



Lake County Sustainable Local Food Systems Report

June 2013

Acknowledgments

The Lake County Sustainable Local Food Systems Report is the cumulative effort of many individuals and organizations, including stakeholders who provided time and expertise to identify issues, opportunities, and recommendations to help successfully complete this report. Gratitude is due to all of the Project Team Partners, survey interviewees, and other stakeholders who lent their expertise to this project along the way.

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The Chicago Metropolitan Agency for Planning (CMAP) is the region's official comprehensive planning organization. Its GO TO 2040 planning campaign is helping the region's seven counties and 284 communities to implement strategies that address transportation, housing, economic development, open space, the environment, and other quality of life issues. See www.cmap.illinois.gov for more information.

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Chicago Metropolitan
Agency for Planning



CONSERVE
LAKE COUNTY

Healthy Land for a Better Life



Growing greens in a hoophouse at Prairie Crossing. Photo courtesy of Liberty Prairie Foundation, 2013.

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Harvesting tomatoes in season-extending hoophouse. Source: Liberty Prairie Foundation, 2013.

Executive Summary

Sustainable local food systems balance economic prosperity, environmental preservation, and public health while moving agricultural products from farmer to consumer. National, regional, and local trends indicate a shift in farming practices and consumer demand, as well as present an opportunity for Lake County to capitalize on this growing economic sector.

Regional agricultural production appears to be diversifying beyond traditional farming to include more vegetable and specialty farming on smaller plots of land. Additionally, there is market demand for food that is grown and processed here by our own neighbors, which generates and circulates money within our state and region rather than sending it elsewhere. By supporting and strengthening the sustainable local food system, Lake County is poised to tap into the added economic potential of increased jobs and production, while contributing to the healthy food options in the region.

In an effort to adapt to changing trends and conditions in the food and agriculture industry, a group of nonprofit, public, and private partners throughout Lake County joined together to explore the potential for strengthening the sustainable local food system in the county. Partners for this project include: Conserve Lake County; the College of Lake County; Farm Business Development Center at Prairie Crossing (of the Liberty Prairie Foundation); Lake County Forest Preserve District; Lake County Planning, Building, and Development (PBD) Department; Libertyville Township; Openlands; and private farmers. This group of partners worked with the Chicago Metropolitan Agency for Planning (CMAP) through its Local Technical Assistance (LTA) program on the Lake County Sustainable Food Systems project summarized in this report.

This project's primary objectives are to identify the key barriers to developing a sustainable local food system in Lake County and to propose recommendations for the County and local stakeholders to address those barriers. The strategy for achieving these objectives included:

- Educational materials explaining the economic opportunity of sustainable local food systems, including a printed brochure for decision-makers, a "microsite" and video, and involvement with programming at a local conference.
- A survey of various stakeholders involved in Lake County's food system.
- A review of Lake County regulations pertaining to the food system.
- Research on food policy based organizations that may be applicable to helping address barriers in Lake County.



Crimper over cover crops in rotation. Photo courtesy of Conserve Lake County, 2013.

Based on the findings from the assessment, this report offers recommendations for how to best move forward in supporting the growth of Lake County's sustainable local food system.

RECOMMENDATION 1:

Recognize agriculture and food production as a positive, legitimate, and economically valuable land use.

Counties that border metropolitan regions, such as Lake County and the other collar counties, hold great potential for capitalizing on the demand for local products by urban populations. Lake County has already established a positive policy direction for a sustainable local food system. It is recommended that the County continue to strengthen and endorse such a system through its land use and development authority, as well as encourage perceptions of agriculture as a valuable, legitimate, and long-term land use that benefits Lake County's economy, character, and quality of life.

RECOMMENDATION 2:

Investigate the potential to provide access to public land for food production.

The high cost of both purchasing and renting agricultural land makes access to affordable, right-sized farmland one of the greatest barriers to sustainable, local food production. This report recommends examining publically owned land as a potential resource for food production. Public land should be considered a temporary support to help build the supply side of the local food economic system until market forces can drive local food production through the private land market.

RECOMMENDATION 3:

Consider farming infrastructure in land use planning, and explore economic development strategies for supporting infrastructure needs.

Access to infrastructure and utilities for small scale local food operations, such as outbuildings, electricity, and an irrigation source, can be significant barriers to local food production. As part of its land use planning and policy decisions, Lake County should consider the location of existing farming infrastructure and utilities, as well as the feasibility and potential to install or otherwise provide necessary infrastructure and utilities. The County could also explore ways to support the installation of infrastructure, such as small loan or revolving loan programs, or incentives for farmers to coordinate and share resources with other sources of public financial assistance.

RECOMMENDATION 4:

Integrate best practices and standards into farm lease terms.

There has been growing interest across the country in leasing arrangements that encourage better land stewardship. Sustainable, local food production strives to balance the agricultural practices that protect land and water health with the autonomy for farmers to grow what they want using the methods they prefer. One potential solution for striking that balance would be implementing performance standards, which could be integrated into leasing and licensing terms for tenant farmers. With performance standards, land managers are required to meet specific targets for indicators such as soil organic matter, soil erosion, water use, and runoff water quality. Setting such standards is a complex undertaking – both in establishing and enforcing the standards. Despite potential challenges, such standards could provide great benefits, helping target sensitive or at-risk lands for better land management and facilitating the increase of sustainable agriculture and local food production in Lake County.

RECOMMENDATION 5:**Strengthen connections within the food system.**

Assessing current networks in the food system and fostering stronger connections would be an important economic development step in Lake County, since strengthening these links between stakeholders will create new business opportunities and encourage innovation. There are a number of programs and initiatives that could be pursued to encourage stronger connections within the Lake County food system, including training programs for beginning farmers and product aggregation services.

RECOMMENDATION 6:**Expand accessory and temporary uses.**

Restrictions on the number, size, and type of structure(s) allowed to assist with agricultural activities can be a barrier for farmers on parcels smaller than five acres who want to extend the growing season or expand operations to a scale at which they can sell products for profit. A number of potential modifications could be made to County policies (specifically in the Unified Development Ordinance [UDO]) to allow for larger accessory structures for some parcels. Such policy changes would become the responsibility of the County's PBD Department, as well as the Health Department.

RECOMMENDATION 7:**Support the local food system through information and coordination.**

Relevant rules about allowable uses, accessory uses, temporary uses, and health and safety regulations should be summarized in a simple brochure format and readily disseminated to interested parties and local food system stakeholders. Educational materials, such as information packets or fact sheets, could be extremely helpful to people who are new to various sustainable local food system operations, whether they are starting a farm, a cottage food operation, or a commercial kitchen. Overall, transparency between departments and with the public should remain a robust goal for Lake County.

