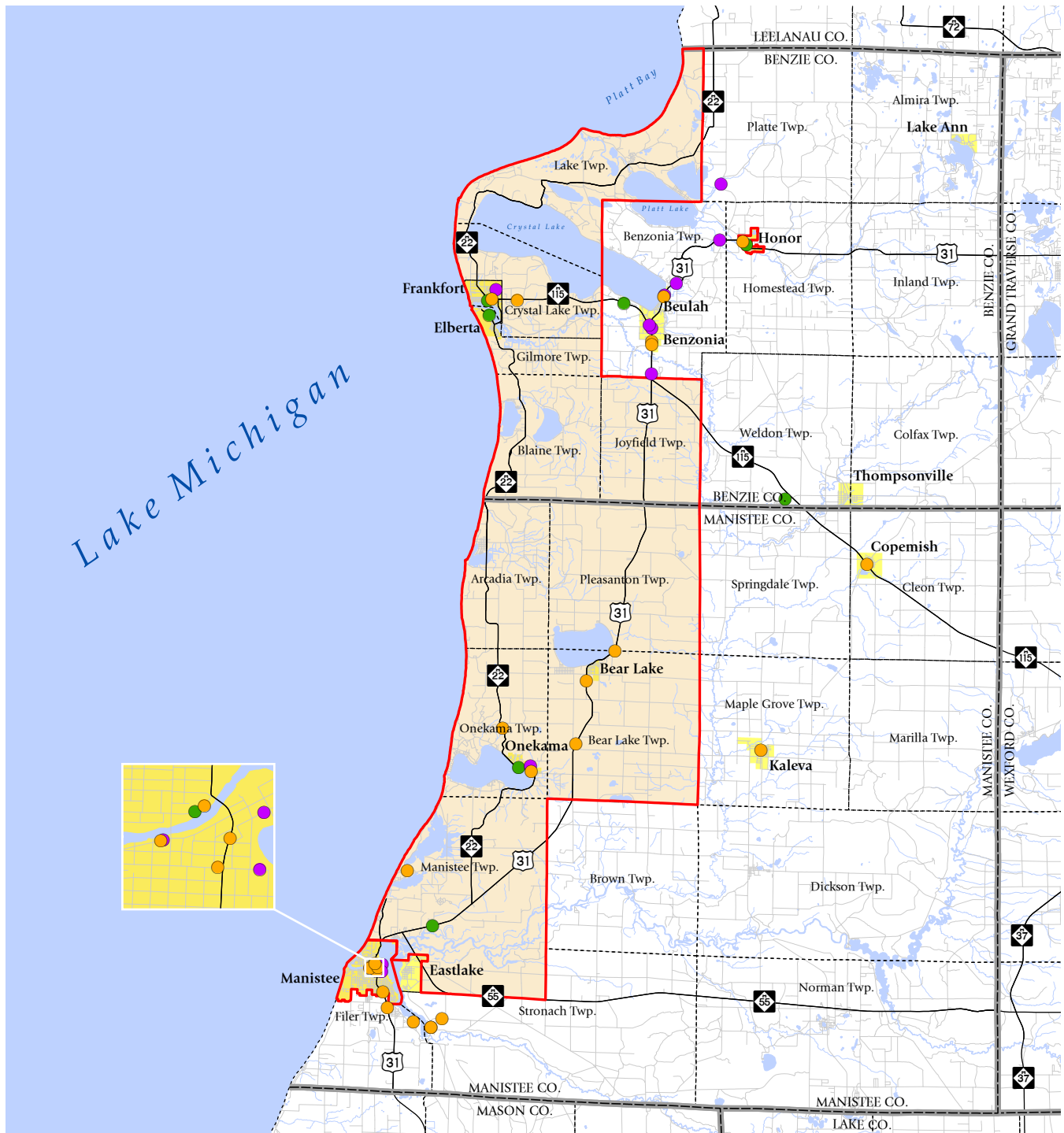
Products sold wholesale are sent to a processor or distributor. The L2L region is home to two (2) large processors and numerous small and medium processors. According to the U.S. Census 2012 County Business Patterns food manufacturing in Benzie County constitutes 26% of total manufacturing. The six (6) total food manufacturing establishments have 247 paid employees, and are of various sizes with the three (3) smallest employing 5-9 people and the largest employing 100-249 people. There is also one food manufacturer that employs 5-9 people within Manistee County's boundaries.

Some wholesale food products leave the producers for local processors and distributors in the greater northwest Lower Michigan region, such as Graceland Fruits or for Cherry Capital Foods, a local distributor in Traverse City. Other products travel to large processors and distributors in the state, other places in the country, and some leaves the U.S. borders.

Retail, Direct to Consumer, and Emergency Markets

The Retail, Direct to Consumer, and Emergency Markets address regional food security, or the residents' access to healthful, affordable, and culturally appropriate foods at all times. The region's food security was not the focus of this study, but it is important to identify the market channels used to address food security. The regional food security map is included to depict the availability of food geographically through retail locations, seasonal farmers markets, and food pantries. The map seems to show a food desert, or geographic area lacking means to obtain affordable, nutritious food in Blaine, Joyfield, Arcadia, and Pleasanton Townships. However, according to the Agricultural Parcels map, these townships have the greatest density of agricultural land. Perhaps retail locations, farmers markets, and food pantries are not available in these rural locations because underserved residents are either growing food for themselves, have the additional burden of having to travel outside of their area for assistance, or truly do not have access.

In this study the food security channels are markets available to connect producers with non-producers. They are geographically clustered around more urban areas to ensure the access of affordable, nutritious, and possibly local products to a greater population.



LAKE TO LAND

Regional Food Security

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization, Dun and Bradstreet, Google Maps, Community Engagement Sessions

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Market Type:

- Farmers Market
- Food Pantry
- Retail

0 2 4 8 Miles



Retail

The retail market includes grocery stores, produce stores, and specialty food stores. According to the U.S. Census 2012 County Business Patterns, of the 180 retail trade establishments in both counties, 23 are food and beverage stores. These stores comprise 14% of total retail trade in Benzie and 12% in Manistee. The establishments are generally larger in Manistee, as two (2) grocery stores employ 50-99 people while the largest grocery store in Benzie only employs 20-49 people.

Direct to Consumer

A significant amount of farmers sell food direct to consumer through farmers' markets, farm markets, CSA's, and on-site produce stands.

Food Service

The food service channel includes food sold to restaurants, café's, bakeries, caterers and institutions. According to the 2012 County Business Patterns, in the accommodation and food services industry, 86 establishments are food service and drinking places, a majority being full service restaurants. Overall, food service and drinking places account for 79% of accommodation and food service establishments in Benzie and 76% in Manistee. The industry employs 295 in Benzie County and 419 in Manistee.

Farmers Markets

Benzie and Manistee counties are home to seven (7) seasonal farmers markets listed in the 2013 Taste the Local Difference guide. Since they gather on varying days and times, there is a market on nearly every day of the week. Six (6) are located within the L2L region and include Elberta, Frankfort, Grow Benzie, Honor, Manistee, and Onekama markets. They vary in size determined by the number of vendors, and rules determining what can be sold at market; strictly edible products or also crafts and gift items. Those that participated in the surveys and interviews mentioned that these markets have drastically grown in the last ten (10) years and offer wonderful opportunities for the community. All of the markets are places full of activity as shoppers gather around tables and under tents, purchasing local food, and speaking with the producers directly. Farmers market shoppers are local yearlong and seasonal residents, and visiting tourists that come to "the new town square" for a taste of Benzie and Manistee during the growing season.

Farmers markets offer locals, seasonal residents, and visiting tourists a taste of Benzie and Manistee during the growing season.

Food Buying Clubs

A silent player in the region's food system is food buying clubs. They operate in rural locations in the U.S. to meet the needs of budget sensitive yet health-conscious consumers who do not have easy access to a health food coop or retailer or prefer buying in bulk to save money. In the most basic form, a food-buying club occurs when individuals join together to purchase bulk health foods directly from vendors, usually at wholesale prices. A semi-truck driver meets the members at a designated delivery site where they gather to unload, sort, and pick up their order.

With the increase in farmers markets and organic sections in food stores, rural communities have greater access to local organic vegetables and fruits, but very little access to organic staple items at affordable prices. At least three communities (Bear Lake, Onekama, and Frankfort) in the Lakes to Land region are, or have previously been, home to active food buying clubs to meet this demand. The clubs allow members to purchase staple items like flour, rice, beans, peanut butter, and value-added products by the case, offering more organic variety than a big-box retailer. The challenge with food buying clubs occurs when local entrepreneurs try to provide organic retail; as their success is impacted by these established food-providing clubs.

Emergency Market

The emergency market ensures that there is food available for those in need. Within the L2L communities, 2,789 people or 13.7% are below the poverty level and 1,364 people or 6.7% have received food assistance in the form of food stamps or SNAP benefits in the last 12 months.

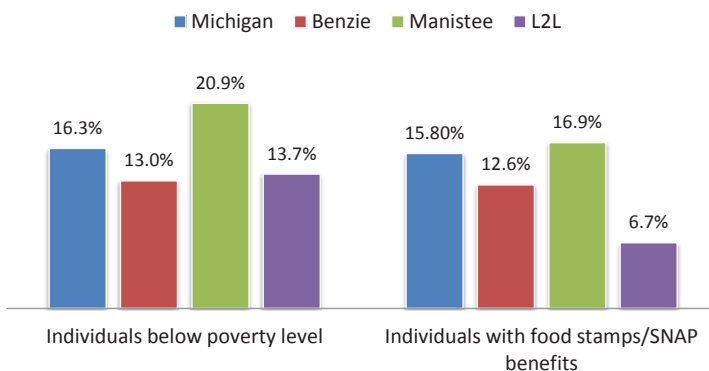
Thirteen (13) food pantries or food assistance programs were identified as L2L regional assets in the inventory. Many food pantries are hosted through non-profit organizations or supported by churches. In the past, the Fresh Food Partnership partnered with local farms to provide locally grown, healthy, fresh food to people in need through food pantries, shelters, and community meals programs in Benzie County. A participant in the study employed by a food pantry mentioned that they used to receive fresh produce donations, but unfortunately the program was discontinued last year.

Pantries obtain food through donations, and make purchases from grocery stores, and food distributors. Of the pantries that provide produce, the challenges in supporting local food include; transportation since food must be dropped off at their facility, price because they have to keep costs low, and the state of the food. Few facilities have a walk-in cooler and/or freezer and food must be in a ready to eat or frozen state since pantries do not have the means to do any processing in-house.

At the time this report was completed, the Benzie Sunrise Rotary Club was in the process of a similar food study on food security. The researcher had distributed surveys to all food pantries in a five (5) county region in northwest Lower Michigan as part of a research project funded by a grant through Rotary Charities. The goals of the Rotary Club's efforts are to develop a backbone organization for area pantries to determine how to work together, and work with farmers to increase the provisions of local food for members of the community in need.

The Benzie Community Gardens is a small group of Master Gardeners who have been meeting their volunteer hour requirements by growing and donating fresh produce to area food pantries. The group solicits donations towards the costs of seeds, plants, and renting garden plots at Grow Benzie; however, finding sufficient volunteers to weed, water, harvest, and deliver has been a challenge.

Poverty and Food Assistance



14. Poverty and food assistance

Source: 2010 U.S. Census



15. Community garden at Grow Benzie

Photo: Sharron May



16. Roadside farm stand

Photo: Kamil Kleczar

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Stakeholder Surveys and Interviews

The regional food assessment completed to gather information for this report included surveys and interviews with regional stakeholders currently involved in the local food system.

The following report is based on input gathered from 88 stakeholders in Benzie and Manistee counties, Traverse City, greater northwest Lower Michigan, and state of Michigan. Researchers gathered 50 surveys and completed 38 additional interviews.

The surveys were originally designed to be completed by individuals that represent local food producers and include questions to identify business opportunities, the barriers prohibiting these opportunities, what could help overcome these barriers, and present needs. Since it is composed of numerous open-ended questions to gather information, the process of completing the survey proved to be time consuming and overall not of interest to the producers. Surveys were distributed at farmers markets and the Farm Bureau Field Day meeting with little success. Since the researcher was more likely to obtain completed surveys with one-on-one in-person interviews, the survey questions were asked in conversation and the interviewee's answers were transcribed. Due to the business of the survey participants, their private nature and a lack of interest in participating, the interview opportunities were time consuming and difficult to arrange.

According to the USDA Economic Research Service (ERS), a family farm is "any farm where the majority of the business is owned by the operator and individuals related to the operator, including relatives who do not live in the operator's household."

This report classifies farms according to the USDA's Economic Research Service (ERS) original farm typology. A small family farm has gross sales less than \$250,000, and the category includes low-sales farms with gross sales less than \$100,000 and medium-sales farms with gross sales between \$100,000 and \$249,999. Large-scale family farms have gross sales greater than \$250,000.



17. Rainbow

Photo: Sharron May

This study did not take into consideration whether or not the farm operator's report a primary occupation other than farming. The gross sales used to determine the farm classification are based on actual sales reported in a database derived from Dun and Bradstreet.

Small Family Farms

Low-sales

Low-sales farms have less than \$100,000 in gross sales. According to the 2012 Census of Agriculture, 70% of farms in Benzie and Manistee counties are small family farms with low sales. Eighty (80) were identified as assets in the region and 19 participated in surveys and interviews.

In general, the participants grow a wide variety of crops and the sales of their products offer a secondary family income. Farming may have begun as a hobby, interest, or lifestyle that became a business. The farms vary in size from 3.5 acres to 183 acres according to the 14 individuals who reported the acreage of their farm. Many are small; as eight (8) of the fourteen (14) participants have farms less than 10 acres in size. Most of the farms in this category are family run by one (1) or two (2) people who may hire some sporadic paid help. The families have been in business farming for between two to 67 years. Nine (9) of twelve (12) responders have been in business for less than 10 years. They operate in mostly seasonal production and report the production of fruit, vegetables, and value-added products. Ninety four (94%) percent of the respondents process and sell 100% of their products within Benzie and Manistee counties.

