



# **Draft Marion County Local Sustainable Food System Plan 2016**

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# About the Marion County Local Sustainable Food System Plan

## What this Plan Is

In response to the increasing interest in and commitment to developing a vibrant, sustainable food and agricultural system in Marion County, this Plan has been prepared as a guide that offers strategies and activities intended to move Marion County's food system from its current conditions toward a locally sustainable food system. In addition to offering strategies and activities for growing multiple key areas of the food system, the Plan also provides background information from the literature on sustainable food systems and useful case examples from around the country.

## Who the Plan is Intended For

This Plan is intended as a resource to inform, serve and guide the planning and activities of all Marion County organizations and individuals currently involved in some aspect of the food system. In addition, it is intended for individuals, organizations, businesses, civic and educational entities whose interests, enterprises, policies and activities have impacts on and intersections with the food system in Marion County. Everyone who eats and anyone who produces, transforms, distributes, markets, or disposes of food products, and all of us who are interested in creating healthy communities, people and local economies have a stake in this Plan.

## How the Plan is to be Used

The Marion County Local Sustainable Food System Plan will be used as:

- The basis for grant applications for funding to support activities outlined in the Plan.
- A document to inform and engage local funding and contributions toward food system work.
- Documentation of food system planning to be integrated into countywide economic development planning documents and efforts.
- A conversation starter to raise awareness and engage informed interest in participating in the development of a local sustainable food system.
- A point of connection to foster collaboration and interconnections among diverse stakeholders.
- A point of focus regarding the interconnections that exist among all aspects of the food system.
- To make the case that developing a local food system is an effective strategy for community and economic development.

It is our hope that this Plan will serve to increase awareness of community food security issues among Marion County community members, as well as promote development of new and more diverse sustainable agricultural activity and local markets within the area's economy. It is also intended to generate ideas about how we can build greater capacity, resilience and vibrancy in our

local food system and to provide goals, strategies and activities that will mobilize involvement and guide the development of a thriving local sustainable food system in Marion County.

## **A Living Document**

This document is considered to be a point of departure. As a community, we will continue to interact with and talk about the information presented here. We will continue to add and refine strategies and activities as we begin work to implement the Plan, as we see results and as new needs and conditions emerge.

## **Vision**

All Marion County residents have access to affordable, nutritious food, locally grown whenever possible. Local farms and support operations play a primary role in producing and distributing that food. Each part of the food system, from seed to table and back to soil, is environmentally regenerative and economically viable. The food system supports a resilient and secure food supply for the county, region, and a vibrant, healthy life for all members of our community.

## **Definition of Local**

“Local sustainable food system” will refer to the economically, environmentally and socially sustainable network of resources involved in growing, producing, transporting, selling, promoting, and consuming food within Marion County and counties contiguous to Marion County (Wyandot, Crawford, Hardin, Union, Delaware, Morrow) with the understanding that this radius may decrease as the food system develops over time. Additionally, it is understood that the directness of the connection between producer and consumer and the level of community support for local food are as important indicators of local as the number of food-miles.

# **Principles of a Local, Sustainable Food System**

## **Local**

Inputs and outputs (products grown, raised, made, baked, processed and sold in Marion County) are present locally, balanced in the context of realistic support for Marion County and moving towards increased self-reliance.

## **Secure Supply**

There is a consistent supply of safe, healthy, culturally appropriate and nutritious food that is not vulnerable to drought, transportation disruptions, and other fluctuations such as high fuel prices and natural disasters.

## **Environmentally Sustainable**

The Marion County food system is integrated with all of nature and all food growing, production, distribution, and associated enterprises are based on agro-ecological methods. This ensures the protection of land, water and air, critical for achieving healthy ecosystems by minimizing greenhouse gas emissions, potable water use and waste and maximizing efficient use of land, air quality, water quality and availability and biodiversity.

## **Develops Community and the Economy**

The food system fosters economic development and action taken in Marion County to create economic opportunities and economic security in the community on a sustainable and inclusive basis.

## **Healthy**

The food system supports access to and education about nutrition and buying, preparing and eating healthy, fresh and local foods. Physical activity, including gardening and food production by adults, children and families is encouraged and supported.



# Introduction

## Background

Marion County has a strong commodity crop agricultural heritage. The county is located in North Central Ohio and is approximately a one hour drive north of the metropolitan area of Columbus, Ohio. Marion's geographic proximity to Columbus gives the county a unique opportunity to capitalize on its agricultural heritage while expanding its economic base to provide speciality crops to county residents and the Columbus area.

The purpose of this plan is to promote sustainable economic development growth that will improve the availability of local foods in the county. Rising transportation, food, health care costs, and growing interest in local food are some of the factors which point to now as the time to implement a plan to bolster the local food system.

## Ohio's Efforts

Marion County's efforts are directly in line with efforts recently made at both the state and regional level. In 2007, the Ohio Food Policy Advisory Council was formed to study Ohio's local food system to help examine food production, processing, and consumption and to help promote the state's \$98 billion food and agricultural industry. This Council issued a report in 2009 that included 15 recommendations and calls for increased agricultural economic development in the state of Ohio.<sup>1</sup> In March of 2011, Ken Meter of the Crossroads Resource Center conducted a study that offers a systemic view of the Ohio food system. His study estimated that, annually, approximately \$30 billion flows out of Ohio each year due to the structure of the farm and food economy. Recapturing even a small portion of these dollars could have a significant positive impact on Ohio's economy.<sup>2</sup> "In addition to the 75,000 farms that work the land, selling an estimated \$7 billion of products each year, the related food industry directly accounts for 13% of the state's business."<sup>3</sup>

More recently, the Mid-Ohio Regional Planning Commission (MORPC) prepared *The Central Ohio Local Food Assessment and Plan* for its 12 county region, which includes Marion County.<sup>4</sup> This food assessment plan is a broader effort that is attempting to encourage the expansion of the local food system and the development of a coordinated regional food plan. The MORPC plan has laid out a vision for how Marion County and Central Ohio can begin to develop and plan for the local food system.

## Marion County Efforts

The *2011 Marion County Land Use Plan*<sup>5</sup> and the *1999 Marion County Farmland Plan*<sup>6</sup> help to guide planning decisions related to farmland in Marion County. Both plans have a strong emphasis on conserving the county's farmland and includes many goals, objectives and policies to help balance the county's growth with smart growth efforts. More specifically, both plans promote agriculture and agricultural related industries in Marion County.

Marion County's Local Food Advisory Committee was formed to provide input and guide the creation of the plan. This advisory group was made up of local education, business leaders and several agencies responsible for setting policies throughout the county. The business leaders consisted of various farmers, processors, bankers, education and retailers, with the retailer participants representing several different venues such as hospital food service, school food service, restaurants, and farmers' markets. The policy group included a broad spectrum of agencies representing the Marion County Farm Bureau, Ohio Farm Bureau Federation, OSU Extension Office, Marion County Soil and Water, Natural Resources Conservation Service, and the Marion County Regional Planning Commission.

The advisory group met beginning in December of 2013. During these meetings, the group helped to form the goals and objectives for the plan and identify the barriers to connecting farmers, processors, and retailers with consumers.

## **Marion County Agricultural Land Use Patterns**

From 1995 to 2009, Marion County experienced a decrease in crop land acreage of nearly 2.58% (approximately 5,326 acres - see Table 1 below).<sup>7</sup> The majority of this crop land was converted into residential land (approximately 3,300 acres) and wetlands (approximately 1,800 acres). From 2009 to present, little crop land has been lost to new residential, commercial, or industrial development due to the economic downturn in 2008-2009. With regards to wetlands, no studies have been conducted in the past five years to determine the extent of crop land loss due to new wetland development in the county.

## **Public Health**

Health care costs associated with obesity continue to rise across the county. In terms of 2012 dollars, these costs are estimated to be \$190.2 billion.<sup>8</sup> "Childhood obesity alone is responsible for \$14 billion in direct medical costs. Obesity-related medical costs in general are expected to rise significantly, especially because today's obese children are likely to become tomorrow's obese adults. If obesity rates were to remain at 2010 levels, projected medical expenditures would be \$549.5 billion over the next two decades".<sup>9</sup>

Poor diet is a major contributor to obesity and chronic disease in this county. According to the **2011 Marion County Community Health Assessment**, nearly half of adults in the county considered their health status to be excellent or very good while 56% described themselves as being either overweight or obese.<sup>10</sup> According to the 2013 / 2014 **Third Grade BMI Study**, "47% of students in Marion City were identified as being overweight or obese".<sup>11</sup> This data indicates that a large portion of the county's population could potentially be at risk for weight related health problems, and that many may not be fully aware of the risks. Promotion of fresh, healthy foods is a method to combat the rising tide of obesity and the negative economic impacts of the associated health care costs. An educational component is also vital as a means to help people achieve better health and nutrition.

**Table 1  
Marion County Land Use Data, 1995 and 2009**

Land Use	1995 Acres	2009 Acres	Gain/Loss in Acres from 1995 to 2009	Percent Change from 1995 to 2009
Residential	14,732.57	18,031.53	3,298.96	22.39
Commercial	1,225.95	1,413.86	187.91	15.33
Industrial	1,624.06	1,797.03	172.97	10.65
Brush / Pasture	5,093.77	5,022.54	-71.23	-1.40
Woods	22,523.11	21,307.65	-1,215.46	-5.40
Ponds/Streams	737.80	872.14	134.34	18.21
Wetlands	1,379.92	3,177.53	1,797.61	130.27
Cemeteries	381.36	383.39	2.03	0.53
Parks / Recreation	970.60	1,183.37	212.77	21.92
Cropland*	206,819.86	201,494.19	-5,325.67	-2.58
Educational	441.28	831.42	390.14	88.41
Religious	63.99	136.11	72.12	112.70
Utilities	91.12	126.90	35.78	39.27
Mixed Urban	310.54	302.32	-8.22	-2.65
Transitional Areas	0.00	36.43	36.43	-
Landfills*	117.27	117.27	0.00	0.00
Airport	195.42	195.40	-0.02	-0.01
Railroad	501.40	501.40	0.00	0.00
Highway	727.58	725.72	-1.86	-0.26
Quarries	212.16	276.97	64.81	30.55
Undeveloped	174.63	323.80	149.17	85.42
Correctional	254.71	350.72	96.01	37.69
Borrow Pits	7.58	0.00	-7.58	-100.00
Junkyard	9.56	9.56	0.00	0.00

\* Corrected totals due to ODNR incorrect land use coding on the 1995 Marion County Land Use / Land Cover Map

## **Defining a Local Sustainable Food System**

A local sustainable food system is a collaborative network that integrates sustainable food production, processing, distribution, consumption and waste management in order to enhance the environmental, economic and social health of a particular place. Farmers, consumers and communities partner to create a more locally based, self-reliant food economy. One of the most important aspects of local sustainable food system projects is that they increase resident participation to achieve the following goals:

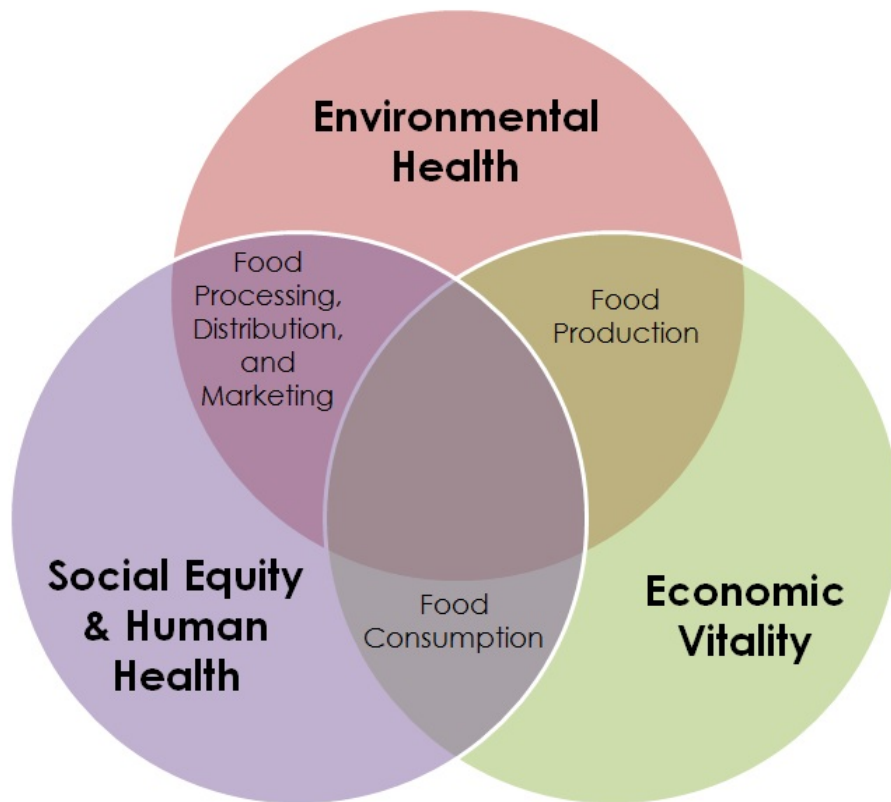
- A stable food production base (gardens, farms, ranches) that uses sustainable production practices and emphasizes local inputs;
- Marketing and processing practices that create more direct links between producers and consumers;
- Improved access by all community members to an adequate, affordable, nutritious diet;
- Food and agriculture-related businesses that create jobs and recirculate financial capital within the community;
- Improved wages and living and working conditions for farm and food system labor;
- Creation of food and agriculture policies that promote local or sustainable food production, processing and consumption, and
- Adoption of dietary behaviors that reflect concern about individual, environmental and community health.<sup>12</sup>

## **Why a Local Sustainable Food System?**

Imagine having access to an abundance of healthy local food produced by people you know trust and from the land that surrounds and sustains you. Imagine diverse varieties of delicious seasonal foods that form the basis of a distinctive, culturally diverse local cuisine. Imagine farmers making a living from the land and providing food for their local communities. Imagine neighbors, schools, churches, and senior centers creating and tending gardens that supply fresh fruits, vegetables, eggs, honey, and herbs. All of this is possible in a local food system—one in which food is locally grown, produced, marketed and consumed.

The term "food system" is used frequently in discussions about nutrition, food, health, community economic development and agriculture. The food system includes all processes involved in keeping us fed: growing, harvesting, processing (or transforming or changing), packaging, transporting, marketing, consuming and disposing of food and food packages. It also includes the inputs needed and outputs generated at each step. The food system operates within and is influenced by social, political, economic and natural environments. Each step is also dependent on human resources that provide labor, research and education.<sup>13</sup> The food system spans the activities, people and resources involved in getting food from field to plate. Along the way, it intersects with aspects of public health, equity and the environment.

**Figure 1**  
**What a Local Sustainable Food System Includes**



- **Environmental Health** – ensures that food production and procurement do not compromise the land, air, or water now or for future generations.
- **Economic Vitality** – ensures that the people who are producing our food are able to earn a decent living wage doing so. This ensures that producers can continue to produce our food.
- **Human Health & Social Equity** – ensures that particular importance is placed on community development and the health of the community, making sure that healthy foods are available economically and physically to the community and that people are able to access these foods in a dignified manner”. (Food Security Network)

Source: Food Security Network, [www.foodsecuritynews.com](http://www.foodsecuritynews.com)

A local food system helps secure the health and welfare of our communities. It strengthens participation and access and gives community members a more direct stake in a healthy future. A local food system improves: local production and food security, the local economy, environment, health, education, community cohesion and governance and civic engagement.

By comprehensively addressing the food system, we can respond to a variety of local needs. Planning for food can help address environmental and social justice, such as increasing access to healthy food choices in all neighborhoods and supporting hunger assistance programs. An emphasis on supporting the local food economy can also have important economic, quality of life, and environmental benefits as shown above in Figure 1. The area where all three circles intersect allows for marketing opportunities in local food development within Marion County.

## **Using the local food system to foster Economic Development**

Improvements to the local food system can have a huge impact on economic development. By transitioning to a locally focused, self-sustaining food system, communities can create desirable jobs via new opportunities in food production, processing, distribution, marketing, and retail. Economic development programs aimed at helping communities support businesses development or expansion that is targeted towards the food system and have great potential to create new wealth and achieve a range of goals, including increasing food access and reducing environmental impacts.<sup>14</sup>

Producers, processors, and consumers all play an important role in our food system. In Ohio, agriculture is the state's number one industry. The food and agriculture industry provides jobs to one of every seven Ohioans.<sup>15</sup> It is Ohio's number one industry and contributes \$107 billion to Ohio's economy.<sup>16</sup> In communities throughout the state, local food creates local jobs and is an essential part of the economy.

Direct to consumer food sales currently represent less than 1% of total food purchased in Ohio.<sup>17</sup> This represents a major economic opportunity since direct to consumer sales have steadily increased in from 2007 to 2012.<sup>18</sup> Focusing on the creation of a local food system can change the idea of what makes for a healthy economy. Transforming the regional food system from reliance on conventional industrial food to sustenance by foods locally produced, distributed, and consumed, provides an opportunity to transform thinking about regional economic development from model focused on job count and low-wage employment to an economy supported, sustained and grown by meaningful living wage employment and measured by metrics that focus on people, planet and profit, with an emphasis on basic economic security.

Michael Shuman of BALLE, writing for the Federal Reserve Bank of San Francisco's Community Development Investment Review states: Growing evidence suggests that every dollar spent at a locally owned business generates two to four times more economic benefit—measured in income, wealth, jobs, and tax revenue—than a dollar spent at a globally owned business. That is because locally owned businesses spend much more of their money locally and thereby pump up the so-called economic multiplier. Other studies suggest that local businesses are critical to tourism, walkable communities, entrepreneurship, social equality, civil society, charitable giving, revitalized

downtowns, and even political participation.<sup>19</sup>

Economic benefits include creating and sustaining living-wage jobs through food production, processing, and sales; improving the economic viability of local agriculture; and more efficiently using vacant or underutilized parcels through the development of back yard, neighborhood and community agriculture. Our community can also foster environmental benefits through decreasing food waste and reducing the miles food travels to our plates.

A local food system promotes food security. As the *Central Ohio Local Food Assessment and Plan* points out, most of the food we consume in Central Ohio is not grown or produced here. Rather it is produced elsewhere, usually a thousand or more miles away, and transported by truck to our region. This makes our food supply precarious. Fuel shortages and rising costs of the fuels used to transport food over distances to our region increase the cost of the foods we buy. Transportation disruptions, resulting from adverse national/international events, global, national or regional climate and weather events, natural disasters or food supply contamination, have the potential to limit or prevent distribution, causing food shortages in the region and leaving us vulnerable.<sup>4</sup>

The *Central Ohio Local Food Assessment and Plan* sums it up well. “the benefits of a local food system are many, but the central Ohio effort has focused on four: strengthening the local economy, ensuring that fresh, safe, healthful, locally produced food is easily accessible to people of all income levels, reducing the miles needed to distribute and sell food; and preserving farmland by making agriculture more viable to area farmers. But there are other benefits. Local food:

- Can include greater varieties of flavorful produce, rather than a few varieties that are bred more for stability for shipping across the country.
- Can save on energy and transportation cost because it is produced, processed and distributed in a given region rather than shipped across the country.
- Is more comforting to consumers because they know where it comes from, how it is produced and because it offers more connections with others in the community.
- Can be part of a resilient system that provides a reliable supply of food regardless of economic conditions, weather and other disruptions in other parts of the country.”<sup>20</sup>

Below is an example of the benefits of local food and its impact on the Marion local economy. For the purposes of this example we assume:

1. That Marion County is capable of supplying local food to county residents.
2. Each family spends one percent of their annual grocery budget on locally produced food.
3. Each family spends \$100 per week on food or \$5,200 annually.
4. There are 25,000 families in Marion County.
5. For each dollar of revenue created, two to four dollars of local economic wealth is generated..

What is the local economic impact of Marion County families spending one percent of their annual grocery budget on local food?

Percent of budget going to purchase local food:

$\$5,200$  annual grocery budget  $\times$  1% for local food purchase =  $\$52$  per family per year for local food purchase.

Amount of revenue generated for local food:

$\$52$  per family per year for local food purchase  $\times$  25,000 families =  $\$1,300,000$

Local economic wealth generated by multiplier effect on local economy:

$\$2,600,000$  to  $\$5,200,000$ .

What is the local economic impact of Marion County families increasing their spending on local food to 10 percent of their annual food budget?

Percent of budget going to purchase local food:

$\$5,200$  annual grocery budget  $\times$  10% for local food purchase =  $\$520$  per family per year for local food purchase.

Amount of revenue generated for local food:

$\$520$  per family per year for local food purchase  $\times$  25,000 families =  $\$13,000,000$

Local economic wealth generated by multiplier effect on local economy:

$\$26,000,000$  to  $\$52,000,000$ .

Based on the above examples, its easy to see the tremendous impact local food can have in generating local economic benefit measured in income, wealth, jobs, and tax revenue.

Making a shift to a local food system to address our regional production, environmental, health, community, and food security needs will demand interventions, at a local and regional scale, to transform current patterns of food production, distribution and consumption. Collaboration, innovation, investment, and a deliberate effort to include and empower our most vulnerable populations will be required to construct a food system that ensures food security and sustains our natural resource base. Expanded local investments in a local sustainable food system are an essential component of a vibrant and enduring food system and long-term economic development. The sooner these investments are made, the greater the benefits will be. To move us forward, it is imperative to



prioritize where, how and when to act. The Key Action Areas, Goals, Strategies and Activities that constitute the core of this Plan are intended to provide us with a guideline.

## Key Action Areas

There are six major sections in this document, corresponding to the six Key Action Areas addressed in this Plan:

1. Production, Capacity & Secure Supply
2. Environment, Water & Land Use;
3. Economic Development
4. Education, Training & Knowledge Transfer
5. Health, Access & Community Building
6. Governance, Policy, Regulation, Legislation & Advocacy

These Key Action Areas emerged from discussions related to the American Planning Association Conference meetings, Mid-Ohio Regional Planning Commission Regional Food Council meetings, Marion County Regional Planning Commission meetings, Pioneering Healthy Community meetings, and Creating Healthy Community meetings and from the thinking and process of identifying priorities that occurred during the Marion County's Local Food Advisory Committee meetings. The Key Action Areas are intended to give structure to the strategies and activities proposed and prioritized by stakeholders and community members, and to define the broad categories under which the strategies and activities fall.