RECOMMENDATION 8:**Expand definitions and allowable uses to support local food activities.**

Lake County can improve clarity about permitted agricultural activities by establishing definitions in the UDO for new sustainable local food system activities, both to clarify the permitted agricultural uses on non-exempt agricultural land and to recognize the significance and economic opportunity of the emerging local food movement. Lake County can further establish its support for a local food system by amending the UDO to specifically permit the keeping of honeybees and hens in non-exempt residential zones. These regulatory modifications can be achieved by directly updating existing UDO language (*Section 6: Use Regulations* in the UDO), and by augmenting this section with specific limitations to these activities.

RECOMMENDATION 9:**Enable composting for local food production.**

This report recommends the facilitation of small-scale organic waste composting on non-exempt land to enhance sustainable agricultural practices and minimize agricultural landfill waste. This report also recommends regulations that exempt small-scale compost operations (such as those found in residential backyards) from restrictions as long as they are well-managed.

RECOMMENDATION 10:**Ensure that processing regulations suit the local scale.**

The Lake County Health Department should examine how federal and state health regulations impact the development of a local food system and advocate for the innovative application of those codes to best-suit local agricultural practices in Lake County. For instance, federal and state regulations on dairy processing require the use of large equipment, which can be cost-prohibitive for smaller, localized processing operations.

RECOMMENDATION 11:**Align water management goals with local food production activities.**

Stormwater regulations may act as a disincentive for the erection of permanent and temporary greenhouses, hoop houses, storage buildings, or other structures associated with food production. In order to encourage local food production on exempt and non-exempt land, the County should consider case-by-case exemption of certain temporary structures used for food production from Watershed Development Ordinance (WDO) stormwater regulations. Permanent structures that meet the threshold for WDO permitting should continue to be required to meet ordinance requirements. The County should also work with growers to implement conservation-based irrigation strategies, such as drip-irrigation, that will support the needs of local food production operations while meeting its water supply conservation and management goals.

RECOMMENDATION 12:**Support and participate in the Lake County Local Food Working Group.**

It is recommended that the project steering committee formed to guide this project continue to convene as an informal working group to address issues and barriers. Lake County should have a prominent role in the working group activities and should provide support in the form of staff participation, assistance with funding requests, and involvement of elected officials in discussions.



Oak Trees along Bull's Brook streambed. Source: Conserve Lake County, 2013.

1. Introduction and Background

Section 1.1. Project Introduction and Purpose

Lake County provides a high quality of life for its residents, with urban centers, rural communities, and ecologically diverse natural areas. Development pressure to accommodate a growing population is often at odds with preservation of open space, much of which is agricultural land. In an effort to adapt to changing trends and conditions in the food and agriculture industry, a group of nonprofit, public, and private partners throughout Lake County joined together to explore the potential for strengthening the sustainable local food system in the county.

Partners for this project include: Conserve Lake County; the College of Lake County; Farm Business Development Center at Prairie Crossing (of the Liberty Prairie Foundation); Lake County Forest Preserve District; the Lake County PBD Department; Libertyville Township; Openlands; and private farmers. This group of partners worked with CMAP through its LTA program on the Lake County Sustainable Food Systems project summarized in this report.

Sustainable local food systems balance economic prosperity, environmental preservation, and public health while moving agricultural products from farmer to consumer. Nationally and regionally, consumer demand for locally and sustainably grown food is increasing, and regional agricultural production appears to be diversifying beyond traditional farming to include more vegetable and specialty farming. Following a trend toward smaller farm plots and more specialty agriculture operations, Lake County is well-suited to grow its sustainable local food system and take advantage of this economic opportunity. By fostering the capacity for small-scale, local, and/or organic agriculture that is environmentally sensitive to natural areas and supports a more diverse local economy, Lake County's food system can drive economic development and contribute to the healthy food options in the region.

This project's primary objectives are to identify the key barriers to developing the sustainable local food system in Lake County and propose recommendations for the County and local stakeholders to address those barriers. The strategy for achieving these objectives included:

- A survey of various stakeholders involved in Lake County's food system.
- A review of Lake County regulations pertaining to the food system.
- Research on food policy based organizations that may be applicable to helping address barriers in Lake County.

Based on the findings from the assessment, this report offers recommendations for how to best move forward in supporting the growth of Lake County's sustainable local food system.

Section 1.2. Definitions and Trends

What is a Food System?

A food system comprises the network of activities that collectively provide products for human consumption, including: growing; harvesting; equipment and supply provision (like tools and seeds); processing; packaging; marketing; transporting and distribution; sales and consumption (to individuals, markets, and institutions); and waste management (see Figure 1). Food systems represent major economic drivers for the stakeholders involved and for local and regional economies.

Food systems vary in extent and geographic scale. For instance, much of the food that Americans consume from grocery retailers today is part of a global system, with a complex web of international suppliers and distributors. At the other end of the spectrum, a food system is considered “local” when the production and consumption of food is more directly linked within a limited area. It also refers to the infrastructure and conditions needed to sustain this system such as local food production; supportive local government policies, programs, and decisions; matching supply and demand; building the local supply-chain (packing, processing, and distribution); preserving farmland; and sustainably managing organic agricultural waste. The “local food economy” is the economic impact that this system generates. While there is no consensus about the exact distance that defines “local” in this sense, there is general agreement that the activities of a local food system originate close to one another. Frequent approximations estimate that local food travels within 100 or 250 miles. Local foods tend to be produced by small, independent farmers and are primarily distributed and sold through a local economy to local consumers.

Local food production has been linked to improved local economic conditions, high levels of productivity, high revenues and farmer incomes, and an appropriate use of agricultural land where large scale commodity crop production is difficult or impossible.^{1,2} In this report, the term “sustainable local food” will be used to describe a system in which: the agricultural practices tend to be smaller scale and consider soil and water health; the crops produced are diverse and primarily grown for human consumption; and those products are primarily distributed and sold to local consumers. This local system has inherent economic, environmental, and community benefits from a sustainability point of view. However, due to the vast breadth and variety of topics that fall within the scope of sustainability, this project and report do not consider in detail all of the sustainable aspects of agriculture or food production such as transportation or “food miles,” carbon footprint, agricultural inputs, or water quality impacts. Rather, the local aspects of the food system are the primary focus of the study.

National Trends

Throughout the past century, the U.S. has witnessed significant changes in its food system. The current domestic food system reflects the U.S. economy, which participates in a complex global supply chain. Today, domestic production reflects eight decades of government policy and technology investment to build economies of scale and efficiency in agriculture. Now, fewer farms generate greater amounts of product, largely due to the mechanization of agriculture.³ A more recent national trend shows an inverse pattern of an increasing number of farms even while total agricultural acreage is decreasing. For instance, the U.S. Census of Agriculture – which is conducted every five years, most recently in 2007 – revealed that over 2002-07, the number of farms increased while the average farm size decreased.⁴ The State of Illinois and the CMAP region mirrored this trend (see Table 1). These new farms, which are typically smaller in size, are more likely to grow specialty crops (fruits and vegetables); be operated by a higher number of young people, minorities, and women than in the past; and are farmed by people who bring in most of their family incomes from off-farm sources.⁵

Figure 1. Components of a sustainable local food system



Source: Chicago Metropolitan Agency for Planning, 2012.