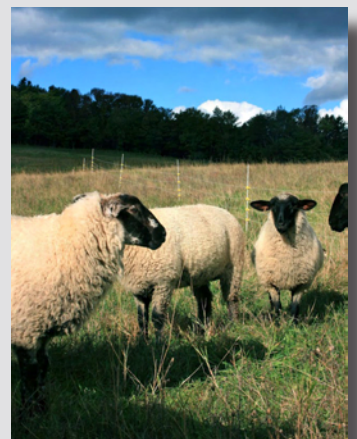
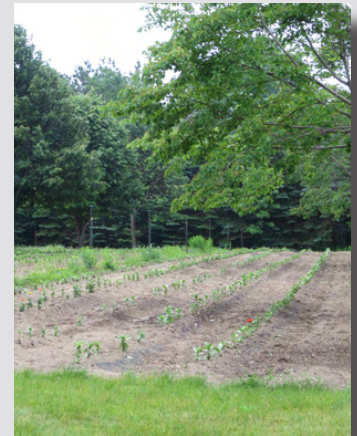
Market Channels

FARM → CONSUMER

FARM → RETAIL STORE OR RESTAURANT → CONSUMER

FARM → DISTRIBUTOR → RETAIL STORE OR RESTAURANT → CONSUMER

Seven (7) farms reported that between 70% and 100% of their product is sold through the direct to consumer market channel through farmers markets, private on-site farm stands, and u-pick programs. Their products can also be found at local retailers, produce stores, and grocery stores. Two (2) farms reported that they sell up to 20% of product through the wholesale channel and few farms also reported minor sales to retail, food service, and the emergency food market.

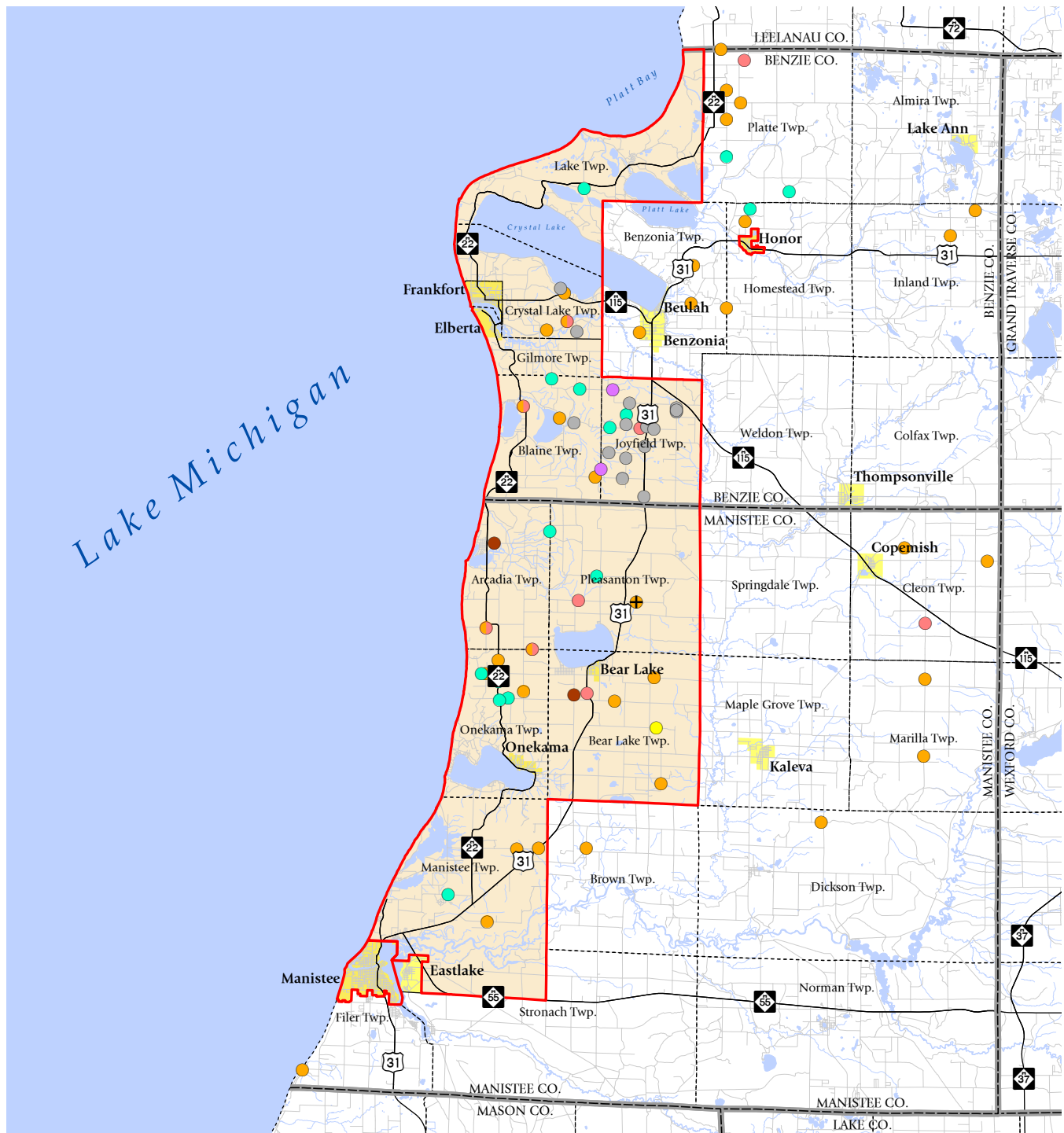


18. Small family farms

Top: Large garden in Crystal Lake Township

Middle: Road sign

Bottom: The May Farm



LAKES TO LAND

Small Family Farms - Low Sales

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Farm Product:

- Berries
- Corn
- Deciduous Tree Fruits
- General Farm Crops
- Livestock
- Maple Syrup
- ⊕ Organic
- Unknown

Opportunities

Small family farms with low sales want to be more self sustainable and self sufficient. All of the participants mentioned that their greatest opportunity is in fresh produce production during the growing season.

Small family farmers are interested in increasing produce production, increasing vegetable seed production, and making value-added products. Some are willing to try different products such as hops and Saskatoon berries and they would like to enter the wholesale market, increase sales to restaurants, and improve their CSA program. There is also interest in pursuing certifications or developing a web based business.

One participant shared that the opportunity for small farms to sell to restaurants is to identify a local restaurant with a need, develop a relationship with the owner or chef, and grow one or two products exclusively for the restaurant. The participant highlighted that if the farm invests in extending the growing season of the product and storage, they could meet the restaurant's demand.

Barriers

There are numerous barriers preventing the small family farmer from accessing the opportunities for their business. According to Petree (2014), farm families across the nation are experiencing obstacles to success such as a "lack of processing infrastructure, an ever-more intrusive regulatory system, and a near complete lack of understanding regarding the operation of a farm" (p. 14).

The barriers presented by the participants include:

- Limited capital, low credit, and financing problems
- High production costs

Based on the USDA Economic Research Service Projections of Food and Commodity Consumption between 2000 and 2020, per capita fruit and fruit juice consumption is projected to increase significantly at home and increase slightly away from home. Vegetable consumption is also projected to increase slightly at home and away. This projection, combined with the USDA ChooseMyPlate.gov recommendations, highlights the increasing demand for produce. The USDA recommends that half of a person's plate per meal is full of fruits and vegetables; foods that are grown close to home in northwest Lower Michigan. The website campaign recommends preparing fresh fruits and vegetables, and offers serving, preparing, and eating suggestions; all of which are important skills to communicate when encouraging Americans to increase their fresh food consumption.

- Transportation - the challenge of getting produce to markets, retail locations, and restaurants
- Lack of available storage and inspected processing facilities
- Lack of local demand for quality fresh produce
- Strict regulations that limit business
- Limited infrastructure
- High amount of labor necessary and lack of help

What would help overcome these barriers?

According to the farmers that participated, financing help and low interest, easy access loans would help them overcome some of the capital barriers. Other aids mentioned include easier access to a certified kitchen, available refrigerated storage space, and equipment resources.



20. In-field solar power

Photo: Sharron May

Unmet Needs

Small family farms with low sales are in need. Their needs that remain unmet include:

- Reliable, affordable electricity
- Reliable, affordable high speed internet
- Reliable, consistent cell phone service
- Cold storage space
- Access to an Individually Quick Frozen (IQF) freezer
- Method to secure land access for young and aspiring producers
- A farm transition process
- On-farm systems for alternative energy sources
- Expertise in solar energy
- Available processing equipment for the small scale production of vegetables, fruit, and meat
- Available greenhouse space
- Public and affordable water and maple syrup testing, a mobile testing service
- Easy access grants, assistance applying for and writing grants
- Revolving loan funds

PUBLIC EDUCATION/AWARENESS CAMPAIGN

To address the lack of local demand for quality fresh produce, a public education campaign was brought up to help brand local healthy food. The program should educate the public on farming, instill the value of healthy food, and teach people how to purchase and prepare fresh produce.

A public education or awareness campaign would compliment any other efforts to stimulate agricultural vitality. A campaign is necessary to educate the public about where their food comes from, help them understand the value of buying directly from local farms, and show them what they can do to support a healthy local food system.



21. Locally grown cabbage

Photo: Kamil Kleczar

A public education or awareness campaign would compliment any other efforts to stimulate agricultural vitality.

It is understood that the success of a public education/awareness campaign depends on the effectiveness of communication methods. Gibson (2014) points out that social media efforts have proven themselves to be successful methods of reaching the public about food.

Methods include a website, weekly e-newsletter, Facebook, Twitter, Instagram, Pinterest, and YouTube. Regardless of the mean of communication, the message should include storytelling and photos. Stories help customers/consumers connect the food on their plate to its origin by understanding the people involved in the process. This connection occurs at farmers markets during set times and the internet extends these opportunities for awareness by providing continuous communication on a personal level. Both farmers and organizations dedicated to the public awareness of food could use social media to compliment their efforts in stimulating the local food system since it has been proven to be an effective tool.



22. Locally grown peaches

Photo: Kamil Kleczar

Chris Wendel with the local investment group, Northern Initiatives addresses the economic benefit of micro-businesses in his article "The Rise of Micro-Business".

Some might dismiss businesses that fall into this category as minor players in our region's economic development, assuming they're a mere hobby or "cottage" business.... Collectively, these smaller operations provide additional income to families and new employment, and they are proving to act as a feeder system for future fast-growth companies. More and more these days, people want to run a business on a small scale that can be worked in to their personal lifestyle [without] a huge financial investment... this [is] a significant wave of small business development that delivers both job growth and economic development in northern Michigan.

Ideas and Strategies

The following ideas and strategies were devised by participating farmers and are categorized by the barrier or need that the subsequent ideas and strategies address.

Labor

A farm camp/internship program to introduce college-age students to farming and provide help on farms. The students would rotate farms throughout the summer providing assistance to different farmers in groups.

An organized volunteer program to help on farms or be sent to farmers markets to sell products

A work exchange program for either farmers to help other farms or public volunteers to help farms on specific projects during different times of the year.

Education

Local schools should teach children how to grow food, instill the value of local food, and encourage kids to learn food preparation methods through cooking classes, working in restaurants, or attending chef school. Recently, programs such as Food Corps have been brought in to area schools to teach children about food and nutrition in the classroom, engage students in growing healthy food, and increase lunch program's access to healthy local food. The challenge with programs such as these is that when they leave, the services they provided are not replaced within the school. The lessons and activities are not ingrained in the curriculum and since the schools have limited resources, the gardens and school lunch programs do not always continue.

Other

Create demand for CSA opportunities by encouraging local businesses to fund part of a CSA membership for their employees. The program would encourage employees to eat healthy local foods, therefore decreasing the company's health insurance costs and would support a local farmer.

FARMER COOP OR FOOD HUB

Numerous farmers discussed the possibility of a farmer cooperative or food hub. Either could be a method of sharing processing equipment and offer other opportunities for farmers to increase sales. A store could be open six days a week and be a place to go for one-stop local food shopping; an every-day farmers market that could also satisfy the local retail, restaurant, and institutional demand. The biggest issue in the success of such a facility would be planning the details including design and management. Farmers recommend that a single person or organization be responsible for managing the facility; tasks including scheduling, machinery cleaning and training. The facility would have to be well organized and offer more equipment and services than a farmer can access on their own in order to be successful. Respondents claim it would need to have a refrigerated food truck that farmers could use to bring their product to the hub and deliver to customers. The challenge with sharing processing equipment and resources is scheduling. Some farmers do not see a shared equipment program being practical from that standpoint alone.

Carthage Mill in Indiana is an example of a cooperative space. The 5,000 square foot space is a site for milling, packaging, brewing, and food preparation used by local producers. With a commercial kitchen, and free space for business seminars and ag-related educational events; the coop offers cost saving opportunities and has opened doors to collaboration (Miller, 20140, p. 13).

The 2013 Feasibility Report for a Food HUB found that farms between one (1) and four (4) acres, within the 14 county region of northwest Michigan, are most interested in selling their product to a food hub (Cambier). The author figures that these farms have found that it is unsustainable to sell all of their production direct to consumer but they are not large enough to sell to a processor; therefore they are interested in aggregation to access new market channels. Although many of the local small family farmers grow on up to 10 acres, they are still very interested in a food hub.



23. Tractor

Photo: Kamil Kleczar

The focus of this study is addressing the needs of the L2L region on a small scale; however it cannot be ignored that the Feasibility Report for a Food HUB found that a “produce aggregation HUB selling only produce cannot be operated profitably in [the 14 county region of Northwest Michigan] under current conditions” (2013, p.31). For a hub to be successful, substantially more produce would have to be grown, a wider produce supply shed would have to be used, or the hub would have to carry more products and offer more services.

Cambier (2013) mentions that Sysco and Cherry Capital Foods are interested in working with an aggregator in the region, but the disconnect comes in the current market place where:

- Most customers are not willing to pay a premium for local produce
- The local food infrastructure is generally inefficient and thus costly
- The local farm business model is largely not oriented to wholesale production

A local farm business model designed to compete in the international produce market is not likely to be developed until the infrastructure is developed to serve them and there is a leveling of the playing field in terms of subsidies. This infrastructure could include such things as a labor force, crop insurance, investment capital, the experience and skills base needed to operate the necessary farm business model, a regulatory climate that makes relatively small costs effective, equipment rental or sharing; and of course aggregation, processing, and distribution.