Although the Key Areas are presented as discrete components of this Plan, in reality they converge, intersect, overlap, and inform each other. Each Key Action Area is interdependent with all of the others, and Activities in one are related to and interdependent with Activities in another. If these Key Areas and the Activities could be displayed graphically in three-dimensions, the result would be a network of ever evolving inter-relationship of complex relationships that make up a locally sustainable food system.

## How to Read the Key Action Areas

Each Key Action Area is organized in this way:

- Key Action Area
- Goals
- Description
- Characteristics
- Table of Strategies & Activities
- Why is this Key Action Area Important?
- Issues / Challenges

Each Key Action Area heading is listed below. Under each heading appear the Goals for that Key Action Area, a Description of the Key Action Area, a list of Characteristics of the Key Action Area, a table of Strategies and recommended Actions to be taken to accomplish those Strategies - short term (1 year or less), medium-term (1-3 years) and long-term (3-5 years). Following the Table is a

section that relates why the Key Action Area is important. This is followed by a list of Issues / Challenges.

### **A Note about Tables of Strategies & Activities**

The column headed “Lead” is, for now, intentionally blank—it will be filled in as stakeholders, organizations and individuals volunteer to take the lead to carry activities forward. The column on the far right indicates how Activities under a Strategy are aligned with the Principles stated on Page 3 of this Plan.

The column labeled “Alignment with Principles” indicates which principles support the Activities in the Key Action Area.

L = Local

S = Secure Supply

ES = Environmentally Sustainable

CE = Develops Community and the Economy

H = Healthy

# Production, Capacity & Secure Supply

## Goals:

**Goal 1: Increase local food production in order to provide consumers with more nutritious foods produced as close to home as possible.**

**Goal 2: Create food system resilience and long-term food security.**

Production includes planting, growing, raising, harvesting, and processing of food from a variety of sources, including home and backyard gardens, school and community gardens, greenhouses, small and larger-acreage farms, orchards, and pastures.

## Characteristics of Production, Capacity & Secure Supply in a Sustainable Food System

- Is secure, reliable and resilient to change (including transportation disruptions, natural disasters, rising energy prices, etc.)
- Is accessible to all members of the Marion Community
- Is energy efficient
- Is an economic generator for local farmers, Marion Community, and the Central Ohio Region
- Is environmentally beneficial or benign
- Uses water reclamation and conservation strategies for agricultural irrigation (where applicable)
- Adopts regionally appropriate agricultural practices and crop choices
- Advances sustainable agricultural practices
- Contributes to both community, economic, and ecological health
- Builds soil quality and farmland through the recycling of organic waste
- Supports multiple forms of in-town as well as rural food production
- Ensures that food processing facilities are available to farmers and processors
- Is celebrated through community events, markets, restaurants, and other venues
- Preserves bio-diversity in agro-ecosystems as well as in the crop selection
- Has a strong educational focus to train producers and create awareness of food and agricultural issues
- Provides a fair wage and economic security to producers and other workers within the food system.<sup>21</sup>

**Production, Capacity and Secure Supply**

**GOAL:** *Increase local food production in order to provide consumers with more nutritious foods and produced and processed as close to home as possible in order to create food system resilience and long-term food security.*

**STRATEGY: Promote and support home gardening and farming.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Encourage small and individual production first before expanding to the community level.</li> <li>2. Encourage people to use their personal lots for food production.</li> <li>3. Encourage people to create their own backyard gardens.</li> <li>4. Encourage network of small producers who will be less subject to a countywide or regional debilitating event than would larger, centralized production.</li> <li>5. Encourage non-profit farmers.</li> </ol>				L, S, ES, CE, H

**STRATEGY: Expand opportunities for community food producing activities throughout the year.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Help producers secure ways to protect their crops in order to extend the growing season.</li> <li>2. Invest in greenhouses that can be used by producers and the general public.</li> <li>3. Find out who has greenhouses and is willing to share and then develop a greenhouse sharing program.</li> <li>4. Develop protein production to include more fish, poultry, beef, and pigs.</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide hoop house grants to individuals via a “hoop house grant lottery”, based on volunteerism (points) or business plan.</li> </ol>			L, S, ES, CE, H

**Production, Capacity and Secure Supply**  
**-Continued-**

**STRATEGY: Establish baseline for current production and set production targets in order to provide an adequate and secure supply of food.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Secure baseline data so will know how much is currently being produced locally</li> <li>2. Develop a food production plan that includes stages that take us from where we currently are to where we want to be.</li> <li>3. Use baseline data to support a realistic assessment of how big a market share will ever belong to the local food system.</li> <li>4. Determine the most viable balance between locally produced and imported food.</li> </ol>				L, S, CE

**STRATEGY: Create more community garden plots to educate and inspire individuals, build community, and produce local food.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
	<ol style="list-style-type: none"> <li>1. Develop more community gardens and teach people (or provide coaches and mentors) to help people learn to garden in this climate.</li> <li>2. Support community gardens.</li> <li>3. Develop garden / permaculture / food education classes.</li> </ol>			L, S, ES, CE, H

**Production, Capacity and Secure Supply**  
**-Continued-**

**STRATEGY: Develop options for sharing resources to support individuals, families, and farmers to grow/raise/produce food.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
	<ol style="list-style-type: none"> <li>1. Develop a cooperative of gardeners who help each other.</li> <li>2. Establish a tool lending library.</li> <li>3. Develop a local exchange for seeds.</li> <li>4. Develop cooperative systems among neighbors for creating gardens, sharing produce, and sharing seeds.</li> </ol>	<ol style="list-style-type: none"> <li>1. Establish a tool lending library</li> </ol>		L, S, ES, CE

**STRATEGY: Develop a local processing, storage, and distribution system that effectively connects local producers, manufacturers, processors, vendors and consumers.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Establish a baseline for food storage needs</li> <li>2. Gather information about initiatives and activities currently underway, and resources currently available - consult ACNET</li> <li>3. Explore ways to develop local food processing resources including mobile meat processing</li> <li>4. Explore the possibility of the development of a cold storage facility</li> <li>5. Establish a clearinghouse for information on cold storage requirements and parameters.</li> <li>6. Compile list of available commercial kitchens willing to allow public access.</li> <li>8. Develop a plan for establishing new commercial kitchens as necessary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Promote, market and educate about commercial kitchens (can also serve as business incubators).</li> <li>2. Assess next steps necessary to meet the need for a local processing, storage, and distribution system that effectively connects local producers, manufacturers, processors, vendor sand consumers and develop a plan.</li> </ol>	<ol style="list-style-type: none"> <li>1. Create a warehouse for storage and distribution of organic food.</li> <li>2. Establish new commercial kitchens as necessary.</li> <li>3. Explore food hub concept combining items one and two above into one facility.</li> <li>4. Develop and implement a plan to develop a local processing, storage, and distribution system</li> </ol>		L, S, CE, H

## Why Is Production, Capacity & Secure Supply Important?

In various regional and local community meetings, an identified high priority is the need to expand local agriculture and food production in Marion County and the Central Ohio region in order to improve local and central Ohio residents' access to local, sustainable, affordable and nutritious food and to create a secure food supply.

## Current Conditions

In order to produce enough food to improve access and create a secure food supply, we need to know how big the market is and how much local agriculture can supply. According to the *Central Ohio Local Food Assessment and Plan* "Central Ohio farmers raised \$1.1 billion worth of agricultural products in 2007. Of that, \$703 million was grain, oilseed, and dry beans or for processing or export, and another \$56 million was nursery, greenhouse, floriculture and sod products. That leaves just \$336 million, about 30 percent of the total, for food - vegetables, fruits, meat, poultry and dairy. This amounts to about \$118 worth of food per person in the region annually - a very small percentage of the food each person consumes".<sup>22</sup> Thus, there is tremendous growth potential for local agriculture in Central Ohio.

With regard to Marion County, the majority of farming operations are small businesses. The 2012 Census of Agriculture County Data reveals there are a total of 578 farms in Marion County. Of which:

1. 52% (298) of the county farms sell less than \$24,999 worth of product per year.
2. 16% (95) of the county farms sell between \$25,000 and \$99,999 worth of product per year.
3. 32% (185) of the county farms sell more than \$100,000 worth of product per year.

According to the below 2012 Census of Agriculture data below, the 2012 direct sales of agricultural products to consumers of \$181,000 represents one-tenth of one percent of the county's total agricultural sales of \$151,430,000. In addition, direct sales of local agricultural products to consumers declined by approximately 55% from 2007 to 2012 while the number of farms from 2007 to 2012 stayed the same. From conversations with Local Food Committee members and local farmers, this decline is mostly likely due to some local food farm operations being scaled back due to the operators preference.

It should also be noted, that the Committee felt that there was under reporting of small farms engaged in local food production in the 2012 Census of Agriculture Data (i.e. small farms missed or their operators simply chose not to fill out the 2012 Census of Agriculture Data Form) and the above data may represent only a small portion of local food production in Marion County.

### Vegetable Production

Data indicates there are six farms growing vegetables on 16 acres of land. The majority of these farms are 0.1 to 4.9 acres in size with one farm being 5.0 to 24.9 acres in size. All of the vegetables from these farming operations were sold directly to consumers. Locally grown vegetables include: green beans, cantaloupes, muskmelons, cucumbers, bell peppers, potatoes, pumpkins, squash, sweet corn, tomatoes, and watermelons. One new CSA farm is anticipated to start operation in 2015.



### Livestock and Poultry

There are a limited numbers of beef cows (440), sheep and lambs (1,757), layers (716), and broilers (622) in the county. Conversely, the county has 3,388 milk cows and 72,656 hogs and pigs. However, all local milk production goes out of county for processing into milk or milk products and all local hogs are transported to the east coast for processing and distribution.

### Orchards

Data indicates there are five orchard farms that utilize 19 acres of land. Locally grown fruit include: apples, sweet cherries, grapes, peaches, pears, nuts, and English Walnuts.

### Berries

According to the above data, there are three berry farms in the county. No information is available on acreage due to need to protect individual farm data. Locally grown berries include: blackberries, raspberries, and strawberries.

### Greenhouse / Hoop House

Data indicates there are two farms in the county utilizing green or hoop houses. However, no data is available on the size of the green or hoop houses to protect individual farm data.

### Maple Syrup

There are no standalone maple syrup farms in the county.

### Organic Agriculture

There are five USDA National Organic Program Certified Organic Production farms and one farm transitioning into USDA National Organic Program Certified Organic Production in the county. The five farms in question had \$253,000 in organic product sales which represents two-tenths of one percent of the county's total agricultural sales of \$151,430,000. One of the five farms has organic product sales ranging between \$1 to \$4,999 while the other four farm had organic product sales of \$5,000 or more.