1 The Farming Systems Trial, Rodale Institute, 2011.

2 Swenson, Dave, “Selected Measures of the Economic Values of Increased Fruit and Vegetable Production and Consumption in the Upper Midwest,” ed. by Leopold Center for Sustainable Agriculture, Ames, Iowa, March 2010.

3 Chicago Metropolitan Agency for Planning, “Food Systems Report,” a GO TO 2040 Strategy Paper, October 2009. <http://www.cmap.illinois.gov/2040/local-food-systems>.

4 The 2012 Census of Agriculture figures were not available at the time of this report.

5 Chicago Metropolitan Agency for Planning, “Food Systems Report,” a GO TO 2040 Strategy Paper, October 2009, page 19.

The trend of smaller farm sizes growing food is reflected in the increase of direct-to-consumer sales, which account for a small but growing segment of agricultural sales. Between 1997-2007, direct-to-consumer sales increased from \$551 million to \$1.2 billion.⁶ Direct-to-consumer sales of vegetables and melon products increased 69 percent from \$198 million in 2001 to \$335 million in 2002. Likewise the numbers of farmers' markets increased both in Illinois and nationally, as shown in Figures 2 and 3.

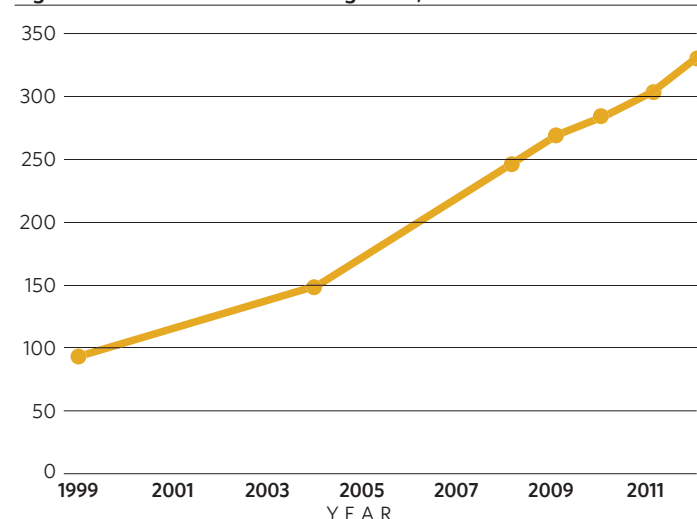
There has been a parallel rise in the number of farms that sell their products for human consumption through community supported agriculture (CSA) arrangements.⁷ The number of CSAs listed with LocalHarvest – a prominent online resource with a national database for local food operators – increased from 374 in 2000 to 2,932 in 2009.⁸ Furthermore, the number of “farm to school” programs – which use local farms as food suppliers for school meals programs – have experienced a similarly steep increase, from 400 programs in 2004 to 2,095 in 2009.⁹

Table 1. Number of farms and average size of farms in the U.S., Illinois, and the Chicago region from 2002-07

	U.S.		ILLINOIS		CHICAGO REGION	
	2002	2007	2002	2007	2002	2007
Farms (number)	2,128,982	2,204,792	73,027	76,860	3,358	3,748
Average farm size (acres)	441	418	374	348	279	226

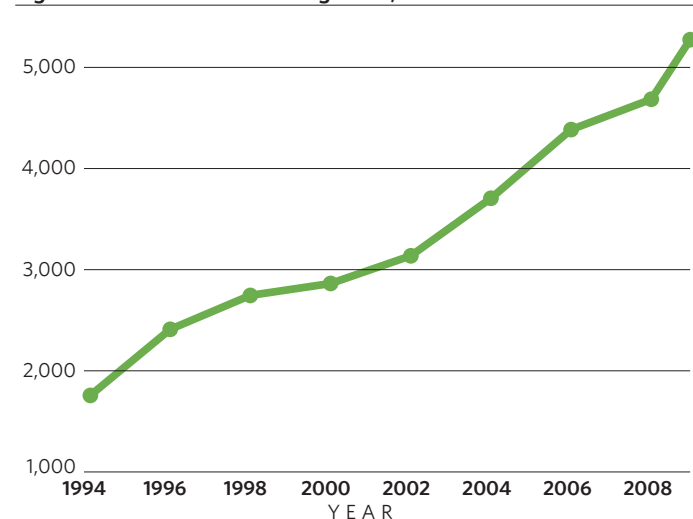
Source: United States Department of Agriculture Census, 2002 and 2007.

Figure 2. Illinois farmers' market growth, 1999-2011



Source: Illinois Department of Agriculture.

Figure 3. U.S. farmers' market growth, 1994-2009



Source: U.S. Department of Agriculture, Agricultural Marketing Service, Farmers' Market Survey, 2009.

6 2007 Census of Agriculture, United States Department of Agriculture.

7 In basic terms, CSA consists of a community of growers and consumers provide mutual support and share the risks and benefits of food production. Typically, members or “shareholders” of the farm pledge in advance to cover the anticipated costs of the farm operation. In return, they receive shares in the farm’s harvest throughout the growing season. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. By direct sales to community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are

relieved of much of the burden of marketing.

Source: <http://www.nal.usda.gov/afsic/pubs/csa/csadef.shtml>.

8 Galt, Ryan E. 2011. Counting and mapping Community Supported Agriculture in the United States and California: contributions from critical cartography/GIS. *ACME: An International E-Journal for Critical Geographies* 10 (2), 131 - 162.

9 National Farm to School Network.

State and Regional Trends

Illinois has a strong history in agriculture, including commodity crops, livestock, and food production. Although Illinois ranks highly amongst states in the nation in terms of agricultural production and value of sales, the majority of what is grown in Illinois does not directly feed humans. This is due in part to federal subsidies that apply to high-volume crops like soybeans and corn, but not to specialty crops like fruit and vegetables. In 2007, less than one percent of Illinois cropland was harvested for vegetables, with 1,377 farms growing vegetables for sale across the state.¹⁰

Loss of farmland has also occurred at both the state and regional levels. Between 1997-2007, Illinois lost approximately three percent of its farmland, while every county in the CMAP region of northeastern Illinois also lost acreage in farmland (see Table 2). Development pressure from competing land uses with high economic value – such as commercial, industrial, and residential uses – is a key reason for the decline in farmland. Despite this loss of agricultural land, there has been a rise in the number of farms across the region. Figure 4 depicts the increasing number of farms between 2002-2007 and the decrease in the total farm acreage.