The disconnect discussed here, while applied to aggregating at a large scale, would also impact food hub or aggregating efforts on a small scale to access the wholesale market within the L2L communities.



LAKES TO LAND

Small Family Farms - Medium Sales

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Farm Product:

- Asparagus
- Berries
- Corn
- Deciduous Tree Fruits
- General Farm Crops
- Livestock
- ⊕ Organic

0 2 4 8 Miles



Small Family Farms

Medium-sales



25. Putney Beef or Fruit in Arcadia

Medium-sales farms sell between \$100,000 and \$249,999. Only 12% of farms in Benzie and Manistee counties have medium-sales according to the 2012 USDA Census of Agriculture. The eight (8) farmers that participated in the study represent 50% of the farms in this category identified as assets in the L2L region.

Participants produce higher quantities of a smaller variety of crops including apples, cherries, peaches, blueberries, asparagus, beef, and eggs. According to participants, the families have been in business for 29 to over 100 years and the farms are larger than those in the low sales category. The six (6) farmers that reported acreage have farms that vary in size from 40 to 1350 acres depending on the product. In general, medium-sales farms have more year-round employees and hire between 8 and 16 seasonal employees. The amount of product that is sold in Benzie and Manistee counties varies greatly. Some farms reported that they sell 100% of their product in the region, while numerous others reported that they sell less than 20%, and some as little as 2%.

Market Channels

FARM → DISTRIBUTOR → RETAIL STORE OR RESTAURANT → CONSUMER

FARM → SMALL PROCESSOR → RETAIL STORE OR SCHOOL → CONSUMER

FARM → PROCESSOR → DISTRIBUTOR → RETAIL STORE → CONSUMER

Small family farms with medium sales report that 50 – 100% of their product is sold through the wholesale market, the average of the seven (7) participants that provided the information is 83%. Some farms in this category also sell to retail and food service. The six (6) participating farms that sell direct to consumer report an average of 23% of their product uses this channel, a range from 50% to as little as 1%. The small amount of food that goes right to the consumer's plate is through u-pick, farmers markets, and online business.

Opportunities

Small family farms with medium sales report their largest opportunity is to increase production. Many reported their interest in increasing sales to local restaurants and grocery stores, and selling more products direct to consumer.

Barriers

The barriers preventing the mid sales farms from accessing their opportunities are similar to those experienced by the low-sales farms:

- Limited capital
- Lack of local processing facilities
- Strict regulation and licensing requirements
- High Transportation costs

Farmers also reported a lack of local demand but they attribute it not to a lack of local interest, but to a small local population.

Farmers feel that there are not enough local residents to consume all of the products produced locally.

According to the U.S. Census, the L2L region has a population of year-round residents of over 20,000. Although the population increases significantly during the summer months, farmers feel that the population is not large enough to support a local food system. Data from the 2012 Census of Agriculture shows that the increasing number of farms near large

High transportation costs is a reoccurring barrier among all local producers. As cited in the 2013 Feasibility Report for a Food HUB, the authors of the study "Local Food Prospectus for the Tri-State Region", found that "the inefficiencies of moving 200 pounds of local food 20 miles are equivalent to moving 30,000 pounds 3000 miles" when exploring the efficiencies of the current national and increasingly international food distribution system compared to the common "local" food system. Cambier highlights that "food produced in relatively small amounts in scattered locations is expensive to accumulate" (p. 21).

metropolitan areas of the nation could lead one, like Petree (2014) to "infer that availability to a large city or other population center is good for small-scale farming." Also, the growth in the number of farmers' markets, the proliferation of farm tours and other aspects of agri-tourism, the interest in CSAs and a host of other farm-related ventures suggests that access to large non-farm populations is significant to the success of many small-scale operations" (p. 41).

Personal factors such as age and health also came in to play as barriers more among medium sales farmers. According to the 2012 U.S. Census of Agriculture, the average age of farm principal operators is 60.9 years in both Benzie and Manistee counties, 3.3 years older than the Michigan state-wide average, and 2.6 years above the national average.

Since these farmers are producing a significantly greater amount of products than the low sales farmers, labor is a greater challenge and barrier. Participating farmers discussed their challenges attracting and keeping employees for harvest. According to Smaus (2014), the "workforce in sustainable small-scale farming is mainly polarized into two camps: skilled farmer-owners and unskilled seasonal interns or temporary employees" (p.26). He argues that there is currently no middle path to sustain those who have acquired some skill, other than becoming farmers on their own. They are at a disadvantage due to a lower base of knowledge and

skill resulting from little experience working on farms.

There is a developing need for paid, skilled employees on small farms. The challenge is that there is little skilled labor available for hire to small farm owners. Internship programs are questioned because of the lower wages, lack of commitment from the interns, and extensive time investment requirements of the farmer for education. Complete employment packages with health insurance, housing, garden space, and food however could attract young people to longer term work on farms; encouraging them to combine knowledge from older farmers with experiences with products of modern innovation and science. The combination could prepare small scale farmers for the new local food system.

What would help overcome these barriers?

- Innovative ideas and collaboration
- Local meat processing facilities (poultry requires a separate infrastructure than red meats)
- An educated, reliable workforce
- A change in mentality among the public, restaurant owners, and chefs in regards to an understanding that prices are higher for quality local product.
- Marketing expertise

Unmet Needs

Reliable, affordable high speed internet access was identified as a need; however the medium sales farms highlighted their greater need for three-phase electricity and natural gas. Three-phase electrical power is more economical than the equivalent single-phase or two-phase system and can be used to power large motors and other heavy loads. Participating farmers emphasized how these utilities would offer business opportunities for growth and expansion.

Other needs mentioned include freezer storage space and available expertise. The MSU Extension has been a source of expertise in the past, but participating farmers mentioned their recent challenges with MSU Extension now that the experts are no longer located in every county. The educators are now more specialized in specific areas and located throughout the state; limiting their availability. Although the MSUE news articles, and information shared on the web is helpful, farmers report that it is not as valuable as having an Extension educator available for specific needs.

Ideas and Strategies

The following ideas and strategies were devised by participating farmers:

- A continuous public education/outreach program to educate consumers on the benefits of quality local food
- A mentorship or networking program to connect existing farms with interested young farmers that includes an education and training program
- Shared refrigerated or freezer trucks to reduce transportation costs and create opportunities for new business. Farmers could rent or lease the truck by the day or mile to transport product. There was a need identified from beef farmers for something/someone to bring product back to the local market from the processing plant.

LOCAL FOOD COORDINATOR

According to a participating farmer, the agricultural community is suffering from connection and communication gaps that were previously filled by MSU Extension. They are in need of someone immediately available with expertise, knowledge of the area, and the ability to bridge connections between producers, processors, and consumers. The recommendation is to implement the position of a Local Food Coordinator.

The position is trending among agricultural communities.

In Cebarrus County North Carolina, a Food Policy Council was created to identify and strengthen the connections between food, health, natural resource protection, economic development and the agricultural community. The Local Food System Program Coordinator coordinates the efforts of the council.

Purdue University Extension in Indiana has a local foods coordinator to strengthen existing connections between farmers and consumers, and support communities that are ready for food hubs and wholesale.

Louisville, Kentucky has a Farm to Table coordinator focused on growing a local food economy, and Lexington is soon becoming the second city in Kentucky with a local food coordinator. The programs and positions are funded through agricultural development funds, private foundation money, and city funds to solve problems and create opportunities for local food.



26. North Star Organics in Frankfort

Large-Scale Family Farms

Large-scale family farms are those with sales greater than \$250,000; of which four (4) are identified as assets in the L2L region. Within all of Benzie and Manistee counties, 17% of farms have sales greater than \$250,000.

The three (3) large-scale family farms that participated in this study produce apples, cherries, peaches, wine grapes, strawberries, and asparagus on between 325 and 1000 acres. On average, the farms have been in business 47 years and hire about 45 or 50 seasonal employees. The respondents reported that some of their product is processed locally but the percentage amount locally sold varies greatly depending on the farm and product; from 60% sold in Benzie and Manistee counties to only 70% sold in the entire state of Michigan.

Market Channels

FARM → DISTRIBUTOR → RETAIL STORE OR RESTAURANT → CONSUMER

FARM → PROCESSOR → DISTRIBUTOR → RETAIL STORE → CONSUMER

Of the farms that reported market channel use, 85 – 99.75% of their product is sold wholesale.



27. A cherry orchard in Joyfield Township



LAKES TO LAND

Large Family Farms

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization, Dun and Bradstreet, Google Maps, Community Engagement Sessions

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road
- Farm Location

0 2 4 8 Miles



Opportunities

The opportunity exists for large-scale farms to increase production in fresh products through wholesale and retail. On order to do so, the needs and opportunities of large processors and distributors should be identified since the wholesale market would have to grow to increase demand.

Barriers

The main barriers preventing the large farms from accessing their opportunities for growth are similar to those barring the small family farms; labor and the lack of local processing facilities. Large-scale family farms also mentioned they are more heavily affected by government rules and regulations; as inspections for certification are costly and time consuming. Lastly large-scale family farms also mentioned the challenges of marketing and advertising, which can limit business.

What would help overcome these barriers?

Labor reform is absolutely necessary for large-scale family farms and participating farmers mentioned the need for a guest worker program. They would also benefit from available expertise in marketing and advertising to help grow their business.

Unmet Needs

Needs include three-phase electricity, natural gas, and access to an IQF freezer.



29. Evans Brothers Orchards in Joyfield Township

Produce Wholesalers and Distributors

Opportunities for large farms could be to sell fresh product to produce wholesalers and distributors. Many operate near Grand Rapids since they supply the broad-line distributors like Sysco and GFS and retail grocery stores with locations near there. While Sysco currently does not have produce needs that are unmet according to the produce buyer that participated in an interview, the broad-line distributor recognizes that there may be opportunities to expand local produce since it is valued by their customer base. Sysco currently carries a grown in Michigan product line and the buyer at Walsma and Lyons that participated in an interview mentioned that they also have a local product line of Michigan grown products. The challenges for sourcing local product include high transportation costs, the shorter growing season, and ensuring food safety certifications from the growers. Produce purchased from Michigan farmers by Walsma and Lyons and Freshway Foods includes apples, asparagus, cabbage, cucumbers, peppers, radishes, romaine lettuce, squash, and zucchini.

AGRITOURISM GUIDE

Tourism is a large economy in Benzie and Manistee counties, with seasonal residents and vacationers visiting the area each summer. To provide this audience with historical information, news, and information on businesses and activities in the area, guides are released by the Benzie County Chamber of Commerce, Benzie County Visitors Bureau, Frankfort Elberta Chamber of Commerce, and the Manistee County Visitors Bureau. Recognizing the attractiveness of the area's agriculture, farms and farm business are frequently featured in these publications; offering information about tours, tastes, and u-pick programs. However, the list of farms included in these guides is not comprehensive and does not include descriptions, directions, or detailed information since the focus is overall tourist attractions, not only agritourism.

The 2014 Michigan Agritourism directory encompasses all farms in the state in a small book, providing contact information, directions, and descriptions of the farm and products available. However only a few farms are listed in Region 2, Northwest Michigan; none of which are in the L2L region.

The Food Travelers Guide, intended to be the "ultimate road map to the freshest food destinations in northwest Lower Michigan", showcases five producers, processors, and retail locations within the L2L region, providing descriptions and contact information. The guide does not meet the needs of the traveling tourists though because it is printed on a very large poster-sized map intended to be displayed on a wall rather than used in a car on a local food journey.

The Local Food and Farm Guide released by Taste the Local Difference is a listing of local farms, specialty producers, farmers markets, restaurants, and retail locations broken down into twelve maps. One map conveniently covers both Benzie and Manistee counties. The brochure is small enough to travel with but does not provide information on the local businesses other than the name, address, and phone number. Numerous farmers, and restaurant and retail owners that participated in the study discussed the value of the previous Local Food and Farm Guides which were publications released in years past providing background information about the farm, directions, descriptions and available products in a booklet. Taste the Local Difference now offers this information only on the website and through the app for Android and iPhone. Although the current map does not meet all of their needs, the public values the printed publications.



30. Existing agritourism guides

Photo: Beckett & Raeder

Unfortunately the 2014 Benzie and Manistee guides were not printed and released to the local public until the end of July, well into the tourist and growing season. Taste the Local Difference also did not have a mechanism in place to ensure that the Benzie and Manistee guides arrived at participating businesses, visitors' bureaus and nearby hotels and resorts.

A need was identified by family farms and processors of all sizes, and retail and restaurant owners for a comprehensive Agritourism guide. The existing guides are not meeting the needs of the suppliers and the consumers.



LAKES TO LAND

Food Processors

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization, Dun and Bradstreet, Google Maps, Community Engagement Sessions

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Processor Type:

- Processor
- Cottage Food Law
- Incubator Kitchen

0 2 4 8 Miles



Processors

A food processor is an individual or business that transforms raw ingredients into food or other forms of food. Within the L2L food system, 28 processors were identified as assets and 50% participated in surveys and interviews.

In this report, the food processors are categorized into three (3) categories: small, medium, and large food processors. Their classification was determined by the location of production and sales, and when available, the actual sales reported in a database derived from Dun and Bradstreet. The food processors map depicts the small, medium, and large processors.



32. Food processor's products

Top: Daniela's Delectables
guten free cupcake

Middle: Wee Bee Jammin'
Toe Jam

Bottom: Fruit dryer at
Graceland Fruit co.

Small Processors

The small processors category includes businesses that operate under the Cottage Food Law or in a commercial incubator kitchen. Eight (8) small processors participated in the study and in general, their processing businesses offer a secondary income; they do not hire employees, operate seasonally, and they are relatively newer businesses. The small processors in this category make value-added products such as baked goods, jams, jellies, and preserves. Although their product is processed and mostly sold in Benzie and Manistee counties, very few source all of their ingredients locally. Those that do source product locally purchase directly from farmers or at local grocery stores.

Market channels

Nearly all small processors sell 100% of their product direct to consumer; although one (1) respondent reported selling 95% through the retail market.