**Figure 2**  
**Agriculture Profile of Marion County, Ohio**

	<b>2012</b>	<b>2007</b>	<b>% Change</b>
<b>Number of Farms</b>	578	654	-12%
<b>Land in Farms (acres)</b>	189,210	206,832	-9%
<b>Average Size of Farm (acres)</b>	327	316	3%
<b>Market Value of Products Sold</b>	\$151,430,000	\$100,230,000	51%
Crop Sales	\$112,350,000 (74%)	\$71,582,000 (71%)	56%
Livestock Sales	\$39,080,000 (26%)	\$28,648,000 (29%)	36%
Average Per Farm	\$261,990	\$153,257	71%
<b>Government Payments</b>	\$4,497,000	\$4,804,000	-6%
Average Per Farm Receiving Payments	\$10,581	\$9,310	14%

**Figure 3**  
**2012 Census of Agriculture**  
**2007 and 2012 Value of Agricultural Products Sold Directly to Individuals for Human Consumption**

	<b>2012</b>	<b>2007</b>	<b>% Change</b>
Farms	39	40	-3%
Direct Sales	\$181,000	\$402,000	-55%

**Figure 4**  
**2012 Census of Agriculture**  
**Vegetables Harvested for Sale - Farms and Acres**

	<b>Farms</b>	<b>Acres</b>
Vegetables harvested for sale	6	16

**Figure 5**  
**2012 Census of Agriculture**  
**Vegetables Harvested for Sale - Farms by Acres Harvested**

<b>Farms by Acres Harvested</b>	<b>Farms</b>
0.1 to 4.9 acres	5
5.0 to 24.9 acres	1

**Figure 6**  
**2012 Census of Agriculture**  
**Vegetables Harvested for Sale for Processing or Fresh Market**

<b>Harvested</b>		<b>Harvested for Processing</b>		<b>Harvested for Fresh Market</b>	
<b>Farms</b>	<b>Acres</b>	<b>Farms</b>	<b>Acres</b>	<b>Farms</b>	<b>Acres</b>
6	16	-	-	6	16

**Figure 7**  
**2012 Census of Agriculture**  
**Livestock and Poultry**

<b>Livestock and Poultry</b>	<b>Farms</b>	<b>Number</b>
Cattle and calves inventory	77	5,862
Beef cows	37	440
Milk cows	15	3,388
Cattle and calves sold	61	2,466
Hog and pigs inventory	30	72,656
Hogs and pigs sold	30	209,629
Sheep and lambs inventory	40	1,757
Layers inventory	41	716
Broilers or other meat-type chickens sold	9	622

**Figure 8**  
**2012 Census of Agriculture**  
**Land in Orchards**

	<b>Farms</b>	<b>Acres</b>
Orchards	5	19

**Figure 9**  
**2012 Census of Agriculture**  
**Berries Harvested for Sale - Farms and Acres**

	<b>Farms</b>	<b>Acres</b>
Berries	3	D

**Figure 9**  
**2012 Census of Agriculture**  
**Greenhouse / Hoop House**

<b>Farms</b>	<b>Sq. Ft. Under Glass or Other Protection</b>	<b>Acres in the Open</b>
2	D	D

**Figure 10**  
**2012 Census of Agriculture**  
**Maple Syrup**

<b>2012</b>		
<b>Farms</b>	<b>Number of Taps</b>	<b>Syrup Produced (gallons)</b>
-	-	-

**Figure 11**  
**2012 Census of Agriculture**  
**Organic Agriculture**

<b>Type of Production</b>	<b>Farms</b>
USDA National Organic Program Certified Organic Production	5
USDA National Organic Program Organic Production Exempt from Certification	-
Acres Transitioning into USDA National Organic Program Organic Production	1

**Figure 12**  
**2012 Census of Agriculture**  
**Organic Agriculture Value of Sales of Certified or Exempt Organically Produced**  
**Commodities**

	Farms	Sales
<b>Total Organic Product Sales</b>	5	\$253,000
By Value of Sales:		
\$1 to \$4,999	1	D
\$5,000 or more	4	D

Symbols

- Represents 0.
- D Withheld to avoid disclosing data on individual farms.

### **Backyard and Community Gardens**

In addition to established farming, backyard gardening and participation in community gardens have the potential to contribute to the production of local, healthful and seasonal food. Over the last several years, interest in local community gardens has grown. Many community garden sites have been developed at churches, schools, city and village parks, and the Marion YMCA. To date approximately 90 community garden beds have been developed at community garden sites. The success of community garden projects has been due in part to an active interest and grant funding by local Health Coalition Members (Marion Area Health, YMCA, Pioneering Healthy Communities, Creating Healthy Communities, Marion Community Food Development) interested in improving the health of Marion County Residents. In addition, local volunteers (i.e. Master Gardeners) also have been key to the success of the community garden projects. No statistics are currently available on the production capacity of these gardens, or what kinds of food they do or could supply.

### **Marion County Food Production and Consumption**

How much land is required to feed Marion County residents? Using conventional U.S. agricultural practices requires 15,000 to 30,000 square feet of land area for an average U.S. diet (assuming average amounts of vegetables, fruits, grains, beans, eggs, milk, cheese, and meat are eaten).<sup>23</sup>

Assumptions for calculation of land area needed for local food production:

1. County Population is 66,501 (2010 Census)
2. We use an average of 23,000 square feet per person for local food
3. County land area is 261,760 acres

<b>Percent of Population</b>	<b>Population</b>	<b>Land Area in Acres for Local Food Production</b>	<b>Percent of County Land Area needed for Local Food Production</b>
10	6,650	3,511	1.34
20	13,300	7,022	2.68
30	19,950	10,534	4.02
40	26,600	14,045	5.37
50	33,251	17,538	6.70
60	39,901	21,068	8.05
70	46,551	24,579	9.39
80	53,201	28,091	10.73
90	59,851	31,602	12.07
100	66,501	35,113	13.41

If local food production were to switch from current commercial farming practices to BIOINTENSIVE® sustainable mini-farming methods we could potentially reduce the amount of land needed above to provide for our local food needs. Utilizing BIOINTENSIVE® farming methods, a skilled farmer can produce approximately two to six times the yield compared to commercial agriculture, while using 67%-88% less water, 99% less energy and 50%-100% less purchased organic fertilizer per unit of yield compared with commercial agriculture.<sup>24</sup> . Generally, if a farmer employs BIOINTENSIVE® farming methods, a person’s complete diet can be grown on 4,000 square feet.<sup>25</sup> However, given that the average American diet also contains meats, eggs, milk, and cheese a less intensive form of BIOINTENSIVE® farming could be utilized to include livestock (need area for grazing and livestock food production) requiring more land area than just 4,000 per person for food (this is difficult to calculate because different livestock have different area requirements - for example a cow / steer require 40,000 sq. ft for grazing, chickens require 600 to 3,000 sq. ft. for grain food supplement).<sup>26</sup>

**Capacity**

In addition to adequate supply, access to a food-processing infrastructure is essential to building a local sustainable food system. Processing facilities allow food producers to provide a wider array of products, extend the shelf life of locally produced foods, and increase their income because they can sell value-added or processed foods at a higher price than raw products. Even minimal processing of foods, such as chopping and washing leafy greens, can add value and thus increase the take-home pay for growers and producers. Increased pay not only encourages more individuals to grow and produce food, but it also has an economic multiplier effect on the community, meaning it benefits the community because more money is available to be spent locally. In addition, processing allows for increased utilization of raw commodities and livestock, which means the community experiences

less waste, improves profitability and job creation, and decreases reliance on infrastructure outside of the region.<sup>27</sup>

## Processing, Aggregation and Distribution

As the demand for local food increases and back yard gardens, community gardens, small and mid-sized farmers respond by scaling up production, these producers will need to move beyond direct sales of small quantities to larger transactions with buyers of all kinds and sizes—including schools and other institutions, grocery stores, and restaurants.

The *Central Ohio Local Food Assessment and Plan* indicates that lack of infrastructure capacity is probably the biggest barrier to developing a regional food system in central Ohio. “The region has produce and livestock auction houses, meat and dairy processing plants, distributors of fresh and processed food, and facilities for processing and canning food products. But it doesn’t have enough of these to feed the region, and it lacks a coordinated network of processors and distributors. The region also lacks a poultry processing plant and a facility to flash freeze local produce for winter consumption. And it lacks an aggregation or distribution center where farmers can take their products to be packaged for distribution”.<sup>28</sup>

“Fortunately, Ohio has retained enough of its food infrastructure to have a foundation for growth. These are some of the infrastructure-related challenges to building a local-food system:

- Lack of coordinated instructional buying.
- Lack of co-ops, brokers, other aggregators.
- Declining number of local distributors due to vertical integration of retail chains.
- Lack of capacity in existing meat processors, lack of sufficient poultry processing.
- Lack of flash-freezing facility.
- Confusing regulations: health regulations and weights & measures standards vary from county to county.
- Proposed federal food-safety regulations, leafy green marketing agreements and milk marketing agreements that pose a threat to local food systems.
- Lack of community kitchen incubators for processing.
- Lack of aggregation points and kitchens for urban community gardens.
- Difficulties in finding capital to expand or create infrastructure businesses.
- Unmet needs for training a workforce for food-infrastructure jobs and devising plans to ensure the jobs are filled by current central Ohio residents”.<sup>29</sup>

## Resilience and Secure Supply

Resilience is defined as the ability of a food system to preserve its function of supplying food in the face of disturbances to the system.<sup>30</sup> Disturbances can be global or local; they can be caused by a catastrophe, for example an earthquake or terrorist event, or they can result from slow change over many years, as is likely to happen with climate change or fossil fuel depletion. A resilient food system is able to recover quickly from sudden disasters and can adapt to long-term change.

Food systems depend upon a wide range of inputs, including weather, natural resources, labor,

energy, financing, transportation, markets, and imported food. A resilient system has alternative sources for essential inputs, so that there is not too much reliance on a single source. Some inputs may be local, like water, good weather at critical points in the growing season, or a local market for goods. Others may be nonlocal, such as available farm credit, transportation in and out of the region, commodity prices, or the price of fuel/energy.

Resilience is built into a food system when all of its component parts have alternatives. For a food system this means that many types of food are produced by many farmers, processed by many businesses, and distributed using many different outlets and networks. Locally produced food may be less vulnerable to distribution problems than long-distance food since there are so many more possible ways to get it to the consumer. A diversity of financing options, energy sources, labor sources, and methods to transport food help make the food system more secure.<sup>31</sup>

Why is this important? The size of the current conventional food system poses many hazards for food security for both humans and animals. The more steps in the chain from planting to consumption, the more opportunities there are for disruption from a variety of sources – lack of fuel, politics, terrorism, climate changes, etc. As mentioned earlier in this document, if there was a snowstorm or other disruption and delivery trucks couldn't get through, the grocery store shelves would be bare in three days. Disturbances to the current food system can cause food shortages or increases in price, impacting food security. The result? Scarce or non-existent local food resources.

## **Issues / Challenges**

- Not enough product to fulfill needs of local market
- Lack of baseline data about local/regional demand/need
- Limited growing season
- Lack of infrastructure capacity
- Lopsided competition between “newcomer” producers and established local producers
- Available farmland is shrinking owing to the fact that many people perceive agricultural land as “undeveloped” land awaiting a “higher” use.
- Costs of local, small scale production too high to produce a reasonable return on investment



# Environment, Water & Land Use

## Goals:

**Goal 1: Develop and promote local agriculture, food production, distribution, consumption and food waste management as components of a food system that regenerates the ecosystem, enhances biodiversity, and promotes practices that mitigate climate change.**

## Description

Environment can be defined as the totality of surrounding conditions, which in their complex inter-relationships form the framework, setting and living conditions for humans and other living organisms by their very existence or by virtue of their impact. The Merriam-Webster Dictionary defines environment as:

- a: the complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival.
- b: the aggregate of social and cultural conditions that influence the life of an individual or community.