Accompanying the trend towards a greater number of smaller farms is the conversion from commodity crop production such as corn and soybeans — which tend to require large acreages to be profitable — to food production, which is feasible on smaller plots of land.

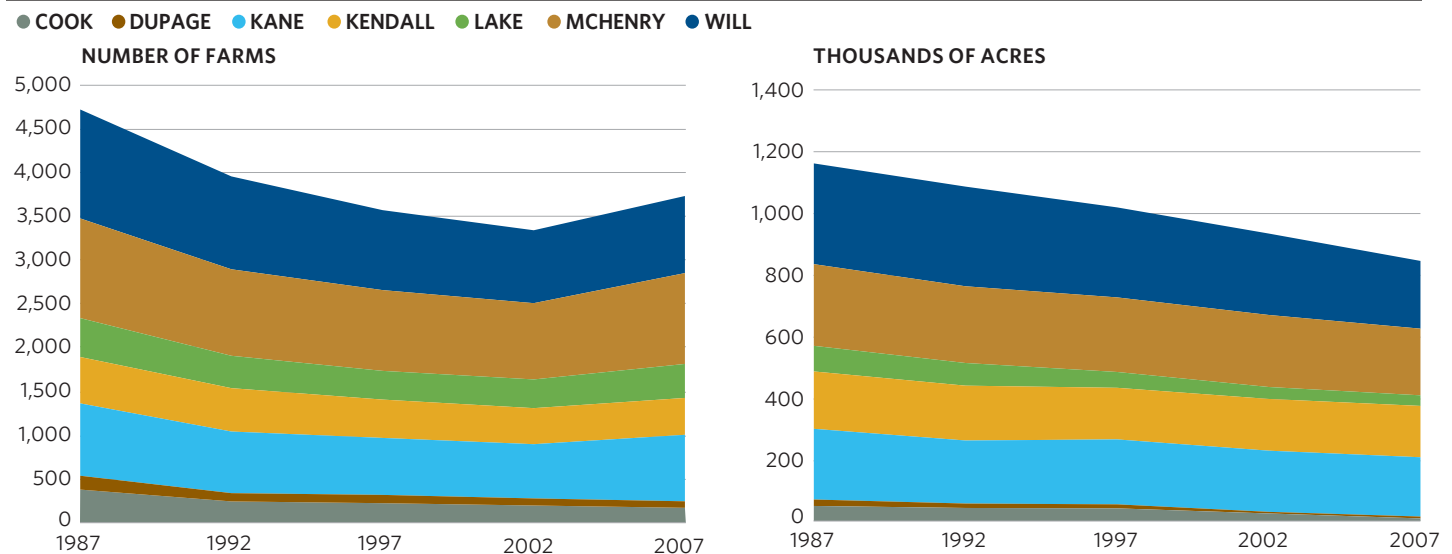
While only eight percent of the Chicago region's farms produced food directly for human consumption in 2007, the volume of food produced locally has been rising due to an increase in organic farms, urban agriculture, food cooperatives, CSAs, and farmers' markets.¹¹ The demand for fresh, local food products is helping to drive this increase in sustainable food production on smaller farms.

Table 2. Land in farms (acres), change in acreage and percent change, Illinois and CMAP region, 1997-2007

	1997	2007	CHANGE	PERCENT CHANGE
Illinois	27,673,285	26,775,100	-898,185	-3.2%
Cook County	42,174	8,198	-33,976	-80.6%
DuPage County	17,654	7,948	-9,706	-55.0%
Kane County	215,146	192,372	-22,774	-10.6%
Kendall County	169,909	166,872	-3,037	-1.8%
Lake County	52,528	34,525	-18,003	-34.3%
McHenry County	251,041	215,584	-35,457	-14.1%
Will County	300,090	220,851	-79,239	-26.4%

Source: United States Department of Agriculture Census, 1997 and 2007.

Figure 4. Number of farms and acreage of farmland in the Chicago region, 1987-2007



Source: U.S. Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, County Profiles, 1987, 1992, 1997, 2002, 2007.

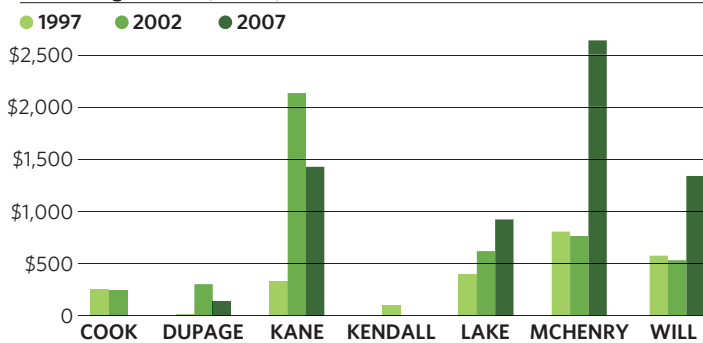
¹⁰ 2007 Census of Agriculture – Illinois State Summary, United States Department of Agriculture.

¹¹ Chicago Metropolitan Agency for Planning, "Food Systems Report," a GO TO 2040 Strategy Paper, October 2009. <http://www.cmap.illinois.gov/2040/local-food-systems>.

Lake County Trends

According to the “On Thin Soil: The Uncertain Future of Agriculture in Lake County,” Lake County farmers in 2001 were pessimistic about the continuation of farming in Lake County, largely due to development pressure and the rapid loss of farmland. In 1997, 42 percent of farmers were approaching retirement and just two operators were under the age of 25. Between 1997-2007, Lake County lost 18,000 acres (34 percent) of agricultural land. Despite that loss, there was an increase in the number of smaller farms throughout the county between 2002-07 (see Table 3), indicating that though large-scale grain farming may be becoming more difficult due to development, smaller scale farms appear to be successful. These smaller farms, which grow vegetables and have nursery operations, generated \$21.6 million of the \$36 million local agricultural economy in 1997.¹²

Figure 5. Market value of agricultural products sold directly to individuals for human consumption, in thousands of dollars, CMAP region 1997, 2002, 2007



Source: U.S. Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 1997, 2002, 2007.

Data from the Lake County 2007 Agricultural Census shows that the county is moving towards sustainable farming practices and more of a local food system. More than 20 percent of farms used conservation methods, and there were 12 organic farms totaling 90 acres. Additionally, Lake County has 13 farmers' markets, and the county has seen a consistent rise in direct-to-consumer sales between 1997-2007 (see Figure 5). There is unmet demand for locally grown food in Lake County, as is the case throughout the metropolitan Chicago area and state-wide.¹³ According to one estimate, if Lake County consumers bought five dollars of food directly from local farms each week, local farms would earn an additional \$182 million.¹⁴ This annual demand for vegetables and fruits in Lake County demonstrates the great economic potential of local food production in Lake County.