Opportunities

Most of the small processors that responded are interested in increasing production and growing to supply the wholesale market. Their immediate opportunity is to capture the local market.

Barriers

The largest barrier that prevents small processors from growth is the expensive overhead for operating an independent food processing business.

The reported barrier to sourcing more products locally is that local farmers have not been able to arrange large volume purchases for staple products. Small processors are interested in occasional large volume orders at bulk prices and there may be miscommunication or unwillingness to compromise between farmers and small businesses.

What would help overcome these barriers?

The following would help small processors overcome the barriers they face in growing their business:

- Low rate small business loans
- Small business and marketing expertise (computer skills, label making, logo design, website management and promotion, etc. classes)
- Zoning and planning that allows for urban agriculture and accessible places for value-added production
- Consistent resources for start-up food and food related businesses

Needs

The needs of small processors include IQF freezer access, possibly out of the incubator kitchen Grow Benzie and refrigerated transportation to deliver their product to retail locations.

Ideas and Strategies

The following ideas and strategies were devised by participating small producers:

- Encourage gleanings, the act of collecting leftover crops from farmers' fields after harvest. The food could be used by small processors or donated to food banks. The challenges would be encouraging farmers to allow others in their fields and ensuring an accessible pool of volunteers available at a moment's notice to collect and transport the food for the emergency market.
- Form a connection between local businesses for collaboration with the goal of encouraging communication, and sharing information and resources. This should be an informal program that could be internet based where processors could request products, guarantee business, and purchase products.



33. Berries being processed in a business under the Cottage Food Law

Photo: Sandra Skees

Medium Processors

The four (4) medium processors that participated in the study operate from an independent location with a certified commercial kitchen. In general, they hire two (2) or more employees, operate year round, and have been in business for more than six (6) years. The products they produce include jams, jellies, and preserves, honey, mead, wine, and canned products. All of the participant's products are processed in Benzie and Manistee counties, but little is sold in the local market. Some ingredients are sourced from locally when possible from farmers and other local processors.

Market Channels

The four (4) participants reported 30 to 60% of their product is sold wholesale. The remainder of their product is sold through retail and direct to consumer channels.

Opportunities

The opportunity for medium processors is to increase production to sell product outside the local food market. Participants are working with Cherry Capital, the local distributor, and commercial sellers such as Meijer, Kroger, and Whole Foods with their eyes on the state of Michigan and Great Lakes region market.

Barriers

Participants reported numerous barriers prevent businesses from securing a position with commercial sellers. These barriers include contracting costs, the costs of new SKU's per item for the Universal Code, shelving and other costs, and buy back policies. The challenge is navigating these barriers and working with the sellers. The codes, regulations, and regulatory practices for processors is also very expensive and time consuming.

What would help overcome these barriers?

The only reported solution to overcoming the costs of starting commercial business with large retailers is money and representation to pave the way for medium processors to become large processors.

Needs

The needs of medium processors are similar to those of small processors and include low rate small business loans and small business marketing and expertise. Medium processors emphasized that they are not interested in grants.

Participants revealed needing cold storage space, access to an IQF freezer, and affordable and accessible natural gas.

Ideas and Strategies

The following ideas and strategies were devised by participating medium producers:

- An online resource or database to connect farmers with businesses looking for product
- Encourage incubator kitchens to offer business classes, rather than spending money on equipment. The businesses should be encouraged to use co-packing facilities for their product. The classes would provide the much needed financing, marketing, and general business education for young entrepreneurs.



34. Packaged dried cherries from Smeltzer Orchard, Co. in Joyfield Township

Large Processors

Benzie County is home to two (2) large food processors with actual sales greater than \$10 million that dry or freeze fruit. They operate year-round processing 100% of the product within the county, their products reach a global market, and they provide a large amount of jobs and trickle-down business opportunities. Both source between one-third and one-half of the cherries they process from Benzie and Manistee counties.

Market channels

Both participants reported that product travels to larger processors and food manufacturers; very little product enters the retail or direct to consumer markets.

Barriers

The largest reported barrier to increasing production is labor.

What would help overcome these barriers?

One participant discussed the need for immigration reform and a guest worker program. The H-2A Temporary Agricultural Workers program has been used in the past but is very challenging. The program allows U.S. employers or U.S. agents who meet specific regulatory requirements to bring foreign nationals to the United States to fill temporary agricultural jobs. The challenges are that employers have to commit in advance to dates for work and give specific scopes of work. The suggestion was made that the program would be more successful if local farmers grouped together to bring in labor with a wide variety of dates for numerous harvests and a wider array of scope of work. The specifics on the program can be found here: <http://www.uscis.gov/working-united-states/temporary-workers/h-2a-agricultural-workers/h-2a-temporary-agricultural-workers>.

Needs

The needs of large processors are very similar to those of family farms:

- Reliable, affordable high speed internet
- Reliable, consistent cell phone service
- Three-phase electricity
- Maintenance on existing, and replacement of damaged electric poles
- Natural Gas
- Cold Storage Space

Their additional needs include: specialized equipment development for fruit processing (specifically for cherries which have pits and are harvested mechanically), specialized chemicals, (specifically fertilizers for fruit plants), and the breeding of special varieties (specifically of apples and cherries).

Another major need discussed is transportation at a large scale. The large processors need a rail system to expand their market and send reliable shipping containers to ports.

Ideas and Strategies

The strategy to assisting in the regional labor challenge developed by a participant is to increase trade and skilled labor courses in local schools. Young people not planning to attend college should be encouraged to pursue apprenticeships and skilled labor programs. The participant would like to see more industrial arts, home economics, farm programs, and coops in local schools.

Retail, Restaurants, and Institutions

Many of the retail, restaurants, and institutions in the region that are most interested in sourcing local food are currently doing so. Some of these vendors consider this a competitive edge and their niche in the marketplace.

The largest challenge in supplying these markets is that some owners and chefs discussed their need for consistent, reliable product, and large quantities from few sources. By nature, local food is grown during the local growing season, not necessarily consistent in size, and subject to the local seasonal weather fluctuations. Although there are methods to extend the growing season, it must be understood that fresh products cannot be provided locally year round.



35. Commercial kitchen in Benzie County
Photo: Kamil Kleczar



36. Coho Cafe in Frankfort
Photo: Kamil Kleczar



LAKES TO LAND

Restaurants, Cafes, and Bakeries

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization, Dun and Bradstreet, Google Maps, Community Engagement Sessions

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road
- Restaurant, Cafe, or Bakery

0 2 4 8 Miles



Retail

Opportunities

The opportunity in retail is to carry more local product and increase business. The participants noted the existing demand for local goods and the importance of local food branding and in-store signage to identify sources.

Barriers

The barriers to increasing sourcing and selling local product identified by retailers are:

- The short growing season
- Little production capacity
- Delivery – Farms need to deliver product to the store location.
- Price – Price is the largest barrier to selling local produce. Retailers claim that customers spend more money at the farmers markets than they are willing to pay at the grocery store. Retailers also struggle getting farmers to understand the price that they are willing to pay for product.
- Sales – Retailers claim that their barrier is consistent sales. They attribute this to the fact that there are not enough people shopping year-round to ensure consistent business.

What would help overcome these barriers?

For retailers to increase their local food sales, all participants agree that a public campaign or marketing strategy to brand local food would be successful.



38. A meal for two at Coho

Photo: Kamil Kleczar

Needs

The needs identified by the retailers include:

- Reliable, affordable high speed internet
- Reliable, consistent cell phone service
- Coop facility for protein processing
- Shared refrigerator/freezer truck to enable farmers to deliver product

Restaurants

There are a total of 64 restaurants identified as assets in the Lakes to Land region. Many restaurants are most interested in the convenience that broad-line food distributors offer. For some restaurants, such as the nine (9) that participated in the study, sourcing and serving local food is important to their business and they are already making local purchases. In general, these restaurants operate year round, sell Michigan-made beverages, purchase value added products from the local distributor and purchase produce directly from farmers during the growing season. The restaurant owners that participated in surveys and interviews are personally active in the local food system, and committed to supporting local producers. Their passion has influenced their business decisions, allowing them to justify any sacrifices of time, convenience, etc. that purchasing local may require.

Opportunities

The opportunity that exists for local restaurants is to increase the volume of local products that they source and serve.

Barriers

The communicated barriers that prevent this increase are:

- The need for a consistent and reliable product, with standard piece and pack sizes
- Price – Some restaurant owners claim that local product is usually more expensive than products from their broad-line distributor. They also claim that the prices of the local distributor are too high.
- Lack of affordable local proteins that are packaged and frozen individually
- Some restaurant owners are hesitant to switch to mostly local product because they would have to change their menu depending on availability.
- Some local products require additional steps in preparation.
- Convenience – For some restaurant owners, the convenience of a broad-line distributor is hard to sacrifice for local product.
- Delivery – Farms need to deliver product to the restaurant.

Ideas and Strategies

Restaurants interested in serving local food could benefit from a local food hub, coop, or organization that sources, aggregates, sells, and distributes local products.

Institutions

The Lakes to Land region is home to twelve (12) institutions identified as assets. Institutions are often a function of government or public service and require food service. The institutional markets include K-12 schools, hospitals, colleges/universities, prisons, and camps that typically purchase exclusively from broad-line food distributors; sometimes with contracts for specific vendors that last for years.

Opportunities

The three (3) participants emphasized their interest in sourcing local product either now or in the near future.

Barriers

The barriers to sourcing local product mentioned by the participants are price, certification, quantity, and delivery. In general, institutions have a tight budget; therefore price is a large barrier to purchasing local product. Broad-line distributors are able to sell food cheaply. Many institutions require USDA certification from their vendors and if purchasing directly from farmers, the farmers would have to be certified. Institutions also demand a large quantity of produce. A participant mentioned that their hesitation to purchasing local product is ensuring that the farmer is able to meet this quantity demand. Finally, institutions value delivery service and farms need to be able to deliver product regularly.

In regards to schools, the most obvious barrier to sourcing local product during the school year is the growing season. The growing season occurs during the summer months when school is not in session. Flexibility and communication of interest and needs could help get local food on lunch trays. *According to the 2013 Feasibility Report for a Food HUB, schools in the 14 county region of Northwest Michigan are most interested in purchasing whole local fresh fruits and vegetables than frozen or processed produce. The study also found that schools are more interested in processed vegetables rather than frozen and frozen fruit rather than processed. This study highlights the opportunities for farmers producing fruit to enter the local school market with frozen product during the school year.*

Ideas and Strategies

Like restaurants, institutions interested in serving local food could also benefit from a food hub, coop, or organization that sources, aggregates, sells, and distributes local products.



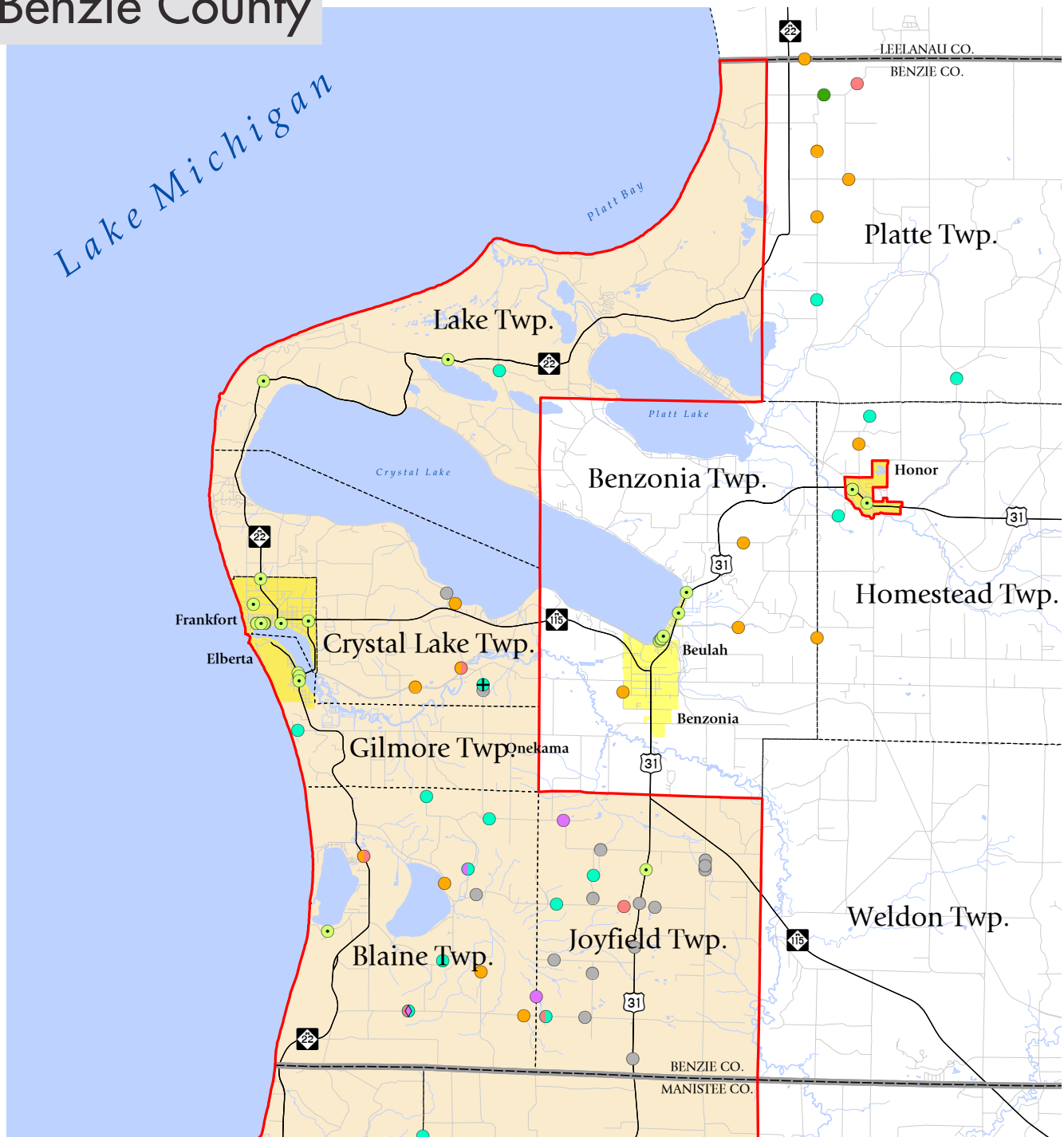
39. The May Farm

Photo: Sharron May

2012 Michigan Vegetable Farmer Survey

While the Center for Regional Food Systems through Michigan State University has conducted numerous surveys of institutional buyers' food purchasing and serving practices to gain their perspectives and identify their uses of local food; in 2012, the first supply-side Farm to Institution (FTI) survey was conducted. The survey was completed by 311 of the 825 vegetable farmers in Michigan; of which only 7% reported selling their produce to any institutions. Overall 50% of farmers were interested in selling to K-12 schools, hospitals, and colleges and/or universities. Farmers are motivated to sell to institutions because they value supplying healthy and local food to customers. The top factors that would be of the most help to begin or increase sales of vegetables to institutions would be knowing which were interested, ensuring consistent ordering, and higher prices. Farmers are concerned about timely payments, low prices, and regular communication with customers when considering selling to institutions. Finally, the logistical challenges from a farmer's perspective are the institution's potential requirement for packaging, product consistency, and delivery. More information about the survey can be found at www.foodsystems.msu.edu.