## Characteristics of Environment, Water & Land Use in a Sustainable Food System

- Local agriculture, food production, distribution, consumption and food waste management are part of a food system that regenerates the ecosystem, enhances biodiversity, and promotes practices that mitigate climate change.
- Land, water, and air quality is conserved and protected.
- Soil quality is maintained and improved.
- Ecological sustainability is supported.
- Relationships and interactions between dynamic natural and human systems are considered, monitored, and respected.

**Environment, Water & Land Use**

**GOAL:** *Develop and promote local agriculture, food production, distribution, consumption, and food waste management as components of a food system that regenerates the ecosystem, enhances biodiversity, and promotes practices that mitigate climate change.*

**STRATEGY: Identify and implement strategies to improve soil quality throughout the county.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>Enhance local compost utilizing food waste.</li> <li>Work with MCSW to identify strategies to improve county soil quality.</li> </ol>	<ol style="list-style-type: none"> <li>Implement strategies to improve soil quality in county.</li> </ol>			L, ES, CE

**STRATEGY: Support the development of alternative energy sources.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>Provide information and education about alternative energy sources.</li> <li>Support alternative energy sources for infrastructure needs.</li> <li>Use solar and wind power as much as possible.</li> <li>Research non-petroleum options for food distribution (including bikes, wagons, etc.).</li> </ol>	<ol style="list-style-type: none"> <li>Develop an environmentally friendly fleet for produce pick-up and distribution.</li> </ol>			L, ES, CE

**STRATEGY: Explore and address challenges surrounding water quality.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>Work with MCSW to identify strategies to improve county water quality.</li> <li>Update Marion County Subdivision Regulations to include LID Standards.</li> </ol>	<ol style="list-style-type: none"> <li>Work with townships with zoning regulations to develop setback regulations for structures near ditches, streams, and rivers.</li> </ol>			L, ES, CE

**Environment, Water & Land Use**  
**-Continued-**

**STRATEGY: Explore and promote methods for water conservation.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
1. Coordinate and sponsor water harvesting workshops with Marion County Litter Prevention and Recycling (rain barrels, water gardens). 2. Encourage tree planing programs.				ES, CE

**STRATEGY: Nurture a healthy ecosystem.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
1. Explore and apply permaculture principles in home and community gardens.				ES

## Why Is Environment, Water & Land Use Important?

Environmental sustainability is a key element of a local sustainable food system. Communities striving for such a food system should focus on replacing conventional practices with the many policies and best practices that address the environmental and social concerns tied to food production.<sup>32</sup> These include encouraging local food production and distribution; incentivizing organic food production and the reduction of pesticides, herbicides, and antibiotics; and remediating urban brownfields (e.g., lands previously used for industrial/commercial purposes that may be contaminated) for use as urban farms and community gardens; and advocating for municipal compost facilities. Food councils can advocate for these practices and educate producers, policy makers, and the community about their beneficial effects. In addition, there are a number of policy goals that food councils can undertake to help develop food systems that more responsibly utilize environmental and human resources:

### 1. Local Purchasing

One way to reduce harmful environmental impacts is to increase the purchase of local foods so that foods do not have to travel long distances.

### 2. Sustainable Agricultural Practices

Food policy councils interested in environmental sustainability may want to work to educate local stakeholders about the importance of utilizing sustainable growing methods to improving environmental impacts.

### 3. Food Waste Disposal

One issue in food system sustainability is reducing the amount of food waste and utilizing excess food supplies in beneficial ways, such as through composting programs and gleaning or food donation initiatives.

### 4. Sustainability Plans

Include sustainability goals in local land use plans. Conservation of Marion County natural resources (air, water, land) are needed to maintain the quality of life for current and future generations and for the ability to protect agricultural lands and production.<sup>33</sup>

## Land Use

If sustainability is going to be defined as development that meets the needs of the present without compromising the ability of future generations to meet their needs, then land use planning is a key component of a sustainable future. Effective land use planning must integrate environmental, economic, and social considerations as well as include significant input from local citizens.

Approximately, 90 percent of Marion County is considered prime agricultural land (when drained). This represents roughly 235,584 acres. Smart growth policies have allowed the Marion Community to grow while remaining compact. This has allowed large areas of agricultural land to remain viable as agricultural land and has limited development pressure to other uses in these areas. In addition,

the *2011 Marion County Land Use Plan* recommends conservation natural resources related to :

1. 100-year floodplain areas designated as conservation areas to maintain stream / river water quality.
2. Conservation of large blocks of wooded areas (Ohio was once predominately covered in woodlands) for wildlife habitat.

## **Water**

Water quality and conservation are issues that need to be addressed now and in the future in Marion County within the agricultural community, government agencies, businesses and industries, and homeowners.

## **Issues / Challenges**

- Threats to surface and groundwater from future major oil/gas drilling (Marion lies within the shale deposit areas in Ohio), chemical pollution (point and non-point), sanitary sewer plant releases, etc.
- Water education i.e. understanding water conservation and quality within Marion County and the Central Ohio Region.
- Monitoring and adjustment of local policies (i.e. subdivision regulations, zoning, etc.) that enhance water quality and conservation.

# Economic Development

## Goals:

**GOAL 1: Use the food system to foster economic development and to promote a thriving local economy.**

**GOAL 2: Grow the local food economy to a scale that meets the county needs, contributes to the success of the county’s food producers, distributors and processors, and creates living-wage jobs that contribute to the recirculation of wealth within the community.**

## Description

Economic development is the “process by which a community creates, retains, and reinvests wealth and improves the quality of life”.<sup>34</sup>

## Characteristics

- Embraces the concept of sustainability
- Focuses on localized economic activity and grows the local economy (and contributes to the regional economy)
- Promotes a sustainable living-wage income for local food producers, distributors, and processors.

**Economic Development**

**GOAL 1:** *Use the food system to foster economic development and to promote a thriving local economy.*

**GOAL 2:** *Grow the local food economy to a scale that meets the region’s needs, contributes to the success of the region’s food producers and distributors, and creates living-wage jobs that recirculate wealth within the community.*

**STRATEGY:** **Engage the community in growing the local food economy by localizing investment and increasing local spending.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Support those individuals who are currently growing or who are serious about growing food.</li> <li>2. Provide education for consumers about how and why to buy locally.</li> <li>3. Develop programs to explain the importance of keeping money in the county and how increasing local production can help attain this end.</li> <li>4. Work with local banks to invest or provide gap funding for local food related business venturers.</li> <li>5. Provide support for local food entrepreneurs.</li> <li>6. Support economic development that takes advantage of local resources.</li> <li>7. Educate county residents about the importance of food security.</li> </ol>				L, S, ES, CE

**Economic Development**  
**-Continued-**

**STRATEGY: Develop commercial markets for local foods, including institutional (e.g. schools, hospital, etc.) markets.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
	<ol style="list-style-type: none"> <li>1. Gain a better understanding of and develop baseline data regarding the quantity needs of local commercial enterprises (food stores, restaurants, institutions, etc.)</li> <li>2. Encourage local grocery stores to provide bins or special places for local growers to sell if they do not produce enough to have a permanent place within the store.</li> <li>3. Help producers learn how to work with local institutions.</li> <li>4. Encourage local commercial enterprises to buy local food even if it only one item.</li> <li>5. Develop coordinated transportation from producers to potential consumers.</li> <li>6. Develop local food exchange that acquire food from local producers and then sell to larger institutions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Work to increase farm to school opportunities.</li> <li>2. Create a mechanism where local producers can bid on providing food to local institutions.</li> </ol>		L, S, CE



**Economic Development**  
**-Continued-**

**STRATEGY: Support food producers to develop a successful, profitable business enterprise.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
1. Develop a plan to provide educational programs to foster the business success of sustainable small acreage farmers.	1. Create economic development opportunities for entrepreneurs wishing to sell value-added food products to local markets.	1. Development of a commercial kitchen to allow local producers the opportunity to explore value-added food products.		CE

**STRATEGY: Develop local employment opportunities that support the local food system.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
	1. Develop a workforce that are trained in ag production. 2. Educate community leaders about the benefits of creating agricultural jobs – they remain local and it keeps money in the community. 3. Create a pool of local ag labor			CE

**Economic Development**  
**-Continued-**

**STRATEGY: Explore and develop entrepreneurial opportunities in the region.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
1. Develop a list of possible entrepreneurship opportunities for all aspects of the food system.	1. Promote farmers' markets and agricultural tourism. 2. Encourage local individuals to start entrepreneurial operations that transport food within the county. 3. Develop a list of greenhouses that can provide space for entrepreneurs	1. Development of a commercial kitchen to allow entrepreneurs the opportunity to explore value-added food products.		L, S, ES, CE

**STRATEGY: Regularly evaluate the viability of the local food system.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
		1. Implement a system of evaluating economic impacts from local food on the local economy that looks beyond profit generation. 2. Educate people about how to think of the economy in a different way – no longer using growth as the measure of success but using sustainability instead 3. Understand how food production is dependent on economics		CE

## Why Is Economic Development Important?

Economic Development involves promoting the standard of living and economic health of the region and involves multiple areas including development of human capital, critical infrastructure, regional competitiveness, environmental sustainability, social inclusion, health, safety, literacy, and other initiatives. Often when we hear the term “economic development”, we think about recruiting industry or adding jobs. But industrial recruitment and job count are not the only, or even most important, determinant of a strong local economy. Bringing economic health and prosperity to a community requires much more than constructing a new industrial park and enticing a company to open a new plant there. Business retention and expansion, small business and entrepreneurial development, retention of the region’s young population, promotion of cultural capital, arts, tourism and retiree attraction, all play a part in regional economic development. Economic development also embraces the concept of “sustainability” — meeting the needs of the current generation without compromising the ability of future generations to meet their own needs. That is, our goal should be to grow employers, jobs and incomes without compromising our natural and other assets.<sup>35</sup>

## Growing the Local Economy

There is substantial evidence that the growth of local food purchasing positively impacts the local economy in a variety of ways. A USDA report, “*Local Food Systems: Concepts, Impacts, and Issues*” (2010), summarizes the results of a variety of studies looking at the issue of economic impact of local food markets. The overall review found that regional or local food systems have the potential to positively impact the local economy. In particular, the following benefits were found:

- When consumers purchase food from local sources, rather than from food that is imported from outside the area, sales and money stay with businesses and individuals within the area. This can then create additional economic benefits for the community at large.
- More money will stay in the area when various stages of food production and consumption are carried out locally. For example, if processing of certain foods is done locally, this increases economic benefit by retaining more cash in the local community.
- Farmers’ markets were found to have a positive impact on local economies. One study found that each dollar of personal income earned at farmers’ markets generated an additional 47 cents in indirect and induced income, and that each full time job created at a farmers’ market supported almost half of a full time equivalent job in other sectors of the economy.
- Even when displaced economic activity within the local community reduced the positive economic impacts of localization (for example, sales lost at mainstream retail stores), the overall estimated benefits were still positive.
- Improved business skills and opportunities and increased consumer spending at other businesses within a community were also noted as potential positive impacts. Local food systems will inevitably retain more revenue within a region than conventional purchasing.