Table 3. Farms in Lake County, 2002-07

	2002	2007	PERCENT CHANGE
Number of farms	337	396	+ 18%
Land in farming (acres)	38,860	34,525	- 11%
Average size of farm (acres)	115	87	- 24%

Source: 2007 Census of Agriculture, Lake County, Illinois – County Profile, U.S. Department of Agriculture.

¹² “The Local Food System brochure,” Chicago Metropolitan Agency for Planning, 2012. See: <http://www.cmap.illinois.gov/lake-county>.

¹³ Bureau of Labor Statistics and Census, from Meter, Ken. “Local Food as Economic Development.” Crossroads Resource Center. October 2008.

¹⁴ Meter, Ken. “Local Food as Economic Development.” Crossroads Resource Center. October 2008.



Tomato Jubilee event for the public at Sandhill Organics Farm. Photo courtesy of Liberty Prairie Foundation, 2013.

An Economic Opportunity in Lake County

Local government decisions can significantly influence the strength and stability of local economies by encouraging and supporting the development of facilities, policies, and programs that the system needs. National, regional, and local trends indicate a shift in farming practices, consumer demand, and an opportunity for Lake County to capitalize on this growing economic sector. Economists estimate that 90-95 percent of the \$48 billion worth of food consumed in Illinois – approximately \$14 billion of which is fruits and vegetables — is produced elsewhere, meaning that approximately \$46 billion leaves our state every year. In Lake County alone, over 88 percent of food dollars were spent outside of the county in 2009.¹⁵

There is market demand for food that is grown and processed here by our own neighbors, which generates and circulates money within our state and region rather than sending it elsewhere. The multiplier effect of money spent on locally grown food in Illinois estimates that those food dollars circulate 1.4 to 2.6 times within the local economy, indicating that every dollar that goes toward local food purchases

can double or triple the economic benefits to the local economy.¹⁶

¹⁷ By that factor, if the unmet demand for fruits and vegetables in Lake County — estimated at approximately \$180 million¹⁸ — were satisfied, then the benefits to the County's economy as a whole could total \$468 million annually. This positive trend also influences labor income and jobs, as it is estimated that fruit and vegetable farms selling in local markets employ 13 full-time employees per every \$1 million in sales, versus three employees for entities that sell into global farm commodity markets. In other words, a dollar spent at the farmers' market supports four times as many workers as a dollar spent at the supermarket.¹⁹ Farm income is also impacted by the choice of product. On a national scale, studies have shown that farm income and per acre net revenue for fresh market vegetables are five to 50 times greater than that for commodity crops.²⁰ By supporting and strengthening the sustainable local food system, Lake County is poised to tap into the economic potential of increased jobs and production.

15 Meter, Ken. "The potential for local food in Lake County." Presentation at the County Green Conference, College of Lake County, Grayslake, Illinois. May 17, 2012.

16 "Building Successful Food Hubs: A Business Planning Guide for Aggregating and Processing Local Food in Illinois." Illinois Department of Commerce and Economic Opportunity. January 2012.

17 Interview with economics professor Larry Swain (2001), retired community development specialist for University of Wisconsin Extension, and retired director of the Survey Research Center at the University of Wisconsin — River Falls. See also Swain, L. (1999). "A Study of

the Economic Contribution of Small Farms to Communities — Completed 1996 to 1999." Unpublished manuscript.

18 Meter, Ken. "Local Food as Economic Development." Crossroads Resource Center. October 2008.

19 Economic Research Service Report Number 128 November 2011, "Direct and Intermediated Marketing of Local Foods in the United States." USDA.

20 Meter, Ken. "Local Food as Economic Development." Crossroads Resource Center. October 2008.



Leafy produce growing on small farm. Source: USDA.

2. Research and Findings

Strengthening Lake County's local food system requires an understanding of the physical, regulatory, and economic barriers to such improvements, and a strategy for addressing them.

The project steering committee established the following set of research tasks intended to identify some of these barriers in Lake County, and to set forth an action agenda for a future local food working group:

- A literature review of information related to local food economics and policy.
- A qualitative survey of Lake County stakeholders involved in the local food system.
- An examination of County regulations that govern or impact agricultural practices.
- A general review of the types of organizations addressing local food system issues.

The results of this research directly inform the recommendations offered in Section 3 of this report.

Section 2.1. Literature Review and Educational Efforts

The literature review for this project heavily informed “Section 1: Introduction and Background” of this report. Additionally, this background research has been summarized in a number of resources intended to educate local elected officials, government staff, and the general public about local food systems and the role of local governments in strengthening these systems. These resources, listed below, include hard copy and on-line materials, as well as in-person presentations to relevant audiences.

- A brochure for decision-makers and the public that describes the local food system, presents the economic potential of a local food system in Lake County and the region, and strategies for local government to support the local food system.
- In an effort to advance the local food recommendations of the GO TO 2040 comprehensive regional plan, CMAP produced a video and a “microsite” (www.cmap.illinois/food) to promote the economic and other benefits of developing a local food system for the Chicago region. These resources – designed to reach and connect with communities across the seven counties – were largely created using the research and findings of this project.
- The project steering committee helped program and execute a “local food forum” as part of the College of Lake County’s annual “County Green” conference in spring 2012. Based on the trends and economic potential identified through the literature review, a series of presentations and speaker panels were organized for the audience of sustainability practitioners at this conference. The panels covered various topics, including how local food presents an alternative agricultural model and how local stakeholders overcome the greatest barriers to participating in the local food system.

Section 2.2. Survey of Agricultural Stakeholders in Lake County

Purpose and Methodology

An initial step in identifying the barriers, issues, and trends in Lake County’s sustainable local food system was to survey a variety of people from across that system about the current regulatory and general market conditions that affect their operations. This survey focused on learning from stakeholders with direct connections to Lake County, such that the steering committee could pinpoint unique local issues and tailor recommended solutions accordingly. Rather than conduct a quantitative study with statistically significant results, the survey was intended to generate qualitative results about the diverse experiences and impressions in five general areas:

- Operations (type of farm and/or business)
- Physical land and infrastructure needs
- Regulatory barriers (zoning, public health, etc.)
- Financial barriers
- Collaboration/connection to others in food system

The survey sample ranged from aspiring farmers to operators of decades-old family farms, and from stakeholders with experience in local food production to more conventional and commodity crop production. The respondents also included a variety of consumer types operating at different scales – from small restaurants to grocery store chains. In all, 52 stakeholders from the following groups responded to an on-line or in person survey:

- Farmer/producer
- Landowner
- Equipment provider
- Processor
- Distributor
- Consumer
- Educator/policymaker

The purpose of surveying people from different roles within the food system was to ascertain their specific challenges, as well as to learn about the obstacles that are commonly encountered across stakeholder types.

Survey Themes and Findings

A total of 52 stakeholders responded to the survey during the winter of 2011-12, with a response rate of over 60 percent. See Table 4 for the distribution of respondents across the seven stakeholder types. The farmer stakeholder category garnered the most responses. The following descriptive summaries of respondents from each phase of the food system illuminate the most salient issues and findings from the survey.