Benzie County



LAKES TO LAND

Food Service and Producers

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization, Dun and Bradstreet, Google Maps, Community Engagement Sessions

Participating Communities

City or Village

County Boundary

Township Boundary

Major Road

Minor Road

Food Service Location

Farm Product:

Asparagus

Berries

Corn

Deciduous Tree Fruits

General Farm Crops

Livestock

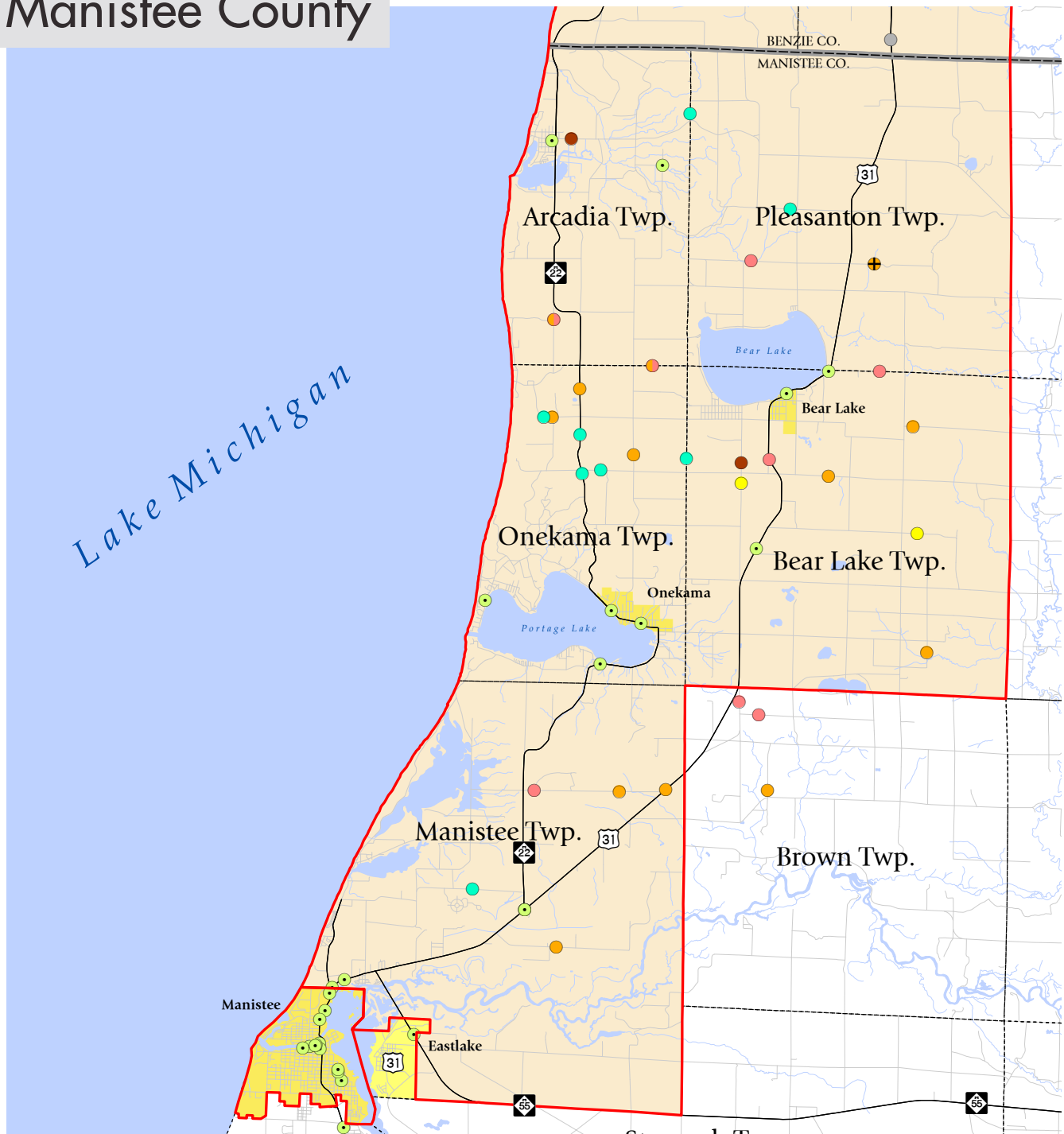
Maple Syrup

Organic

Unknown



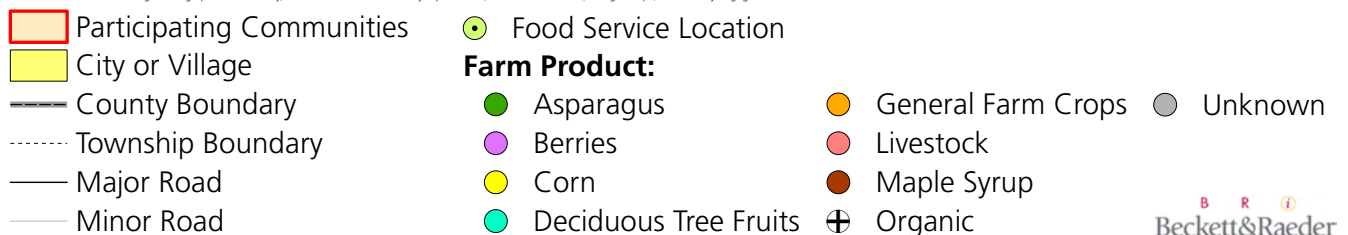
Manistee County



LAKES TO LAND

Food Service and Producers

Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization, Dun and Bradstreet, Google Maps, Community Engagement Sessions



B R I
Beckett & Raeder

Regional Prosperity Strategies and Solutions

At the time of this report, the Northwest Michigan Council of Governments (NWMCOG) was currently working with the ten-county region of Antrim, Charlevoix, Emmet, Benzie, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, and Wexford counties on a regional prosperity plan.

The plan, called *Framework for our Future: A Regional Prosperity Plan for Northwest Michigan* is part of the statewide Regional Prosperity Initiative (RPI) initiated by Governor Snyder and signed into law as part of the FY 2014 Budget. The purpose is to provide information, tools, and action guides for organizations and communities seeking ways to connect to larger, more regional goals. In April and May of 2014, community members throughout the region had the opportunity to participate in strategy work sessions to discuss actions and solutions to common issues. One of the issues discussed was agriculture; therefore participants worked to produce strategies and solutions for food and farm challenges.

In this study, researchers used the previously proposed strategies and solutions, compiled by the NWMCOG from the work sessions to gain feedback from members of the L2L communities. Community members were asked to participate in a sticker-voting exercise to prioritize the strategies and solutions at community events, farmers markets, and an L2L leadership team meeting. Individuals were asked to use star stickers to indicate which of three (3) or four (4) strategies would most successfully achieve each of four goals. Seventeen (17) individuals that live within the study area participated in the activity.

Planning and Policy Goal: Coordinate policies, plans, and ordinances that support local food access and agricultural production, processing, and marketing

For this goal, the strategies address considering zoning changes that promote agricultural entrepreneurship and innovation, protect farmland, and allow agricultural activities in cities and villages. The least selected strategy addressed food security, promoting plans, programs, and ordinances to ensure and improve healthy food access.

Financing and Incentives Goal: Support and incentivize innovative food and farming programs and activities

The participants were evenly divided between the strategies of securing small-scale farm, food producer, and food processor access to capital, increasing funding from community and nonprofit foundations, and using tax increment financing and other financing incentives.



42. Apple orchard

Development and Implementation Goal: Increase local food/farm access, consumption and business/entrepreneurial opportunities

Forty Four (44%) percent of the votes for this goal were for the strategy of focusing on local market channels to institutions. The strategy may include enhancing, expanding, and improving access to local market channels and healthy foods, improving and expanding farm-to-school purchasing programs to include day cares, hospitals, senior housing, and other institutions, and maximizing the amount of local food served in schools by increasing the number of schools participating in farm-to-school programs. The other strategies that were equally supported address farm labor, land accessibility, and available infrastructure.

The most popular strategies to address food and farm challenges are branding local food, farmer support efforts, and zoning changes that promote agricultural innovation and protect farmland.

Data, Education, and Outreach Goal: Improve awareness, knowledge, and understanding of the region's food products and food system needs, programs, and initiatives

The equally selected, most popular strategies are local food branding and farmer support. The local food branding strategy may include promoting and improving the awareness of local food options, considering the development or use of a local or regional brand to aid consumers in identifying and purchasing local foods, including local food and agriculture in local and regional marketing efforts, and providing and/or supporting free or low-cost food, nutrition, and cooking classes in convenient and high-traffic locations. The farmer support strategy may include providing education, outreach, and communication with farmers and would-be farmers, providing and/or supporting business development training and technical assistance for farmers, agricultural workforce, and would-be farmers, and providing and/or supporting job training for emerging innovative agricultural industries and technologies.

Food Assessment Conclusions

The regional food assessment that began this Farm and Food System project provides an understanding of the existing food system in the Lakes to Land region.

The opportunities, barriers, and challenges to sustaining the food system were identified directly from the region's stakeholders. The farmers and producers, processors, and consumers shared their needs, strategies, and ideas for a sustainable local food system with a robust network of local and regional food production and distribution that enhances the region's agricultural economy. This report shares their voice as a resource to the leadership team of stakeholders who will be determining next steps and appropriate strategies to encourage farm profitability and vitality, encourage the continuation and growth of small agricultural operations, and sustain and enhance agricultural economy of the region.

Food innovation districts are defined by the activities that occur within the geographic clustering of food and food-related businesses. Of the activities listed in the FID guidebook, the following occur in the Lakes to Land region and were identified in the inventory of assets and opportunities: numerous farmers markets, a business incubator, a community kitchen, a handful of farm-to-table retail and restaurants, festivals and events celebrating local food, healthy food assistance through food pantries and programs, and some nutrition and cooking education classes. This study reveals the room to expand these activities within the region and highlights the need for the missing activities. There is a communicated need for a regional food hub and public space.

There is also a need to strengthen the interconnections within the regional food system of Food Innovation District activities occurring through communication. During this study, an extensive list of current and ongoing initiatives and efforts by local, regional, and state organizations was identified (see the Resources and Contacts section in the Appendix). The initiatives and efforts offer farmer support,

brand local food, and encourage communication and the sharing of information for stakeholders in the L2L local food system. One outcome of discussions with farmers and small processors during this assessment is the recognition that many individuals are not aware of some of these efforts. This report highlights a great need to ensure that producers and processors are well informed of current applicable resources and definitely the outcome or initiative that results from the Farm and Food System project.

This study reveals the room to expand the occurring Food Innovation district activities within the region and highlights the need for the missing activities.



43. Fresh food

Photo: Kamil Kleczar

The combined findings chart below displays the identified barriers and needs, the proposed ideas and strategies, and the participant categories who communicated that such an effort would be beneficial. The efforts would reduce the financial burdens of farming, encourage farmer's active participation in the local food system, and promote growth.

44. Combined findings table

NEEDS, STRATEGIES, AND BENEFICIARIES								
Barriers and Needs	Ideas and Strategies	Who would the effort benefit?						
		Small Family Farms Low Sales	Small Family Farms - Medium Sales	Large Family Farms	Small Processors	Medium Processors	Large Processors	Retail, Restaurants, and Institutions
Aging farmer population	Method of connecting older farmers with young, aspiring farmers and a farm-in-transition process	X	X					
Capital Costs	Easy access grants and low interest loans	X	X		X	X		
Cold Storage Space	Access to shared cold storage space	X	X			X	X	
Communication	Person, organization, or online tool to connect farmers with local businesses	X	X			X		X
Demand	Public awareness of local food, education campaign, agritourism guide, etc.	X	X					X
Expertise	Farming and small business classes, local food coordinator or available resource	X	X	X	X	X		
IQF Freezer	Access to IQF Freezer	X		X	X	X		
Labor	Labor reform, guest worker program, farmer trade school, etc.	X	X	X			X	
Processing Equipment	A Farmer Coop or Food Hub with shared processing equipment	X	X	X		X		
Quantity	Aggregating and Distributing through a food hub or organization	X	X					X
Transportation and Delivery	Shared refrigerated and freezer trucks	X	X		X			X
Utilities	Affordable, accessible electricity, internet access, and cell phone service	X	X				X	X
Utilities	Three-phase electricity and natural gas		X	X		X	X	

Today, the local food movement is sweeping across the nation, offering communities with strong agricultural assets and regions with the ability to share resources an advantage. The Lakes to Land region has great potential for an improved local food system.