Local food systems will inevitably retain more revenue within a region than conventional purchasing. Whether it is direct-to-consumer sales or sales to local retailers, a greater percentage of each dollar will remain in the region. In this way, a regional food hub and healthy local food system will foster regional economic development.<sup>35</sup>

Studies of the economic impact of local spending found that locally directed spending contributes as much as two to three times more to a community's income than spending at non-local businesses. Local multipliers measure the impact of local spending on a community's income. Increasing local income leads to what economists call a "multiplier effect", that is, an increase in income from additional rounds of spending. . . . the larger the local multiplier, the more dollars circulating locally, the greater the number of economic linkages and the greater their strength. More and stronger linkages suggest a healthier, more diverse and resilient economy.<sup>36</sup> Communities can benefit from initiatives to localize economic activity by increasing the proportion of local to non-local spending. . . . spending food dollars locally significantly increases regional income because local food economy businesses are likely to use local suppliers.<sup>37</sup>

### **Issues/challenges**

- Approximately 19% of the County's population is considered below poverty level in regard to income.<sup>38</sup>
- There is a need to enhance local food small business development and entrepreneurship support and resources.

# Education, Training & Knowledge Transfer

## Goals

**GOAL 1: Develop resources and implement ways to educate, train, mentor and share knowledge about growing/raising food.**

**GOAL 2: Provide elementary and secondary education students with increased exposure to and the opportunity to pursue careers within the food system.**

## Description

Education, training and knowledge transfer refers to the means of increasing the base of knowledge, skills, and experience necessary to produce and sustain the local food supply. Workforce development to train new and existing farmers and producers and also entrepreneurs in food-related enterprises is a key component, as is providing community members of all ages with an understanding of where food comes from and why the way it is grown and sold is important.

## Characteristics Education, Training & Knowledge Transfer Important in a Local Sustainable Food System

- Food system education for all ages
- Transferring knowledge: gathering information and learning from those who are experienced
- Leveraging institutions and organizations to provide educational opportunities
- Educating gardeners/growers/producers, current and future, large- and small-scale
- Educating consumers about true food costs

**Education, Training and Knowledge Transfer**

**GOAL 1:** *Develop resources and implement ways to educate, train, mentor and share knowledge about growing/raising food.*

**GOAL 2:** *Provide elementary and secondary education students with increased exposure to and the opportunity to pursue careers within the food system.*

**STRATEGY:** **Establish K-12 programs and/or develop curriculum to educate young people about farming.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Have classes that focus on ag and food at the secondary level.</li> <li>2. Use existing community grow boxes at the schools so children can learn about where food comes from.</li> <li>3. Recruit young farmers</li> <li>4. Form a “young local food ag leadership” program</li> <li>5. Use the availability of greenhouses as a way to attract young growers</li> <li>6. Explore partnerships with OSUM and OSU Extension Office for ag and food education classes</li> <li>7. Find out why growers are dropping out of production</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop and incorporate gardening, food and nutrition education into traditional academic curriculum</li> </ol>	<ol style="list-style-type: none"> <li>1. Encourage young people to become farmers by having programs and land available to use for garden projects</li> <li>2. Use the availability of greenhouses as a way to attract young producers</li> </ol>		<p align="center">L, S, ES, CE</p>

**Education, Training and Knowledge Transfer**  
**-Continued-**

**STRATEGY: Develop mechanisms to collect and disseminate local knowledge.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Identify local sources of knowledge about land use and farming and make sure that this knowledge is not lost</li> <li>2. Pull together farmers/producers who know what to do and when to do it and have them mentor new growers</li> <li>3. Understand what has worked or not worked in other communities and how this might play out in communities</li> </ol>				L, S, ES

**Education, Training and Knowledge Transfer**  
**-Continued-**

**STRATEGY: Explore available resources from local colleges/universities, Agricultural Extension Services, and other entities and develop appropriate educational opportunities.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
	<ol style="list-style-type: none"> <li>1. Get more people to take the Master Urban Farmer Workshop offered through the OSU Extension Office.</li> <li>2. Educate people about how to grow given our climate.</li> <li>3. Teach people how to design and care for their garden</li> <li>4. Provide a means to coach and mentor producers (including backyard gardeners)</li> <li>5. Educate people about how to plan for the production cycle in their own backyard gardens</li> <li>7. Make onsite gardening classes available to new gardeners</li> <li>8. Offer classes that focus on small production and producing for people of all income levels.</li> </ol>	<ol style="list-style-type: none"> <li>1. Get more people to take the Master Urban Farmer Workshop offered through the OSU Extension Office.</li> <li>2. Educate people about how to grow given our climate.</li> <li>3. Teach people how to design and care for their garden</li> <li>4. Provide a means to coach and mentor producers (including backyard gardeners)</li> <li>5. Educate people about how to plan for the production cycle in their own backyard gardens.</li> <li>7. Make onsite gardening classes available to new gardeners</li> <li>8. Offer classes that focus on small production and producing for people of all income levels.</li> </ol>		L, S, ES, CE, H



**Education, Training and Knowledge Transfer**  
**-Continued-**

**STRATEGY: Increase awareness about true food costs (environmental impacts, transportation/fuel, etc.).**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Educate producers about the true costs of what they are selling</li> <li>2. Educate consumers about the true cost of food and who pays the cost</li> <li>3. Educate consumers about the benefits and value of local food</li> <li>4. Educate consumers about the costs of convenience and that convenience is not always the most important thing</li> <li>5. Make information about the costs/perils of trucked in food more highly visible</li> </ol>				L, S, ES, H

## Why Is Education, Training & Knowledge Transfer Important?

Being aware and conscious of the economic, social, and environmental impacts of our food system is the first step towards embracing and participating in a local sustainable food system. We can start by asking and answering basic questions, like: Where did this food come from? How was it grown? How did it get to my plate in its present form? What are the true costs (including human health, environmental health, antibiotic resistance, carbon footprint) of low-priced foods produced, distributed and sold in the current industrial food system?<sup>39</sup>

Local food system success will depend, in good measure, on its educational opportunities for answering questions like these, and for acquiring knowledge, leveraging resources, sharing best practices, accessing skilled leadership, perpetuating generational knowledge, and ensuring student and worker preparation and training. Any food system plan must include efforts to improve food system education, from elementary school to college and beyond, and to better prepare the next generation of farmers and food system workers for success.

Providing education to food system participants of all ages about the answers to these questions begins to create a community of enthusiastic food system advocates who start to make informed and healthy choices about food (producing it, purchasing it, preparing it, eating it).

In addition, educating and training the next generation of farmers is critical. The nation's and Ohio's farmers are getting older. According to the *2012 Census of Agriculture* the average age of a farmer in Ohio is approximately 57. Nationally, the average age of a farmer is approximately 58. There is a huge need and opportunity for new young farmers to partner with local colleges, universities, OSU Agricultural Extension Service and other education sources to develop courses, programs, and hands-on training for young people who want to work the land.

Finally, we want to continue to build awareness about problems in our food system and the true cost of food. Though packaged/processed, convenience, and fast food is generally thought of as cheap, [the] food miles traveled and the current dominating food system represent many hidden economic, social, and environmental costs that are not factored into the actual price of food.<sup>40</sup>

## Issues/challenges

- Need more new farmers
- Need buy in at educational institutions for healthy, nutritious foods as part of curriculum, meals, activities and careers
- Have school gardens / community grow boxes be an integral part of school grounds
- Need apprenticeship programs and mentoring programs to connect young farmers with older farmers (would help with knowledge transfer, labor, land acquisition and more)
- Loss of local, geographic specific agricultural knowledge
- Need to identify local, traditional farmers to facilitate knowledge transfer
- Encourage community gardens in order to facilitate community building, communal growing and sharing, knowledge and resource sharing, connection to the natural world

# Health, Access & Community Building

## Goals

**GOAL 1: Residents are food secure and have access to sufficient affordable, nutritious, fresh foods.**

**GOAL 2: Influence healthy eating and active living, and reverse the chronic health issues related to obesity in Marion County.**

**GOAL 3: Celebrate and nurture the natural diversity of the region: humans, cultures, ecosystems, and economies.**

**GOAL 4: Nurture a sense of place and belonging that promotes security and happiness.**

**GOAL 5: Foster connections, collaboration, cooperation, and fair and equitable distribution of resources.**

## Description

Health, access and community building focuses on the health impacts of poor eating habits and lack of access to fresh, nutritious food, and on the way the local food system can support healthy people and healthy communities. Also important is how our communities coalesce, collaborate and celebrate around growing, preparing and eating food. Food traditions and their place in our culturally rich and diverse region are included and celebrated.

## Characteristics of Health, Access & Community Building in a Local Sustainable Food System

- Improved food-related health outcomes
- Eaters are educated about food use based on knowledge of basic nutrition and healthy food choices
- Community members have access to fresh, healthy, affordable local foods
- Environments that include healthy eating and physical exercise exist
- Community through food and the culture surrounding food is an integral part of life

**Health, Access & Community Building**

**GOAL 1:** *Residents are food secure and have access to sufficient affordable, nutritious, fresh foods.*

**GOAL 2:** *Influence healthy eating and active living, and reverse the chronic health issues related to obesity in Marion County.*

**GOAL 3:** *Celebrate and nurture the natural diversity of the region: humans, cultures, ecosystems, and economies.*

**GOAL 4:** *Nurture a sense of place and belonging that promotes security and happiness.*

**GOAL 5:** *Foster connections, collaboration, cooperation, and fair and equitable distribution of resources.*

**STRATEGY: Provide means for all to participate.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Develop commercial kitchens and have them open for public use</li> <li>2. Make healthy food available to all seniors</li> <li>3. Make sure that everyone is able to participate in some way and feels welcome</li> <li>4. Find ways for people who are not physically able to garden to participate in gardening enterprises -for example, teach them how to grow in raised container gardens</li> <li>5. Create food buying clubs</li> <li>6. Make healthy food available at all institutions (senior centers, schools, hospitals, etc.)</li> </ol>				L, S, CE, H

**Health, Access & Community Building**  
**-Continued-**

**STRATEGY: Promote the benefits of local food to all populations.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Use farmers markets as a venue for educating people about local food</li> <li>2. Work with the Chamber of Commerce and Convention and Visitors Bureau on doing things to promote local production and purchasing of local food – eg. the local food label – and to develop connections between growers and market outlets</li> <li>3. Devise education and marketing campaigns that take into account all the various sub-populations within Marion County</li> <li>4. Make better use of local media for marketing</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop and display stories from different population groups related to how they produce and use local food</li> <li>2. Support growing green activities in the county throughout the year</li> </ol>			L, S, ES, CE, H

**STRATEGY: Improve access to and consumption of healthy, safe and affordable foods.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Ensure that SNAP and WIC recipients can use these programs to buy food at farmers markets</li> <li>2. Start a food sharing program where people with backyard gardens and people who grow food in community gardens can share this food with people who cannot grow their own</li> </ol>	<ol style="list-style-type: none"> <li>1. Leverage state and federal food assistance programs to merge food access with healthy food options (EBT, SNAP, WIC Farmers' Market Nutrition Program Vouchers)</li> <li>2. Provide a means for people to acquire the resources they need to raise food</li> <li>3. Educate people that the more local food that is produced the more affordable it will become</li> </ol>			L, S, ES, CE, H

**Health, Access & Community Building**  
**-Continued-**

**STRATEGY: Develop and utilize diverse distribution methods.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
1. Develop distribution plans that are convenient for commercial establishments as well as for individuals	1. Develop cross-community distribution networks 2. Develop distribution plans that are convenient for commercial establishments as well as for individuals			L, H