There were a number of themes that pervaded multiple stakeholder types across of the food system:

- Regulations presented few restrictions and were not the greatest barrier that any stakeholder type identified.
- Long-term access to farmland, including the cost of land to rent or buy and the length of lease, as well as the presence of necessary infrastructure, can be prohibitive for farmers.
- There is not enough supply of locally produced food to meet a growing consumer demand, especially at larger consumer scale, nor to support the development of a local processing and distribution network.
- There is a lack of efficient distribution networks to connect producers with consumers.

Table 4. Survey respondent role in agricultural system

ROLE	NUMBER CONTACTED	RESPONSE COUNT	EACH CATEGORY'S PERCENT OF TOTAL RESPONSES
Farmer (includes specialty growers)	39	23	44.2%
Landowner	6	4	7.7%
Equipment provider	4	4	7.7%
Processor	2	1	1.9%
Distributor	3	3	5.8%
Consumer (for example: market, restaurant)	22	11	21.2%
Educator/policymaker	9	6	11.5%
Total	85	52	100.0%

Source: Project qualitative survey conducted in 2012.

Farming and Production

As reported in Section 1.2 on food system trends, the number of small farms in Lake County is increasing, along with the demand for locally grown products, which was also evident in the survey responses. A snapshot of the farmer respondents' characteristics (see sidebar) reveals that there is an emergence of new farmers renting small plots of land and employing sustainable practices to grow food. The survey responses pointed to a number of different gaps and barriers that constrict the development of a more sustainable local food system in Lake County:

• *Policies matter, but aren't the biggest barrier.*

While over half of the farmer respondents are affected on some level by local policies, most farmer respondents said that regulatory barriers were not their greatest challenge. Nonetheless, some responses indicate that regulations on accessory and temporary uses can be restrictive to farming operations, particularly the ability to pursue season-extension activities (i.e., greenhouses) that allow them to raise crops for a longer period each year and thereby expand their productivity. Others suggest that composting regulations may be unnecessarily complex. About a third of respondents reported that zoning, public health, and/or environmental regulations were moderate barriers. Issues with signage, nuisance, erosion, and stormwater regulations were only slight barriers for a majority of respondents. (These regulatory issues will be explored in greater detail in Section 2.2 – Ordinance Review.)

• *Access to affordable, right-sized land is hard to come by.*

Many respondents identified land access – that is, finding good land to lease or buy – as their biggest challenge, frequently citing problems with affordability, leasing terms, and the lack of necessary infrastructure. Figure 6 (on page 21) shows the degree to which farm land characteristics are barriers to farming operations. The lack of access to affordable land – primarily to purchase but also to rent – proved the largest impediment for this sample of farmers. This reflects issues with the private market for land, property taxation, and difficulty obtaining financing to cover the cost of land. Other land components were identified as moderate to severe barriers, including a farmer's ability to find a "right-sized" plot, and the length of lease for tenant farmers, since having certainty about longer-term tenure impacts a tenant's investment in the land and farm operation.

- **Farmers need key infrastructure to operate.**

Different agricultural products have different infrastructure needs. For example, corn and bean operations, regardless of whether they are organic or conventional, have fairly low infrastructure needs. Produce, however, can require a number of elements such as access to irrigation and outbuildings (i.e. structures for storing, cleaning, and processing products), which were identified by a majority of farmer respondents as moderate to severe barriers. This calls attention to the important role that infrastructure plays in farming, especially as a farmer launches a new operation. In fact, many respondents shared how they either had undergone or would like to implement certain changes to the land that they farm in order to make it more suitable for their agricultural operations:

- Seventy-three percent of respondents had remediated the soil.
- Fifty-three percent of respondents had brought water irrigation systems to the farm.
- Forty-seven percent of respondents had constructed outbuildings.

- **Better networks are needed in order to meet demand.**

Another commonly identified barrier was the difficulty making connections to others in the sustainable local food system. Respondents would like better connections to other farmers with knowledge and experience, and a better distribution service that can transport products to local markets and restaurants. Farmers did not express a lack of demand for products; rather, the challenge exists in the mechanisms for growing their operations to meet that demand and for connecting to a broader consumer base.

Snapshot of Farmer Survey Respondents

Twenty-three survey responses were recorded under the farmer stakeholder category. Below are the facts and characteristics about this particular set of survey respondents:

- The sample's average years of experience in farming was ten, with nearly 50 percent of respondents having been in farming for just one - five years.
- Sixty-five percent of respondents described themselves as "sustainable" farmers.
- Over three-quarters of respondents rent the land they farm, rather than own it.
- Forty-five percent of respondents farm on land that is five acres or less in size, while 20 percent of respondents farm on 40-100 acres.
- Nearly all respondents use direct-to-consumer methods for selling their products, with 90 percent driving a truck themselves to deliver at least some of their product to their customers.
- Over 80 percent of respondents need to supplement their farming income with other sources of income.

Land Ownership

Through the lens of this stakeholder type, the survey aimed to include the experiences of public and private landowners who farm their own land and who lease land to tenant farmers

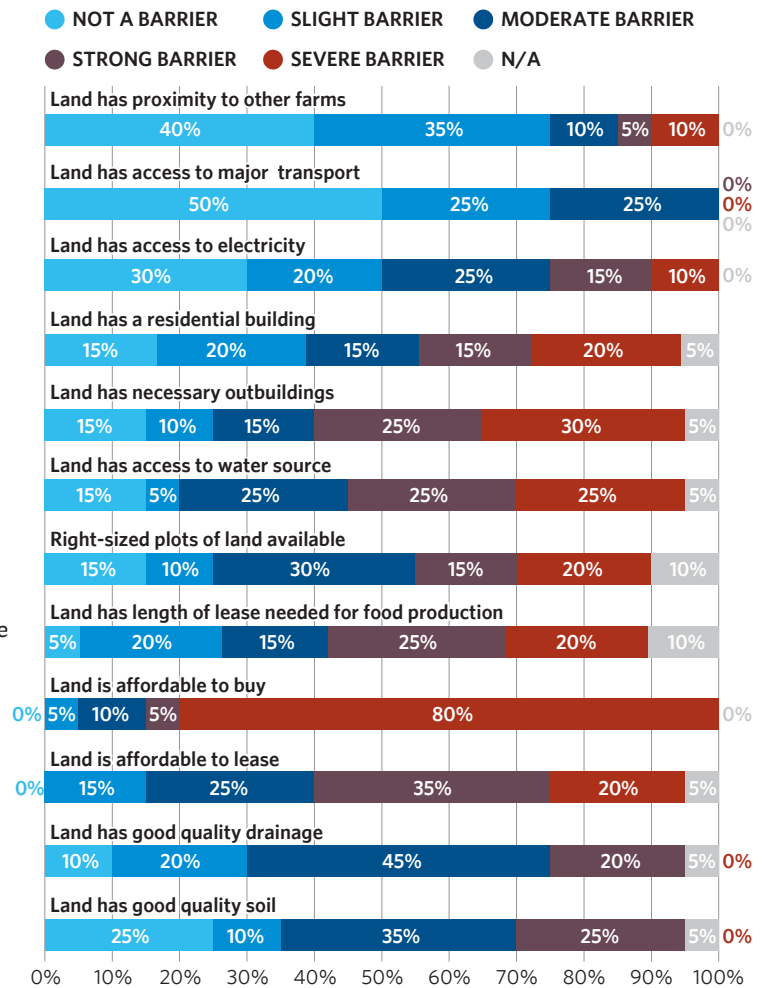
- ***Landowners' responses are aligned with farmers.***

Land affordability, length of leases, and right-sized plots were identified as major barriers that landowners perceived farmers to have, which aligned with farmer responses.