Appendix A

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LAKES TO LAND REGION AREA DEMOGRAPHICS								
	STATE		COUNTY				Total L2L	
	MICHIGAN		BENZIE		MANISTEE			
	#	%	#	%	#	%	#	%
Population (2010 Census)	9,883,640		17,525		24,733		20,348	
Median Age (years)	38.9		46.2		47.1		50.1	AVG
Male Population	4,949,114	49.1%	8,701	49.60%	12,806	51.8%	10,499	51.6%
Female Population	5,035,526	50.9%	8,824	50.40%	11,927	48.2%	9,849	48.4%
White	7,803,120	97.7%	16,843	96.1%	22,811	92.2%	18,549	91.2%
Black or African American	1,400,362	14.2%	72	40.0%	723	2.9%	729	3.58%
American Indian	62,007	0.6%	252	1.4%	516	2.1%	468	2.30%
Asian	238,199	2.4%	45	0.3%	67	0.3%	62	0.30%
Hispanic or Latino	436,358	4.4%	302	1.7%	634	2.6%	505	2.48%
number of households	3,872,508		7,298		10,308		8,545	
number of families	2,554,073		4,970		6,651		5,410	
average household size	2.49		2.37		2.27		2.21	
average family size	3.05		2.82		2.77		2.72	
Total Housing Units	4,532,233		12,199		15,694		13,809	
Occupied Housing Units	3,872,508	85.4%	7,298	59.8%	10,308	24.9%	8,546	61.9%
Seasonal, recreational, occassional use	263,071	5.8%	4,035	33.1%	3,902	24.9%	4,016	29.1%
Vacant - for sale, for rent, etc.	396,654	8.8%	866	7.1%	1484	9.5%	1,248	9.0%
Median household income (\$)	48,471		47,491		41,228			
Mean household income (\$)	64,538		57,223		52,405		56930	
Median family income (\$)	60,749		54,708		50,473			
Mean family income (\$)	76,708		66,232		62,391		58161	
Per capita income (\$)	25,547		24,420		22,351		24264	
Individuals below poverty level (2012 ACS)		16.3%		13.0%		20.9%	2789	13.7%
With Food Stamps/SNAP benefits in last 12 months	602,972	15.80%	944	12.6%	1,799	16.9%	1364	6.7%
OCCUPATION								
Civilian employed population 16 years and over	4,269,865		7,811		9,419		8,095	
Management, business, science, and arts occupations	1,459,146	34.2%	2,369	30.3%	2,553	27.1%	2,469	257.7%
Service occupations	792,133	18.6%	1,717	22.0%	2,340	24.8%	1,952	203.8%
Sales and office occupations	1,056,849	24.8%	1,807	23.1%	2,145	22.8%	1,781	185.9%
Natural resources, construction, and maintenance occupations	336,308	7.9%	980	12.5%	1,077	11.4%	958	100.0%
Production, transportation, and material moving occupations	625,429	14.6%	938	12.0%	1,304	13.8%	935	97.6%
INDUSTRY								
Civilian employed population 16 years and over	4,269,865		7,811		9,419		8,095	
Agriculture, forestry, fishing and hunting, and mining	57,564	1.3%	264	3.4%	288	3.1%	284	138.5%
Construction	207,349	4.9%	728	9.3%	592	6.3%	530	258.5%
Manufacturing	722,680	16.9%	659	8.4%	1,271	13.5%	1,011	493.2%
Wholesale trade	109,849	2.6%	155	2.0%	219	2.3%	205	100.0%
Retail trade	499,742	11.7%	890	11.4%	1,110	11.8%	889	433.7%
Transportation and warehousing, and utilities	177,645	4.2%	415	5.3%	403	4.3%	246	120.0%
Information	73,331	1.7%	108	1.4%	121	1.3%	115	56.1%
Finance and insurance, and real estate and rental and leasing	235,788	5.5%	399	5.1%	260	2.8%	272	132.7%
Professional, scientific, and management, and administrative and waste management services	390,370	9.1%	589	7.5%	566	6.0%	533	260.0%
Educational services, and health care and social assistance	1,024,364	24.0%	1,839	23.5%	2,019	21.4%	1,768	862.4%
Arts, entertainment, and recreation, and accommodation and food services	400,969	9.4%	1,029	13.2%	1,412	15.0%	1,236	602.9%
Other services, except public administration	206,337	4.8%	333	4.3%	347	3.7%	361	176.1%
Public administration	163,877	3.8%	403	5.2%	811	8.6%	645	314.6%

Source: 2010 U.S. Census and 2008-2012 American Community Survey

2012 County Business Patterns				
Industry based on NAICS Code			Number of Establishments	
			BENZIE	MANISTEE
Agriculture, Forestry, Fishing, Hunting			3	5
	Support Activities		2	1
Wholesale Trade			5	15
	Grocery and Related Product Merchant		1	
	Farm Machiney, Equipment, Supplies			1
Retail Trade			73	107
	Food and Beverage Stores		10	13
		Supermarket	5	10
		Convenience Stores	2	0
		Fruit and Veg. Markets	2	1
Manufacturing			23	23
	Food Manufacturing		6	1
	Agriculture, Construction, Mining Equipment Manufacturing		1	0
	Pesticide, Chemical Ag Manufacturing		0	1
Healthcare and Social Assistance			30	65
	Community Food Services		0	2
Accomodation and Food Services			57	54
	Food Service and Drinking Places		45	41
		Special Food Services	3	1
		Full Service Restaurants	21	21
		Limited Service Restaurants	9	8
		Snack and Nonalcoholic Bev. Bars	8	5
		Cafeteria, Buffet Grill, Buffet	0	1
Source: US Census, US Department of Commerce				

Harvested Crops					
	BENZIE		MANISTEE		TOTAL
Item	2007	2012	2007	2012	2012
HARVESTED VEGETABLES					
Harvested					
Farms	19	15	27	26	41
Acres	116	104	450	332	436
Harvested for processing					
Farms		4		11	15
Acres		(D)		266	0
Harvested for fresh market					
Farms		15		23	38
Acres		(D)		66	0
ASPARAGUS					
Farms	3	1	4	2	3
Acres	(D)	(D)	175	(D)	0
BEANS, SNAP					
Farms	3	8	7	10	18
Acres	(Z)	7	3	3	10
BEETS					
Farms	0	1	3	2	3
Acres	0	(D)	Z	(D)	0
BROCCOLI					
Farms	0	0	5	3	3
Acres	0	0	1	(D)	0
CABBAGE, CHINESE					
Farms	0	3	0	0	3
Acres	0	1	0	0	1
CABBAGE, HEAD					
Farms	3	0	1	0	0
Acres	Z	0	(D)	0	0
CANTELOPES AND MUSKMELONS					
Farms	0	1	2	2	3
Acres	0	(D)	(D)	(D)	0
CARROTS					
Farms	0	4	3	3	7
Acres	0	1	(D)	1	2
CAULIFLOWER					
Farms	0	0	1	0	0
Acres	0	0	(D)	0	0
CUCUMBERS AND PICKLES					
Farms	4	4	12	4	8
Acres	1	1	189	132	133
GARLIC					
Farms	2	0	1	1	1
Acres	(D)	0	(D)	(D)	0
HERBS, FRESH CUT					
Farms	3	1	0	0	1
Acres	(Z)	(D)	0	0	0
HONEYDEW MELONS					
Farms	0	1	0	0	1
Acres	0	(Z)	0	0	0
KALE					
Farms	2	0	0	0	0
Acres	(D)	0	0	0	0
LETTUCE, LEAF					
Farms	0	0	3	2	2
Acres	0	0	1	(D)	0
ONIONS, DRY					
Farms	0	0	0	1	1
Acres	0	0	0	(D)	0
ONIONS, GREEN					
Farms	0	3			3
Acres	0	1			1
PARSLEY					
Farms	0	0	0	2	2
Acres	0	0	0	(D)	0
PEAS, GREEN					
Farms	2	0	1	0	0
Acres	(D)	0	(D)	0	0
PEPPERS, BELL					
Farms	5	7	6	6	13
Acres	1	3	2	2	5
PEPPERS, OTHER THAN BELL					
Farms	5	8	9	4	12
Acres	1	4	3	1	5
POTATOES					
Farms	4	9	10	8	17
Acres	1	6	2	6	12

PUMPKINS					
Farms	4	5	9	7	12
Acres	(D)	7	12	7	14
RHUBARB					
Farms	2	1	0	0	1
Acres	(D)	D	0	0	0
SQUASH, ALL					
Farms	4	3	1	3	6
Acres	(D)	(D)	(D)	3	0
SWEET CORN					
Farms	6	5	11	9	14
Acres	(D)	(D)	42	23	0
SWEET POTATOES					
Farms	2	0	0	1	1
Acres	(D)	0	0	(D)	0
TOMATOES IN THE OPEN					
Farms	13	10	16	15	25
Acres	11	11	16	14	25
WATERMELONS					
Farms	0	0	3	3	3
Acres	0	0	1	1	1
OTHER VEGETABLES					
Farms	2	2	0	2	4
Acres	(D)	(D)	0	(D)	0
HARVESTED BERRIES					
BLACKBERRIES AND DEWBERRIES					
Farms		1		1	2
Acres		(D)		(D)	0
BLUEBERRIES, TAME					
Farms		3		8	11
Acres		4		22	26
BLUEBERRIES, WILD					
Farms		1		0	1
Acres		(D)		0	0
RASPBERRIES					
Farms		0		6	6
Acres		0		5	5
STRAWBERRIES					
Farms		1		6	7
Acres		(D)		45	0
FRUITS AND NUTS BY BEARING AGE ACRES					
NONCITRUS, ALL					
Farms		44		26	70
Acres		2,571		1,153	3724
APPLES					
Farms		28		18	46
Acres		735		456	1191
APRICOTS					
Farms		0		1	1
Acres		0		(D)	0
CHERRIES, SWEET					
Farms		20		8	28
Acres		315		(D)	0
CHERRIES, TART					
Farms		25		10	35
Acres		1,483		492	1975
GRAPES					
Farms		4		4	8
Acres		14		3	17
NECTARINES					
Farms		0		1	1
Acres		0		(D)	0
PEACHES, ALL					
Farms		8		8	16
Acres		(D)		58	0
PEARS, ALL					
Farms		6		1	7
Acres		(D)		(D)	0
PLUMS AND PRUNES					
Farms		0		1	1
Acres		0		(D)	0
NUTS, ALL					
Farms		0		2	2
Acres		0		(D)	0

Source: USDA Census of Agriculture, United States Department of Agriculture

(D) = Withheld to avoid disclosing data for individual farms

(Z) = Less than half of the Unit Shown

Farm Overview			
Item	BENZIE	MANISTEE	TOTAL
Farms	181	324	505
Land in farm (acres)	20,646	44,298	64,944
Average size of farm (acres)	114	137	129
Median size of farm (acres)	65	80	75
Estimated market value of land and buildings			
Average per farm	\$475,487	\$393,091	\$422,623
Average per acre	\$4,169	\$2,875	\$3,339
Estimated market value of all machinery and equipment (\$1,000)			
Average per farm	\$11,797	\$13,320	\$25,117
	\$65,179	\$41,110	\$49,737
Farms by size:			
1 to 9 acres	18	15	33
10 to 49 acres	57	99	156
50 to 179 acres	79	151	230
180 to 499 acres	20	51	71
500 to 999 acres	6	4	10
1,000 acres or more	1	4	5
Total cropland:			
Farms	143	282	425
Acres	9,818	20,081	29,899
Harvested cropland:			
Farms	126	234	360
Acres	7,560	13,742	21,302
Irrigated land:			
Farms	39	42	81
Acres	288	1,295	1583
Market value of agricultural products sold (\$1,000)			
Average per farm	6,396	7,628	14,024
Average per acre	35,339	23,544	
Crops, including nursery and greenhouse crops (\$1,000)	3,320	6,492	9,812
Livestock, poultry, and their products (\$1,000)	3,077	1,136	4,213
Farms by value of sales:			
Less than \$2,500	79	153	232
\$2,500 to \$4,999	18	33	51
\$5,000 to \$9,999	28	46	74
\$10,000 to \$24,999	22	41	63
\$25,000 to \$49,999	7	20	27
\$50,000 to \$99,999	11	12	23
\$100,000 or more	16	19	35
Selected crops harvested:			
Corn for grain			
Farms	21	55	76
Acres	1,720	3,937	5,657
Bushels	65,303	250,026	315,329
Corn for silage or greenchop			
Farms	16	21	37
Acres	432	400	832
Tons	2,866	3,834	6,700
Wheat for grain, all			
Farms	3	4	7
Acres	8	46	54
Bushels	320	2,290	2610
Winter wheat for grain			
Farms	3	4	7
Acres	8	46	54
Bushels	320	2,290	2,610
Oats for grain			
Farms	2	6	8
Acres		56	56
Bushels		2,600	2,600
Soybeans for beans			
Farms	2	5	7
Acres		173	173
Bushels		4,815	4,815
Forage- land used for all hay, all haylage, grass silage, and greenchop			
Farms	59	136	195
Acres	1,893	4,999	6,892
Tons, dry	3,332	5,451	8,783
Vegetables harvested for sale			
Farms	15	26	41
Acres	104	332	436
Potatoes			
Farms	9	8	17
Acres	6	6	12
Sweet Potatoes			
Farms		1	1
Acres			
Land in orchards			
Farms	47	34	81
Acres	3,042	1,442	4,484
Source: USDA Census of Agriculture, United States Department of Agriculture			

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Appendix B

Asset Inventory

This Appendix contains the partial list of available infrastructure, the list of available grants, loans, and fiscal incentives, and a directory of programs and resources.

The complete asset inventory in producer-oriented, community-oriented, and place-oriented categories is available upon request from the Lakes to Land Leadership Team.

Available Infrastructure

A partial list of available infrastructure includes:

- Storage facility in Bear Lake
- Former Oldsmobile garage / Old Kinney building in Beulah
- The Bear Lake Road Commission Building offers rentable meeting space

Grants, Loans, and Fiscal Incentives

The following grants, loans, and fiscal incentives were mentioned by participants or provided by the Northwest Michigan Farm and Food 20/20 Fund.