**STRATEGY: Educate about and facilitate the practice of healthy cooking.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
1. Teach people how to cook from the basics 2. Provide free, or low cost cooking classes and make sure there are scholarships so that anyone who wants to take a class can take it 3. Use food pantrys as venues for cooking classes				L, H

**Health, Access & Community Building**  
**-Continued-**

**STRATEGY: Promote programs and policies that support healthy nutrition.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Work with local schools to provide education about nutrition and food</li> <li>2. Raise awareness about the importance of healthy eating to prevent childhood obesity</li> </ol>	<ol style="list-style-type: none"> <li>1. Teach families how to use raw food by having demonstrations, recipe sharing, and incorporating kids into growing and preparing</li> <li>2. Work with the health care industry to educate people about nutrition and how changes in diet can help combat specific diseases without using expensive medications</li> <li>3. Teach people how to eat seasonally</li> <li>4. Teach people how to read nutrition labels</li> </ol>			L, H

**STRATEGY: Reduce access to and consumption of calorie-dense, nutrition-poor foods.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
		<ol style="list-style-type: none"> <li>1. Amend local zoning ordinances /resolutions prohibiting fast food restaurants within 500 feet of a school</li> <li>2. Combine Zoning restrictions with incentives for healthy food alternatives</li> <li>3. Model Healthy Food Zone Ordinance <a href="http://www.changelabsolutions.org/publications/model-ord-healthy-food-zone">http://www.changelabsolutions.org/publications/model-ord-healthy-food-zone</a></li> </ol>		L, H

**Health, Access & Community Building**  
**-Continued-**

**STRATEGY: Develop and promote opportunities for cross-community and inter-community connections.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
		<ol style="list-style-type: none"> <li>1. Promote programs that get neighbors together and encourage people to get to know their neighbors in order to facilitate sharing of resource and inputs</li> <li>2. Do not become isolationists - learn to share with our neighbors and help each other and to keep the sense of community and reciprocity</li> <li>3. Involve the community in the process of becoming more sustainable</li> <li>4. Plan for walking, biking and play (in process with multiple agencies)</li> <li>5. Adopt a complete streets policy</li> <li>6. Plan a county trail system (in process through with multiple agencies)</li> <li>7. Educate people about how to prepare for and what to do in case of a food emergency</li> </ol>		L, ES, CE, H



## Why Is Health, Access & Community Building Important?

Just as our food choices can contribute to our health and well-being, conversely, what we choose to eat may adversely impact our health and well-being. “Because of unhealthy diets, 100 years of progress in improving public health and extending lifespan has been reversed. Today’s children are expected to live shorter lives than their parents. In large part, this is because a third of these children will develop Type 2 diabetes, formerly rare in children and a preventable disease that reduces life expectancy by several years.<sup>41</sup> In addition, the standard American a high-calorie diet, combined with a lack of exercise, accounts for one-third of the premature deaths in the U.S.<sup>42</sup>

Poor diet is a major contributor to obesity and chronic disease in this county. According to the **2011 Marion County Community Health Assessment**, nearly half of adults in the county considered their health status to be excellent or very good while 56% described themselves as being either overweight or obese.<sup>10</sup> According to the 2013 / 2014 **Third Grade BMI Study**, “47% of students in Marion City were identified as being overweight or obese”.<sup>11</sup> This data indicates that a large portion of the county’s population could potentially be at risk for weight related health problems, and that many may not be fully aware of the risks. Promotion of fresh, healthy foods is a method to combat the rising tide of obesity and the negative economic impacts of the associated health care costs. An educational component is also vital as a means to help people achieve better health and nutrition.

Low-income, underserved neighborhoods (such at the west side of Marion City which is considered a food insecure area by the USDA) are at the highest risk for obesity because they often lack supermarkets, leaving convenience stores or fast-food chains as the main sources of meals. Expensive fruits and vegetables are also cost-prohibitive for low-income families which often stretch their limited food dollars by purchasing high-calorie, low nutrition processed foods. These barriers often prohibit families from meeting the 2010 dietary guidelines recommendations.<sup>43</sup>

A successful local sustainable food system ensures that access to safe and nutritious food is not limited by economic status, location, or other factors beyond the control of community members. Without access and without good food choices, diet-related public health issues will continue to rise in Marion County. These health issues impact young people, adults, the elderly and the entire community, with far-reaching effects on health care costs, worker productivity, and quality of life.

## Food Security

Two useful definitions of food security are: “A condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice,”<sup>44</sup> and the USDA Food and Nutrition Service’s definition: “access by all people at all times to enough nutritious food for an active, healthy life.”<sup>45</sup>

Commonly, the definition of food security includes both physical and economic access to food that meets people's dietary needs as well as their food preferences. This involves:

- Food availability: sufficient quantities of food available on a consistent basis.
- Food access: having sufficient resources to obtain appropriate foods for a nutritious diet.

- Food use: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation.<sup>46</sup>
- Food emergency preparedness: having in place the systems and provisions to sustain our community in the event of disruptions.
- Growing season extension: the infrastructure to grow food year round, such as hoop houses and greenhouses.
- Storage capacity: infrastructure to store foods for longer periods, especially over winter when not as much is being grown.

## **Community & Culture**

The cultivation, distribution, preparation, and appreciation of delicious and healthy foods provide rich opportunities to meet, work, eat, and celebrate with friends and neighbors. So alongside the many benefits of creating a local sustainable food system mentioned in this Plan, growing our community connections and enriching our cultural traditions may be mentioned last, but are not considered least among the factors contributing to a full and vibrant life and local sustainable food system. Whether we come together around a farmer's market stand, in a cooking class, to cultivate a garden, to share what we've grown, or to eat together around a holiday table, we create the space to celebrate and nurture our regional diversity and shared experience. Food from our own local food system, and increased access to the nourishment, health and sustenance it provides, can establish us in security, happiness, and environmental, social, economic and personal well-being.

## **Issues/challenges**

- Lack of access to healthy, nutritious food due to economic circumstances, transportation challenges, education and knowledge or living in a food desert
- Need label reading and nutrition education
- Education on shopping for and preparing simple, quick, healthy meals and prioritizing the time needed to do so
- Understanding quantity vs. quality
- Communal food growing and processing
- Fear of unnamed risks and unknown consequences

# **Governance, Policy, Regulation, Legislation & Advocacy**

## **Goals**

**GOAL 1: Have in place policies, practices and plans that support the local food system.**

**GOAL 2: Establish a Local Food Council that is responsible for the implementation of the food system plan, including systems for maintaining communication and stakeholder connections.**

## **Description**

Governance, policy, regulation, legislation and advocacy involves the role of local government and planning in supporting community efforts at food system change, as well as the creation and implementation of policy change. A key element is the guiding of cross sector work and the facilitation of coordinated food system-related activities.

## **Characteristics**

- Informs decision-making processes
- Supports and facilitates planning, programming, policies and implementation
- Creates standards, guidelines, and policies
- Builds partnerships, collaborations and consensus
- Targets public and local investments
- Improves healthy local food access through zoning, education and incentives
- Fosters coordination between sectors in the food system

**Governance, Policy, Regulation, Legislation & Advocacy**

**GOAL 1:** *Have in place policies, practices and plans that support the local food system.*

**GOAL 2:** *Establish a Local Food Council that is responsible for the implementation of the food system plan, including systems for maintaining communication and stakeholder connections.*

**STRATEGY:** **Engage public officials in the process of developing the local food system.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Work with Marion City and villages to set aside land for community gardens</li> <li>2. Work to get support from local government</li> </ol>	<ol style="list-style-type: none"> <li>1. Bring the county commissioners into the process</li> <li>2. Work with local economic development offices (CANDO, Regional Planning) office to develop an incentive program(s) for land that is used for food production</li> <li>3. Develop agricultural security areas and zoning that encourages farming in areas that would be appropriate for farming</li> </ol>			L, CE

**Governance, Policy, Regulation, Legislation & Advocacy**  
**-Continued-**

**STRATEGY: Leverage existing government, civic and private industry resources in support of a local food system.**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Develop local networks for sharing resources or information that could include food exchanges</li> <li>2. Utilize AmeriCorps or MCI when needed for specific projects.</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop local networks for sharing resources or information that could include food exchanges.</li> <li>2. Work with the county or city to acquire surplus land for local food development</li> </ol>			L, S, ES, C

**STRATEGY: Establish a local food council**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
<ol style="list-style-type: none"> <li>1. Establish a Local Food Council to implement and adjust as necessary the local food system plan.</li> <li>2. Utilize other organizations i.e. Creating Healthy Communities, Pioneering Healthy Communities, etc to help support local food system plan development and implementation.</li> <li>3. Develop and manage a social media presence to facilitate communication about the local food system plan and provide communication among stakeholders.</li> </ol>	<ol style="list-style-type: none"> <li>1. Coordinate the local food system plan development with the action plans of other local organizations.</li> </ol>			L, S, CE

**Governance, Policy, Regulation, Legislation & Advocacy**  
**-Continued-**

**STRATEGY: Advocate for policy changes**

Short-Term Actions/Activities 1 year or less	Medium-Term Actions/Activities 1-3 years	Long-term Actions/Activities 3-5 years	Lead	Alignment to Principles
	<ol style="list-style-type: none"> <li>1. Develop local tax incentives for local food system producers, distributors, etc.</li> <li>2. Work to streamline local laws that may inhibit local food and cottage industry production</li> <li>3. Revise local zoning and subdivision regulations to consider the preservation of large blocks of agricultural land (also within new developments where possible)</li> <li>4. Gain a better understanding of state or federal laws that inhibit local food production and distribution and work to change these laws</li> <li>5. Help producers get exemptions from the USDA</li> <li>6. Update the Land Use Plan, Subdivision Regulations, Zoning Regulations, Economic Development Plans, etc. in support of Local Food Production</li> <li>7. Consider the adoption of right-to-farm laws</li> <li>8. Work with appropriate organizations to change rules for using workforce funds in local food production</li> </ol>			L, S, ES, CE

## **Why Is Governance, Policy, Regulation, Legislation and Advocacy Important?**

Critical to the success of a local sustainable food system is the integration of food system issues into policies, plans and programming at all levels of community and government work. Local food system planning efforts require tools and strategies, including informed decision making processes by compiling data, researching alternatives, assessing needs and impacts, and advocating for policies and legislation. Governments can shape local policies about our local food system by encouraging sustainable food production, processing and distribution through plans, policies and programming; improving healthy food access through zoning, education and incentives for producers and sellers alike; and ensuring that relevant policies include, address and support a thriving local sustainable food system and a vibrant local food economy.

Our community and our elected representatives can make choices that protect the health, safety, and welfare of community members. As community members and local food system advocates, we participate in decision-making about our food supply, to make sure that food production, distribution, and marketing are carried out in ways that are healthy for people, the local economy and the environment. It is our role, as active community members and citizens to advocate for regulations, policies and legislation that support local food and agriculture.

It is also important that city and county planning provides direction in addressing the food system. City and county planning documents, economic development plans, and other relevant policy documents must include goals related to food system planning.

Many government and municipal agencies impact food policy, but without coordination, numerous unnecessary impediments will exist along the road toward achieving the goal of improving healthy food access and creating a robust local food system. In communities with active and successful local food system plans and initiatives, Local Food Councils are essential to fostering change within the food system.