- ***Landowners are open to more sustainable operations, but are wary of the cost and complexities of implementation.***

Public and private landowners were generally amenable to converting to more sustainable agricultural practices on their land, including removing invasive species and providing access to electricity and water necessary for smaller scale operations – possibly sharing the cost of those utilities with a tenant in exchange for a longer-term lease. However, they also acknowledged common concerns about the potential costs of remediation or additional infrastructure, and the possibility that longer-term leases – which may be preferable for sustainable farming operations – could limit the flexibility of their land's future use (i.e., for development or some use other than agriculture).

Figure 6. Components of farm land that act as barriers, survey results



Source: Chicago Metropolitan Agency for Planning,
Survey of Lake County Food System Stakeholders, 2012.

Equipment and Supplies Provision

The survey attempted to gather information about how equipment and supply providers perceive supplying agricultural operations that may differ from large-scale commodity crop production.

- ***Equipment and supply providers would be able to meet different market needs if the demand were strong enough.***

In general, equipment and supply purveyors did not feel that local policies were restrictive. Instead, the main challenge hinged on the perception that there is not a market for equipment and supplies that cater to smaller scale sustainable or food production operations. One respondent reported: “If the demand was there, I would have no problem meeting it.” These equipment and supply providers expressed an interest in and understanding of sustainable agriculture, and said that they had strong relationships with farmers – such that if those farmers started asking for different products, they would make an effort to accommodate the new needs. When asked how an increase in sustainable farming would affect their operations, supplier respondents reported that it would in turn increase their own business and could be a positive change.

In response to ranking potential barriers, the equipment and supply providers reported that the cost of stocking the inventory necessary for sustainable farming would not be problematic. Obtaining and stocking smaller equipment and tools, as well as products that assist with small-scale processing (like cans and jars) would simply require customers to request them. Respondents acknowledged that they would need to forge new relationships with manufacturers of sustainable farming products, but said it would not be difficult to do so and ultimately, the increased diversity of products and needs from sustainable farmers would likely benefit their equipment and supply businesses.



Food processing: canning beets. Photo courtesy of Liberty Prairie Foundation, 2013.

Processing

Smaller scale processing facilities that can accommodate a diversity of products and entrepreneur needs may be necessary to support a more robust local food system. Frequently, a local food grower produces a greater diversity of crops at a smaller volume than that which a commodity crop farmer currently produces in Lake County. Of the 60 food manufacturing establishments in Lake County, five of them specialize in preserving fruits and vegetables, while seven establishments focus on animal slaughtering and processing.²¹ If the local food system grows in the future, there could be a potential gap between the need for and the availability of processing facilities that could serve smaller-scale farmers growing food sustainably.

- ***A local food system would be strengthened by small-scale processing facilities and flexibility for on-site processing.***

Survey respondents weighing in from across different stakeholder groups expressed a similar outlook about the availability of facilities. Both farmer and processor respondents reported that the number of smaller-scale facilities would need to rise if sustainable farming activity increases, and both respondent groups expressed that it would be helpful if there were more exemptions for on-farm food processing. Health codes were viewed as a barrier to varying degrees, depending on the processor’s familiarity with the regulatory agency’s policies. While livestock and dairy regulations as well as sanitation codes were mentioned as being restrictive in some cases, health codes did not appear to be a universal barrier for this survey’s sample. However, this could change as the sustainable local food system grows and there is a greater need for supervision.

21 U.S. Census Bureau, 2010 County Business Patterns (NAICS): Lake County, Illinois, Total Establishments: Manufacturing.

Distribution

Distributor respondents to this survey worked both with farmers and consumers in Lake County (as well as throughout the greater Midwest), including working with at least some U.S. Department of Agriculture (USDA) certified organic produce. Complying with governmental regulations was described by respondents as an important part of their businesses, with many U.S. Food and Drug Administration standards directly influencing the types of products they can buy and sell.

- ***Meeting the demand for sustainable, local food products is the largest challenge.***

Distributor respondents expressed that there was consistent demand for sustainable products (including organically grown, pesticide-free, and/or locally produced) from market and restaurant customers. Of the potential barriers facing distributors, governmental regulations were not as challenging as the lack of access to enough sustainably grown products. Finding growers that produce the quality of product at the quantity needed, as well as the price points of local and sustainable produce, were mentioned as the greatest challenges to participating in a sustainable, local food system. Distributors cannot transport products that do not comply with health and quality regulations, and for the most part they choose not to transport products that are not grown at a high enough volume to meet economies of scale.

As a complicating factor, anecdotal evidence suggests that distributors may find it difficult to identify farmers who are willing to sell produce to a distributor rather than through a farmers' market, CSA, or other direct marketing outlet. As farms grow and achieve economies of scale, direct marketing becomes more challenging and the need to coordinate with a distributor also grows. This gap between supply and demand illustrates the potential value of services like aggregation centers (or "food hubs") which can address the problems of scale.

Consumption

A variety of consumers – from farmers' markets to restaurants to grocery stores – shared their experiences with the sustainable local food system. There were no institutions (i.e., schools, government entities, hospitals) that responded to the survey; however discussion of providing sustainably grown food at the institutional scale did occur with other consumers.

- ***Consumers would purchase more local, sustainable products if the supply existed.***

Most consumers reported the lack of supply of sustainably grown products as the greatest barrier. Consumer respondents demonstrated an interest in and commitment to buying sustainable products from local sources whenever possible. All respondents reported that there are good places to access food grown in Lake County, saying they would source more from local farmers if more products were available (particularly out of season). Consumers said there is a need for better connections with growers who have the quality and quantity of products they are looking for and who can deliver on a schedule that works for the consumer. Over 80 percent of consumers reported that establishing the partnerships needed for the scale of sustainable operations was the most challenging issue for their operations.