- USDA Natural Resources Conservation Service, Conservation Innovation Grants
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/>
- Chamber of Commerce loans
- Rural Development Loan Assistance
http://www.rurdev.usda.gov/rd_loans.html
- Agriculture Individual Development Accounts: An equity/matched savings incentive program for eligible farmers used toward building farm assets. Farms must establish a savings account at Honor Bank, save toward identified farm asset goal, show lease or farm purchase agreement, demonstrate consistent savings behavior, and use savings/match funds for qualified asset. For more information, contact Susan Cocciarelli, cocciare@msu.edu.
- GT Area Chamber Loan Fund: available to meet gap financing, with flexible/tailored debt financing features, and a turnaround time to meet the financing needs of new and beginning farmers. Contact Laura Galbraith, galbraith@tcchamber.org.
- Northern Initiatives: a community development corporation whose goal is financing businesses that generate community based economic development. Contact Chris Wendel, cwndel@niupnorth.org.
- Honor Bank: community bank offering eight branches throughout northern Michigan. Business ending including: commercial term loans and lines of credit, SBA Loans: 7(a), 504, Express, and Patriot Express, Business checking, Cash Management Services, Savings, Money Market Account, and CDs.
- American Farmland Trust (AFT) Love Farm Fund: debt capital: A loan fund generated by proceeds from the sale of a large Michigan farm, debt capital must be used by eligible farmer to lease or purchase farmland that may otherwise be in jeopardy of development. In most situations, conservation easements are required. Farm succession and/or transfer is a major goal of the fund's value. For more information, contact Brian Bourdages, brian@gttrlc.org.

Programs and Resources

Acres U.S.A.

Acres U.S.A. is North America's oldest publisher on production-scale organic and sustainable farming. The monthly magazine helps farmers, ranchers and market gardeners grow food organically, sustainably, without harmful, toxic chemistry. This valuable resource was mentioned by numerous producers in the region. One can purchase books and videos, audio tapes, and a magazine subscription here: www.acresusa.com

Baker College, Cadillac: Agriculture Technology Program

The Cadillac campus of Baker College offers a program to prepare individuals for a career in agricultural technology through classroom instruction, lab training, and field experience. The field requires problem-solving and mechanical skills, sound judgement and practical experience to bring innovative approaches to farming. Program information can be found here: www.baker.edu/programs-degrees/interests/agriculture-technologies/

Benzie Conservation District

The Benzie Conservation District is currently providing resources and has initiatives under way to support agriculture in Benzie County. Initiatives include no-till farming and other methods to reduce fuel costs, extending grazing periods, and removal of invasive species. Resources include a tool library of shared equipment for farmers. More information is available on their website: www.benziecd.org

Benzie County Economic Development Corporation.

The Benzie County Economic Development Corporation (EDC) is committed to improving the economic vitality of Benzie County. EDC works as a catalyst and facilitator for local economic development, lending financial support for new business development and the expansion of existing enterprises. EDC, the Benzie County Chamber of Commerce, the Planning Commission, Benzie Central School System and area business leaders form the Benzie County Task Force; charged with implementing priorities. They are currently developing a legislative strategy to further infrastructure improvements, skilled trades training, and value-added agriculture. Information on business in Benzie County is available on their website: http://www.benzie.org/Economic_Development

Benzie-Manistee Farm Bureau

The local branch of the Michigan Farm Bureau encourages and promotes the efforts of the agricultural community by supporting farmers and farm programs, promoting agriculture, and enhancing the community awareness of food production and agriculture in Benzie-Manistee County. The programs available include a Young Farmer program to develop leadership potential for young men and women and a Young People's Citizenship Seminar to teach young people about world economic and political systems. The Bureau offers insurance and discounts and conducts an annual meeting and field day for its members. Contact information and location are available on their website: www2.michfb.com/counties/index/10

Chefs Collaborative

Chef's Collaborative works to fix the country's broken food system by engaging chefs in a national network that inspires and educates them to change how they source, cook, and serve food. The non-profit organization is dedicated to cultivating a vibrant community to develop and share best practices and providing educational resources to chefs and food service professionals. More information can be found at www.chefscollaborative.org

Double Up Food Bucks

The Double Up Food Bucks program is funded by the State of Michigan to encourage Bridge Card users to purchase local fruits and vegetables. For every 20 bridge card dollars they spend at farmers' markets on SNAP eligible foods, they receive an additional \$20 specifically for local fruits and vegetables. The program also offers benefits for purchasing local fruits and vegetables from participating grocery stores. Of the 300 farmers markets in the state, 140 participate in the program, a few of which are in Benzie and Manistee counties. Opportunities exist for more markets to participate and for private farm stands to be approved as vendors. There are also opportunities for further marketing of the program to both farmers and SNAP users. Details about the program and participating markets can be found here: <http://doubleupfoodbucks.org>

Edible Grande Traverse

The Edible Grande Traverse magazine promotes the appreciation of the local foods produced in Michigan's northwest Lower Peninsula. The publication links area farmers, retailers, chefs, winemakers, and cheese and bread artisans and their passions for great foods through a magazine, website, and events. One can find a free publication in at least eight food and farm locales that support local foods in Benzie and Manistee counties or purchase a subscription. More information is available here: <http://ediblecommunities.com/grandetraverse/>

Food and Farming Network

The Food and Farming Network is a forum and opportunity for the Norwest Michigan region's food and farming interests to connect and advance their work. The organization sponsors an annual Summit to bring 100 or more people together from a broad cross-section of food system interests. Active projects include Get Farming/Keep Farming, a farmer training program under development, A Farm Succession Farmlink website, The Safe Food Risk Assessment, Seeds and Rootstock, a regional Food Hub in Traverse City, and a Farmer Residency program on reserved farmland. More information about the projects and their progress is available on the website: www.foodandfarmingnetwork.org

Fruit Growers News

Fruit Growers News is a publication released from Sparta Michigan with information and resources specific to regional fruit growers. More information is available on their website at: <http://fruitgrowersnews.com/index.php>

Goodwill Farm to Freezer

Goodwill Farm to Freezer is a community based job training program that flash freezes produce from local farms in Northern Michigan. The program enables local farmers to gain access to new markets by purchasing and freezing produce, then packaging, and distributing in retail and institutions. They plan to outgrow capacity in 2014 and will be looking to expand the facility and add IQF tunnels. Opportunities exist for partnership and collaboration with the program. More information can be found here: www.goodwillnmi.org/food/farm-to-freezer/

Grand Traverse Regional Land Conservancy

The Grand Traverse Regional Land Conservancy is committed to protecting significant natural, scenic and farm lands, and advancing stewardship, now and for all future generations. The organization has protected over 34,000 acres of land and more than 100 miles of shoreline along the region's exceptional rivers, lakes, and streams in Antrim, Benzie, Grand Traverse, Kalkaska and Manistee Counties. More information about preserves and trails can be found at www.gtrlc.org.

Misty Acres: The Borwell Preserve

One of the Grand Traverse Regional Land Conservancy's recent acquisitions is Misty Acres: The Borwell Preserve, a 600-acre property that straddles the Benzie-Manistee County line. The preserve includes a farm home to a small herd of cattle, 360 acres of hardwood forest, 6200 feet of the Betsie River, and sensitive wetlands. At the time of this report, the plan for the farm is not complete. Currently the farm is a participant with two other L2L region farms in a MSU Experimental Station grassfed beef project.

Grow Benzie

Grow Benzie is a community non-profit farmstead, dedicated to enriching the lives of Benzie County residents by fostering self-reliance through education in agriculture, nutrition, job training and life skills. The organization offers youth and school programs, community outreach, incubator kitchen education, and farmstead programs. Available at the location is a commercial kitchen, community farm, greenhouse, classroom space, and farmers market. Program details can be found here: www.growbenzie.com

Local Harvest

Local Harvest is an online directory of local farms, farmers markets, restaurants, and grocery stores to connect people looking for good food with the farmers who produce it. Food businesses are able to post information in the catalog and sell products. Local Harvest also provides announcements about local farm events, online promotions, and a monthly newsletter complete with recipes. Numerous food businesses in the study area are listed in the Local Harvest directory which can be found here: www.localharvest.org

Manistee Alliance for Economic Success

The Alliance for Economic Success (AES) is an economic development organization servicing Manistee County and the surrounding areas. AES works collaboratively with all business sectors, including agriculture to provide expansion and site location services, small business planning services, diagnostic assessments and recommendations for small to medium sized business, and access to local, state and federal incentives and assistance. It acts as a liaison service to governments offices and provides neutral third-party convener and facilitation services to help develop organization and leadership capacities and positive relationships. More information is available on their website: www.allianceforeconomicsuccess.com

Manistee Community Kitchen

The Manistee Community Kitchen was started by a grass-roots agency and stemmed from a volunteer education program. The program is part of the Cooking Matters (<http://cookingmatters.org/>) movement that offers a curriculum for cooking and nutrition education, and the mobile kitchen is able to travel to schools, food pantries, and other locations where people come for food. Participants leave with a bag of groceries and a wealth of knowledge. Food for the program is currently purchased by the organization from various sources or donated. The organization's challenges for sourcing local food include the higher price point, distribution, the labor costs for additional food preparation, and the timing of the growing season which is not during the regular school year. At the time of this report, the community kitchen is still a work-in-progress and will include a commercial kitchen and restaurant. Additional information about the kitchen is available on their website: <http://manisteeKitchen.org/>

Michigan Food & Farming Systems

Michigan Food & Farming Systems (MIFFS) is dedicated to supporting the many faces of farming, particularly out beginning and historically underserved farmers. The statewide, membership-based nonprofit organization connects farmers to resources and opportunities through farming centers, programs for multicultural farmers in English and Spanish, facilitation services for incubator kitchens and agriculture support organizations, and programs for women, veterans, and beginning farmers. The organization has very few members in Benzie and Manistee counties and only provide programs for the region if the programs are not being duplicated by local organizations. There may be opportunities to partner with the organization in the L2L region if a request is made for their services. More information on their programs can be found on their website: www.miffs.org/

Michigan Good Food Charter

Michigan Good Food Charter is a roadmap for a food system that is rooted in local communities and centered on good food. They host an annual summit to bring together consumers, growers, buyers, advocates, educators, policymakers, and others. The charter also has numerous goals for Michigan institutions, farms, and residents to reach by 2020. Visit the website to learn more about the goals: www.michiganfood.org

Michigan Land Use Institute

Taste the Local Difference

Taste the Local Difference (TLD) is a marketing campaign from the Michigan Land Use Institute (MLUI). The Benzie and Manistee Counties guide is one of six individual maps that represent specific geographic areas of northwest Lower Michigan. The maps contain listings of farms, restaurants, retailers, breweries and wineries, and specialty producers. More detailed information about each business is available on the TLD app and website. This year, TLD also began a grocery store marketing initiative at Tom's Food Markets to market local products. More information can be found on the website at www.mlui.org/food-farming/projects/taste-the-local-difference/

Farm to School

The Farm to School program through MLUI provides schools with 10 cents a meal to purchase locally grown fruits and vegetables. The program also manages a directory of farms with products for cafeterias or fundraisers, educational opportunities, and chefs, and nutrition educators. More information is available on the website: <http://www.mlui.org/food-farming/projects/farm-to-school/>

Food Corps

Through the MLUI Farm to School program, northwest Lower Michigan schools near Traverse City hosted Food Corps. The team of AmeriCorp leaders placed in limited-resource schools connect kids to real food and help them grow up healthy. The service members teach lessons about food and nutrition, build and tend school gardens, encourage healthy food from local farms on lunch trays. The website is full of information: <https://foodcorps.org>

Michigan State University

Center for Regional Food Systems

The Center for Regional Food Systems is committed to a developing a thriving economy, equity, and sustainability for Michigan through food systems rooted in local regions and centered on food that is healthy, green, fair, and affordable. Some of the organization's goals are to explore regional food systems through research and practice; expand the resource base for regional food systems applied research, education, and outreach; and develop farmers and farms for regional food systems. More information about what they do can be found here: <http://foodsystems.msu.edu/>. The Center also leads the Michigan Food Hub Learning and Innovation Network to increase learning, innovation, and profitability for food hubs, offer financial and technical assistance, research, and education and increase collaboration. Network information can be found here: http://foodsystems.msu.edu/activity/info/michigan_food_hub_learning_and_innovation_network

Extension

MSU Extension helps Michigan residents improve their lives by providing tools and information to individuals, communities, and businesses. The Extension is committed to growing Michigan's agriculture economy with resources, programs, and consultations from the office, through MSUE News and online at: (<http://msue.anr.msu.edu/>). An AgExpo is hosted each year to allow visitors to experience the latest technology in agricultural production and current research findings from faculty, scientist, and Extension educators in areas that include food production, energy and the environment. Also, the Enviro-weather website has weather-based pest, natural resources, and production management tools (<http://enviroweather.msu.edu/homeMap.php>). The Extension and MSU Experimental Station in Lake City received a three-year grant in 2012 to start the Grassfed Beef Project to test the feasibility of a value-added grass-fed beef chain in northwest Michigan. Three of the twenty participants in the program reside the the L2L region.

Great Lakes Expo

The Great Lakes Expo is the resulting event from a collaboration of MSU Extension with Michigan State Horticultural Society and Michigan Vegetable Council. The event is in December each year and offers three days of educational programming and resources for growers. The topics are listed on the event website here: <https://www.glexpo.com/index.php>.