Local Food Councils work across sectors, engaging with government policy and programs, grassroots/non-profit projects, local businesses and food workers. Instead of many advocates working on the isolated symptoms of a failing food system, Local Food Councils attempt to establish platforms for coordinated action at the local level and . . . to better facilitate activities.<sup>47</sup>

Councils generally have four functions: to serve as forums for discussing food issues, to foster coordination between sectors in the food system, to evaluate and influence policy, and to launch or support programs and services that address local needs.<sup>48</sup>

In Marion County, the Local Food Council will take the lead in organizing planning efforts, overseeing the implementation of the Marion County Local Sustainable Food System Plan, and fostering coordination among stakeholders, communities, and private and non-profit food system-related entities.

## **Marion County Local Food Council Membership**

The Marion County Local Food Council will be composed of the following members:

Marion Area Health Commissioner (or designee) Representative  
Marion County Commissioner Representative  
Marion Community Food Development Representative  
Marion County Soil and Water Representative  
Marion County Farm Bureau Representative  
Marion County Regional Planning Commission Representative  
One local institutional buyer  
Three local food producers or distributors

Initial appointments to the Local Food Council will be made by the Marion County Regional Planning Commission. Once the Local Food Council is operating, it will be their responsibility to oversee and appoint individuals to represent the various sectors on the committee and adopt rules for organization.

### **Issues/challenges**

- Lack of funding to support the Local Food Council and its work
- Government regulations create barriers, especially for small producers
- Liability stifles creativity
- Unknown or lack of decision-making criteria
- Quantifying the value of local vs. non local food



## Glossary/Definitions:

**Community Food Security.** Community food security is a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.–Mike Hamm and Anne Bellow

**Local.** “Local food system” will refer to the economically, environmentally and socially sustainable network of resources involved in growing, producing, transporting, selling, promoting, and consuming food within Marion County and counties contiguous to Marion County (Wyandot, Crawford, Hardin, Union, Delaware, Morrow) with the understanding that this radius may decrease as the food system develops over time. Additionally, it is understood that the directness of the connection between producer and consumer and the level of community support for local food are as important indicators of local as the number of food-miles.

**Foodshed or Food shed.** Similar in concept to a watershed, a foodshed outlines the flow of food feeding a particular area.<sup>49</sup>

**Food System.** All processes and infrastructure involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. It also includes the inputs needed and outputs generated at each of these steps. A food system operates within and is influenced by social, political, economic and environmental contexts. It also requires human resources that provide labor, research and education.<sup>50</sup>

**Resilience.** The ability of a food system to preserve its function of supplying food in the face of disturbances to the system.<sup>51</sup>

**Sustainable Agriculture.** Sustainable agriculture is one that produces abundant food without depleting the earth’s resources or polluting its environment. It is agriculture that follows the principles of nature to develop systems for raising crops and livestock that are, like nature, self-sustaining. Sustainable agriculture is also the agriculture of social values; one whose success is indistinguishable from vibrant rural communities, rich lives for families on the farms, and wholesome food for everyone.<sup>52</sup>

**Sustainable Food System.** A sustainable food system is one that can be maintained with minimal use of scarce resources from outside the system; with minimal negative impact on the planet; and with maximum benefit for the producer.<sup>53</sup> It aims to produce food without exhausting natural resources of contaminating the environment.

## References

- <sup>1</sup> ***Bringing Everyone to the Table***, August 2009, Ohio Food Council Advisory Policy
- <sup>2</sup> ***Ohio's Food Systems - Farms At The Heart Of It All***, Ken Meter, Crossroads Resource Center, March 30, 2011
- <sup>3</sup> ***Ohio's Food Systems - Farms At The Heart Of It All***, Ken Meter, Crossroads Resource Center, March 30, 2011, Page 5
- <sup>4</sup> ***Central Ohio Local Food Assessment and Plan***, April 2010, Mid-Ohio Regional Planning Commission
- <sup>5</sup> ***2011 Marion County Land Use Plan***, Marion County Regional Planning Commission
- <sup>6</sup> ***1999 Marion County Farmland Plan***, Marion County Regional Planning Commission
- <sup>7</sup> ***2011 Marion County Land Use Plan***, Marion County Regional Planning Commission, Table 31, Page 139
- <sup>8</sup> ***The medical care costs of obesity: an instrumental variables approach***. Cawley J, Meyerhoefer C. *Journal of Health Economics*. 31(1):219-230. 2012
- <sup>9</sup> ***Economic Costs of Obesity***, National League of Cities
- <sup>10</sup> ***Marion Community Health Assessment***, 2011, Marion Area Health
- <sup>11</sup> ***Third Grade BMI Study***, 2013/2014, Marion Area Health
- <sup>12</sup> UC SAREP (Sustainable Agriculture and Research Education Program, UC Davis)
- <sup>13</sup> ***2012 Local Food Assessment Report, Grant County, New Mexico***, Page 24; citation from Walden Pete. "Economic Impact of Ranching in Grant County and New Mexico". New Mexico State University. 2009.
- <sup>14</sup> ***Good Laws, Good Food: Putting Local Food Policy to Work for Our Communities. 2012***. Written by Harvard Food Law and Policy Clinic under the supervision of Emily Broad Lieb in partnership with the Community Food Security Coalition, p. 28.
- <sup>15</sup> ***Agriculture, Food Production and Bioproducts***, Ohio Centers of Excellence, Newsletter
- <sup>16</sup> Ohio Proud Web Page; [www.ohioproud.org](http://www.ohioproud.org)

- <sup>17</sup> *Fairfield Growing, An Agricultural Economic Development Plan*, 2011, Page 7
- <sup>18</sup> USDA, Census of Agriculture 2007 and 2012
- <sup>19</sup> See the full text of Michael Schuman's article here:  
[http://www.frbsf.org/publications/community/review/vol5\\_issue2/schuman.pdf](http://www.frbsf.org/publications/community/review/vol5_issue2/schuman.pdf)
- <sup>20</sup> *Central Ohio Local Food Assessment and Plan*, April 2010, Mid-Ohio Regional Planning Commission, p 6
- <sup>21</sup> Adapted from *Calgary Eats! Summary: A Food System Assessment and Action Plan for Calgary*. The Calgary Food Committee and Serecon Management Consulting Inc supported by Altus Group. The City of Calgary, 29 May 2012, p. 11.
- <sup>22</sup> *Central Ohio Local Food Assessment and Plan*, April 2010, Mid-Ohio Regional Planning Commission, p 4
- <sup>23</sup> *The Man Who Would Feed the World / John Jeavons' farming methods contain lessons for backyard gardeners too*, Amy Stewart, San Francisco Chronicle, April 13 2002
- <sup>24</sup> *A Quick-Start Guide To Our Projects, Partners and Proposals*, Ecology Action, 2012, p 3
- <sup>25</sup> *Sustainable Market Farming*, Pam Dawling, new society Publishers, 2013, p 109
- <sup>26</sup> *Livestock and Biointensive Mini-Farming*, Ecology Action, 2010, pp 1-5
- <sup>27</sup> *Good Laws, Good Food: Putting Local Food Policy to Work for Our Communities. 2012*. Written by Harvard Food Law and Policy Clinic under the supervision of Emily Broad Lieb in partnership with the Community Food Security Coalition, pp. 20-21.
- <sup>28</sup> *Central Ohio Local Food Assessment and Plan*, April 2010, Mid-Ohio Regional Planning Commission, pp 23-24
- <sup>29</sup> *Central Ohio Local Food Assessment and Plan*, April 2010, Mid-Ohio Regional Planning Commission, pp 24
- <sup>30</sup> *Community Food Systems: Toward a Common Language for Building Productive Partnerships*, Ardyth H. Gillespie and Gilbert W. Gillespie, Jr., (Cornell University Community Nutrition Program, Division of Nutritional Sciences, 2000)
- <sup>31</sup> *Sonoma County Community Food Assessment, July 2011*, p. 41.
- <sup>32</sup> *Good Laws, Good Food: Putting Local Food Policy to Work for Our Communities. 2012*.

Written by Harvard Food Law and Policy Clinic under the supervision of Emily Broad Lieb in partnership with the Community Food Security Coalition, p. 84.

- <sup>33</sup> ***2012 Local Food Assessment Report, Grant County, New Mexico***, p. 22.
- <sup>34</sup> David Dodson, MDC, Inc. Quoted in “*Economic Development Broadly Defined*,” Auburn University, ECDI, economic development, Economic Development Definition, Joe Summers
- <sup>35</sup> ***Creating a Regional Food Hub: Assessments and Recommendations for Dona Ana County***. Prepared by Krysten Aguilar with La Semilla Food Center, pp. 4-5.
- <sup>36</sup> ***Sustainable Seattle: Why Local Linkages Matter: Findings from the Local Food Economy Study***. Researched and written by Viki Sonntag PhD for Sustainable Seattle, April 2008, p. 5.
- <sup>37</sup> ***Sustainable Seattle: Why Local Linkages Matter: Findings from the Local Food Economy Study***. Researched and written by Viki Sonntag PhD for Sustainable Seattle, April 2008, p. 7.
- <sup>38</sup> ***2010-2014 American Community Survey 5-Year Estimates***, Poverty Status in the Past 12 Months
- <sup>39</sup> U.S. Food System - Americans enjoy a diverse abundance of cheap food – spending a mere 9.9% of our disposable income on food. However, store prices do not reveal the external costs – economic, social, and environmental – that impact the sustainability of the food system. Considering the full life cycle of the U.S. food system helps to make the connection between consumption behaviors and production practices. New Mexico State University Cooperative Extension
- <sup>40</sup> ***Oakland Food System Assessment***, Mayor’s Office of Sustainability, p. 19
- <sup>41</sup> ***How a National Food Policy could save Millions of Lives***, Michael Pollan, The Washington Post, November 7, 2014
- <sup>42</sup> ***National Alliance for Nutrition & Activity***, 2010.
- <sup>43</sup> ***2010 Dietary Guidelines for Americans 2010***, U.S. Department of Agriculture, U.S. Department of Health and Human Services.
- <sup>44</sup> ***Community food security: Background and future directions***, Hamm, M.W., & Bellows, A.C. (2003).. *Journal of Nutrition Education and Behavior*, 35(1), 37-43.
- <sup>45</sup> [www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-theus/measurement.aspx](http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-theus/measurement.aspx)

- 46 World Health Organization. [www.who.int/trade/glossary/story028/en/](http://www.who.int/trade/glossary/story028/en/)
- 47 Food First Institute for Food & Development Policy  
<http://www.foodfirst.org/en/foodpolicycouncils-lessons>
- 48 [www.oaklandfood.org/home/food\\_policy\\_councils\\_lessons\\_learned](http://www.oaklandfood.org/home/food_policy_councils_lessons_learned)
- 49 [www.foodroutes.org/faq14/jsp](http://www.foodroutes.org/faq14/jsp)
- 50 ***What's On Your Plate? An on-going community conversation about the food system in New Hampshire's Lakes Region***, March 2012, p. 2.
- 51 ***Community Food Systems: Toward a Common Language for Building Productive Partnerships***, Ardyth H. Gillespie and Gilbert W. Gillespie, Jr., (Cornell University Community Nutrition Program, Division of Nutritional Sciences, 2000)
- 52 ATTRA: National Sustainable Agriculture Information Services.  
<https://attra.ncat.org/attra-pub/viewhtml.php?id=294>
- 53 The Sierra Club Sustainable Consumption Committee  
<http://www.sierraclub.org/truecostoffood/>