Integrated Pest Management

The Integrated Pest Management (IPM) program at MSU collaborates with faculty and Extension educators to develop diverse information serving growers of many crops. More information can be found at their website: www.ipm.msu.edu

Product Center

The MSU Product Center is dedicated to enhancing economic opportunities in Michigan agriculture, food and natural resource sectors. The Product Center helps entrepreneurs and established companies develop and commercialize high value, consumer-responsive products through MSU's vast and varied technical expertise, research, outreach, and educational services. Numerous stakeholders that participated in surveys and interviews benefited from the services offered that can be found on their website: productcenter.msu.edu

Student Organic Farm

The MSU Student Organic Farm is a 15-acre, certified organic year-round teaching and production farm. The farm markets products in a 48-week CSA, Summer CDA, 7-month on campus farm stand, and sells to MSU dining halls. The largest opportunity for participation is an intensive 9-month Organic Farmer Training Program in year-round organic farming focusing on diversified production of vegetables, livestock, flowers, fruits, and herbs for local markets. Information about program offerings and volunteer opportunities can be found here: www.msuorganicfarm.com

Northwestern Michigan College

Northwestern Michigan College is a publicly funded community college that serves offers associate degrees and professional certificates, as well as non-credit classes to learners throughout the Grand Traverse region. The college partners with Michigan State University to offer an Associate of Applied Science Degree and Applied Plant Science Certificate in Viticulture, Commercial Turfgrass Operations, Landscape Horticulture, and Commercial Horticulture Operations. Program information is available here: <https://www.nmc.edu/programs/academic-programs/plant-science-applied/index.html>

Small Farm Conference

The Northern Michigan Small Farm Conference (NMSFC) is planned by the NMSFC Committee and held annually to promote and build a local vibrant agriculture community, to equip the small farm community with the tools to be successful, and to be a forum for the open exchange of ideas within the small farm community. Information is available on the website at www.smallfarmconference.com

The Starting Block

The Starting Block is the West Michigan Regional Kitchen Incubator located in Hart. The non-profit, regional economic development organization is committed to small business initiatives and provides entrepreneurs, producers, and processors a properly equipped, licensed, and inspected food processing kitchen. Some of the food businesses in Benzie and Manistee counties had their start at The Starting Block. More information is available on their website: www.startingblock.biz

USDA Natural Resources Conservation Service

Programs offered by the Natural Resources Conservation Service help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. Their programs can be found here: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/>

USDA Local Food Directories

The Agricultural Marketing Service, an agency of the USDA released a free online local food directory to be the gateway to locate local food retail and wholesale market outlets. Managers and owners of local food entities enter their business information the Farmers Market, CSA, Food Hub, or On-Farm Market directory for public searching by zip code. The directories can be found here: <http://usdalocalfooddirectories.com/>

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Appendix C

Survey and Interview Participants

Survey and Interview Participants

Location	Name	Business or Organization
Ann Arbor	Rachel Chadderdon	Fair Food Bucks, Double Up Program
Arcadia	Adam Putney	Putney Beef or Fruit
	Neil	Mountain Hollow Farms
	Leo	Daddy's Girl
	Dori Turner	Watervale Inn
	Kurt Harvey	Camp Arcadia
Bear Lake	Dave Meister	Apple Valley Orchards
	Bette Brown	Brown's Orchard (M&B Farm)
	Miller's Northwood Market	Bonnie Miller
	Wes Magnan	Four Lakes Farm
	Grace Phillips	Loving Dove Farm
	Casey Reeves	Five Springs Farm
	Bernie Ware	Ware Farm
	John R Powers	John R Powers Farm
	Simone Scarpace	Wee Bee Jammin
Benzonia	Randy Rice	Rice Centennial Farm
	Tracey Scheifele	In Great Taste LLC
	Daniela Weiner	Daniela's Delectables
	Leilan M HeilerCape	Misfit Farms / Country Girl Creations
	Dale Gilbert	Shop & Save
	Michelle Northrup	Benzie Area Christian Neighbors (BACN)
Beulah	Madeline Mummey	Sweet Cheeks Treats
	Deb Nickerson	Betsie Bay Bread
	Kirk Jones	Sleeping Bear Farms / St. Ambrose Cellars
	Cindy Frieswyk	The Market Basket
	Nels and Karen Nelson	East Shore Market
	Greg Griswold	Champion Hill Farm
	Eric Chorley	Frankfort-Elberta Area School / Blue Caribou Café
	Scott Hughey	Benzie Conservation District
	Kris Thomas	Benzie Sunrise Rotary Club
	Kurt Schindler	MSU Extension
Brethren		Shiloh's Garden
Copemish	Larry Townbridge	Back Yard Farmer
Elberta	Jim Barnes	Elberto's Taqueria / Crystal Lake Catering Company
Empire	Carol Vanderberg	Granola Empire LLC
	Mimi Wheeler	Grocer's Daughter Chocolate
Frankfort	Loy Putney	Loy Putney's Orchard
	Alan and Cheryl Kobernik	North Star Organics
	Gary Lathwell	Lathwell Farms
	Paul May	May Farm
	Anne Sangemino	Creation Farm
	Greg Kindig	The Ant and The Grasshopper Farm
	Suz McLaughlin	Still Grinning Kitchens

Survey and Interview Participants Cont.		
Location	Name	Business or Organization
Frankfort	Chef Steve Tebo	Chimney Corners Resort
	Michael Evans	Evans Brothers Fruit Company
	Charlie McDaniels	Charlie's Natural Food Market
	Lisa MacHugh	The Manitou Restaurant
	Lynette Maxey	Paul Oliver Memorial Hospital
	Becky DeVries	Coho
	Tim Brian	Smeltzer Orchard Co.
	Doug Plumstead	Graceland Fruit Co.
	Dave	Camp Lookout
Grand Rapids	AJ Zotos	Sysco Grand Rapids
	Sean Lyons	Walsma & Lyons
Grawn	Frank Rushlow	Chef Frank's
Honor	Harry Norconk	Norconkfarm
	Mary Roeter and Ricky Hilliard	Frog Hollow Farms
	Keri Schneider	
	Helen Schneider	Honor Family Markets, Inc.
	Kari Tomashik	Earth Turtle Farm
	Timothy Young	Food for Thought
		Benzie Food Partners
Interlochen	Bryan and Karla Black	Platte River Gardens
		Wild Things
Kaleva	David Miller	Cream Cup Dairy
	Calvin Lutz II	Calvin Lutz Farms
Manistee	Charlie and Katie Schoedel	Summit View Farms
	Roberto Rosales Garcia	Rosales Farms
	Connie Woodcock	Douglas Valley Farm and Winery
	Loni Lee Hernandez	The Loni Lee Look
	Lynn Miller	Miller's Produce
	Joe Dumas	Port City Organics
	Ms. Souders	Oaks Correctional Facility
	Mary Griner	Oleson's Foods
		FiveCAP, Inc.
	Brandon Seng	Manistee Community Kitchen / Food Rescue of Northwest Michigan
	Al Frey	Manistee Community Kitchen
Onkama	Louri Brown	Brown Poplar (Brown's Honey)
Sidney, OH	Roman Smith	Freshway Foods
Suttons Bay	Jim Bardenhagen	Bardenhagen Farms
Thompsonville	Chef Bryant Betts	Crystal Mountain Resort
Traverse City	Joanne Gallagher	Gallagher's Centennial Farm
	Steve Nance	Oryana Natural Foods Market
	Mark Coe	Goodwill Farm to Freezer
	Marty Pavlock	Up North Global
	Bill Palladino	Taste the Local Difference
	Diane Conners	Michigan Land Use Institute
	Evan Smith	Cherry Capital Foods

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Appendix D

Farm and Food System Survey

FARM AND FOOD SYSTEM SURVEY

The purpose of this survey is to assess the regional food system in western Benzie and Manistee counties. The Lakes to Land Regional Initiative, through the Alliance for Economic Success has received a grant to identify opportunities for economic development in agriculture and find ways to support the local food system. A food system encompasses all the people, processes, and places involved in the production, processing, distribution, and eating of food. We greatly appreciate your time answering the following questions regarding the opportunities, barriers, and challenges that exist in the region. Thank you for your participation!

Name: _____

Name of Farm/Business: _____

Mailing Address of Farm/Business: _____

Email: _____ Phone: _____

1. How many acres is your farm/business? _____
2. How many employees? Year Round: _____ Seasonal: _____
3. How many years have you or has your family been in business? _____
4. When does your business operate? *Circle one.* Seasonally Year Round
5. What are your products? *Please circle category and list products.*
 - a. Fruit: _____
 - b. Vegetables: _____
 - c. Nuts: _____
 - d. Grain: _____
 - e. Animal products and production: _____
 - f. Other: _____
6. What distribution and marketing channels do you use? *Circle all that apply and specify the amount of product that is distributed through each channel that you use.*
 - a. Wholesale (to a processor or distributor): _____%
 - b. Retail: _____%
 - c. Direct to consumer: _____%
 - d. Food service: _____%
 - e. Emergency market (food pantries, soup kitchens, etc.): _____%

7. What percentage of your product is sourced from, processed in, and/or sold in Benzie and Manistee counties?

Sourced: _____% Processed: _____% Sold: _____%

8. How interested are you in the expansion of local distribution and marketing opportunities? *Circle one.*

Very Much Somewhat Undecided Not Really Not at All

9. What untapped opportunities do you see for your business?

10. What barriers are preventing you from accessing these opportunities?

- a. Production: _____
- b. Processing: _____
- c. Distribution: _____
- d. Marketing: _____
- e. Consumption: _____
- f. Other: _____

11. What would help you overcome these barriers?

12. What needs to you have that remain unmet?

- a. Storage (cold): _____
- b. IQF: _____
- c. Equipment: _____
- d. Expertise: _____
- e. Processing: _____
- f. Other: _____

13. Who do you consider your partners or collaborators?

14. Who do you consider your competitors?

15. In regards to infrastructure (i.e. equipment, water, natural gas, three phase electricity, buildings) for small and mid-sized farmers and business owners in the region...

a. What is available?

b. What is underutilized?

c. What is needed?

16. What kinds of programs or resources have you used in the past to grow your business?

17. What kinds of programs or resources would be helpful in the future?

18. How do you obtain food for yourself or your family?

19. Your input is vital to the success of this study. Are you interested in being contacted for a follow-up interview? *Circle one.* Yes No

20. Please provide a referral for a friend/colleague that would be interested in participating in this study with a survey or interview?

Name: _____

Name of Farm/Business: _____

Contact information: _____

21. How would you like to be informed of the results and outcomes of this study?

Circle all that apply.

- a. Newspaper article
- b. Meeting
- c. Mail
- d. Email

22. We welcome any other comments:

For more information about the survey, Lakes to Land Regional Initiative, and regional food assessment, please contact Cassi Meitl at cmeitl@bria2.com.

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Appendix E

Regional Prosperity Strategies and Solutions Results

Food & Farm Strategies and Solutions

Data, Education, and Outreach Goal: Improve awareness, knowledge, and understanding of the region's food products and food system needs, programs, and initiatives

Strategy #1: LOCAL FOOD BRANDING

- Promote/improve awareness of local food options
- Consider the development or use of a local or regional “brand” to aid consumers in identifying and purchasing local foods
- Include local food and agriculture in local and regional marketing efforts
- Provide and/or support free or low-cost food, nutrition, and cooking classes in convenient and high-traffic locations

7

Strategy #2: IMPROVE MARKET CHANNEL AND INFRASTRUCTURE

- Identify/assess market channel gaps and infrastructure needs
- Conduct market assessments/feasibility studies for food system infrastructure elements as needed
- Identify and support equipment and processing needs
- Increase producer access to market demand information

2

Strategy #3: DATA DRIVEN APPROACH

- Measure impact/improve understanding of process and activities
- Identify and/or develop valid and accurate local food consumption data in order to track progress toward food system goals
- Develop and coordinate systems for collecting and sharing production, market, and other data

0

Strategy #4: FARMER SUPPORT

- Provide education, outreach, and communication with farmers and would-be farmers
- Provide and/or support business development training and technical assistance for farmers, agricultural workforce, and would-be farmers
- Provide and/or support job training for emerging innovative agricultural industries and technologies

7

Total: 16

Financing and Incentives Goal: Support and incentivize innovative food and farming programs and activities

Strategy #1: SECURE SMALLER SCALE FARM CAPITAL

- Ensure smaller-scale farm, food producer, and food processor access to capital
- Work with state, regional, and other partners to access CDFI funds and other sources of capital

5

Strategy #2: COMMUNITY AND NONPROFIT FUNDING

- Philanthropic funds and program related investments in food enterprises and nonprofit support corporations
- Work with community foundations and others to increase funding from regional, state, and national foundations

6

Strategy #3: TAX INCREMENT FINANCING

- Consider the use of tax and other financing incentives for food system infrastructure, processing, and other needs
- Consider the use of brownfield, downtown development authority, corridor improvement authority, and other avenues of tax increment financing to incentivize food system infrastructure and improvements

5

Total: 16

Development and Implementation Goal: Increase local food/farm access, consumption and business/entrepreneurial opportunities

Strategy #1: LOCAL MARKET CHANNELS

- Enhance, expand and improve access to local market channels and healthy foods
- Improve and expand farm-to-school purchasing programs to include day cares, hospitals, senior housing, and other institutions
- Maximize amount of local food served in schools by increasing the number of schools participating in farm-to-school programs

8

Strategy #2: FARM LABOR

- Enhance, expand, and improve access to farm labor
- Provide, encourage and/or support programs for youth agricultural entrepreneurship, agricultural skills, career opportunities, apprenticeships
- Provide, encourage, and/or support farmer training programs
- Improve systems for hiring migrant farm workers/guest workers and the visa/H2A program

3

Strategy #3: LAND

- Improve access to viable and affordable agricultural land and secure tenure for farmers

3

Strategy #4: INFRASTRUCTURE

- Enhance, improve, and expand food system processing, production, and distribution capacities
- Encourage and support food system infrastructure enhancements

4

Total: 18

Planning & Policy Goal: Coordinate policies, plans, and ordinances that support local food access and agricultural production, processing, and marketing

Strategy #1: AGRICULTURAL ENTREPRENEURISM AND INNOVATION

- Consider planning and zoning policies that encourage agricultural entrepreneurship and innovation
- Zoning changes to allow a variety of agricultural tourism activities
- Zoning changes to allow for food production and food processing
- Zoning changes to allow food distribution, food hubs, and food innovation districts

6

Strategy #2: AGRICULTURAL ACTIVITIES IN CITIES AND VILLAGES

- Zoning changes to allow and encourage non-traditional agricultural activities
- Zoning changes to allow small-scale urban agriculture in cities and villages
- Zoning changes to allow community gardens, market gardens, and other small-scale production
- Zoning changes to allow farmers markets, roadside stands, and other direct-to-consumer retail activities

4

Strategy #3: LAND CONSERVATION

- Consider plans, programs, or ordinances to reduce farmland fragmentation
- Consider options to purchase or lease farmland development rights or easements
- Zoning changes to encourage protection and active use of prime agricultural soils

5

Strategy #4: FOOD SECURITY

- Consider plans, programs, or ordinances to ensure and improve healthy food access
- Consider allowing form-based or mixed use zoning approaches to ensure easy residential access to food retail
- Zoning changes to allow for small-scale neighborhood retail opportunities
- Consider limits or restrictions to fast food/drive-through establishments

2

Total: 17