- ***Direct relationships between producer and consumer are highly valued.***

Most respondents also report direct-to-consumer exchanges with farmers. Two-thirds of respondents indicate that at least some of their purchases are delivered directly to them from the farmer, and one third of respondents reporting that they pick up products from the farm themselves (sometimes making multiple trips per week). These direct relationships between producer and consumer are more feasible for the smaller scale consumers that can be flexible about their purchases from day to day (like restaurants).

Education and Policy

While not directly active in the chain of activities that comprises a food system, this survey aimed to learn from stakeholders in the education and policy fields who have expertise in food systems. These respondents reflected back much of the same concerns and issues that surfaced through the responses of other stakeholder groups.

- ***Educator and policymaker perceptions are aligned with other survey responses.***

Educator respondents perceived start-up and operating costs (including the cost of land) as the biggest barriers to sustainable operations, while they consistently perceived demand for sustainable goods as only a slight barrier. Survey respondents also suggested that it is important to have people with local, sustainable food experience interpreting and adjusting the local policies and codes.

Section 2.3.

Ordinance Review and Findings

Purpose and Background

While the survey of barriers tried to gain a qualitative understanding of the challenges facing Lake County's local food system stakeholders, a separate analysis of the regulatory environment was conducted to learn more about the presence and severity of legal constraints on the food system. Although regulations were not identified as the biggest barriers by those surveyed in Lake County, changes to the rules and ordinances that affect the food system is a straightforward and low-cost (in terms of County resources) step that the public sector can take to improve the system. This research into pertinent local (and occasionally state and federal) rules and laws was intended to identify potential regulatory modifications that could better cultivate that system. The general nature of Lake County's regulatory environment is to have definitions and rules in place when necessary, rather than to set parameters for every possible activity that could occur. In this way, Lake County government allows itself to appropriately adjust to new or changing conditions within the county, such as an emerging local food economy.

This regulatory review covered many aspects of the food system, from zoning and environmental requirements to health and sanitation standards that govern how food products can be processed, distributed, and sold (see sidebar for a thematic outline). The analysis of these policy areas was organized into three topical tables (see Appendix B for original documents). The primary resource for this review was the Lake County UDO (adopted in April 2000), which regulates zoning, subdivisions, signs, and site development (including stormwater detention, erosion control, floodplains, and wetlands) on unincorporated land.²²

Additional resources included:

- Lake County Regional Framework Plan (adopted in 2004 and revised in 2007)
- Promoting Sustainable Building and Development Practices in Lake County: Sample Ordinances and Information Sources (December 2011)
- A number of federal, state, and local laws on food safety, including:
- IDPH codes, specifically Technical Information Bulletins (TIBs) regarding food sales at farmers' markets (TIB Food #30) and cottage food production (TIB Food #44)
- Lake County Board of Health Regulation of Food Service Facilities ordinance
- Lake County Food Program Administrative Procedures and Policies
- First-person operational information from staff members of the Lake County Health Department (LCHD) and the Lake County PBD Department
- Lake County WDO
- Data from the McHenry – Lake County Soil and Water Conservation District

Outline of Regulatory Review

1. Zoning Codes

A. Agricultural Terms and Definitions

B. Agricultural Use Category

- i. Exempt
- ii. Non-Exempt
- iii. Agricultural Areas
- iv. Signage

C. Accessory Use

D. Temporary Uses

i. Farmers Markets

E. Temporary Sales

2. Public Health and Food Safety Standards

A. Food Safety and Sanitation Standards

i. Definitions of Food Types

B. Food Permits

- i. Permits for Commercial Kitchens
- ii. Permits for Temporary Food Service Events

C. Food Processing

- i. Federal and State Food Processing Laws
- ii. Food Processing Requirements

D. Food Service and Distribution Standards

- i. Federal Interstate Commerce laws
- ii. Wholesale Food Distribution Standards
- iii. County Standards for Food Service Facilities
- iv. Standards for Retail Food Distribution at Farmers' Markets and Outdoor Food Sales Events

E. Cottage Food Operation Standards

3. Environmental Regulations

A. Soil Assessment and Management

B. Chemical Use

C. Composting

D. Stormwater Management and Soil Erosion Control

E. Irrigation

i. Wells

²² "Unified Development Ordinance (UDO)," Planning, Building, and Development Department webpage of the Lake County official government site. <http://www.lakecountyil.gov/Planning/publications/Pages/UDO.aspx>.

Zoning Regulations

Zoning, which regulates land use and allowable structures, can have a strong influence over food production and related activities by controlling what, where, and how one can grow, process, and sell products in Lake County. Agricultural zoning districts, permitted accessory and temporary uses, and site development standards were examined to assess their impact on the sustainable local food system in Lake County.

This zoning analysis draws not only from the UDO, but also from the County's strategic planning documents. The Regional Framework Plan captures the vision and goals for the future of Lake County and provides guidance for how to achieve those goals. "Chapter 4: Environmental Resources, Farmland, and Open Space" explores issues of farmland protection and emerging farming activities (such as fruit and vegetable businesses).²³ The County's interest in supporting agriculture provides the context for exploring if and how their regulations could better facilitate local food production, which helps to achieve goals for open space, economic development, and quality of life. This exploration is reinforced by CMAP's current work with Lake County to amend the Regional Framework Plan with a chapter on sustainability, which will include similar goals about fostering the local, sustainable local food system.

Agricultural zoning codes originate from 20th Century forms of farming; that is, Illinois state statutes dictate that agricultural exemption from certain taxes and building codes are granted to larger plots of land – at a minimum of five acres (or 200,000 square feet as measured by Lake County code). A majority of Lake County farms — for the most part conventional operations growing corn and soybeans commercially — are significantly larger, with an average farm size of 87 acres in 2007.²⁴ However, the minimum lot size for agricultural exemption does preclude farming operations on smaller plots of land from some of the same advantages afforded to larger-scale farmers.

Facilitating agricultural activities on larger lots has historically made sense for the State of Illinois, but as the number of smaller farms increases in Lake County, zoning restrictions on these smaller plots can create challenges for sustainable food operations. Therefore, because there are few restrictions on larger plots of agricultural land, this analysis will concentrate instead on barriers and recommendations for non-exempt agricultural land (less than 200,000 square feet), which may be more conducive to food production than to commodity crops. Non-exempt agricultural uses are permitted in all zoning districts, which includes small-scale backyard gardens on residential lots. However, there are a few key restrictions to these non-exempt agricultural uses that can impede a person from growing food at a larger scale than a kitchen garden.

Agricultural Terms and Definitions

Article 14 of the Lake County UDO defines the land use categories and terms that are present throughout the ordinance. Lake County defines the uses and practices that are current, rather than including definitions for categories that do not commonly exist.

- ***Defining emerging local food activities would provide clarity.***

The Lake County UDO does not strictly define infrequent activities or uses, such that it does not place unnecessary boundaries around practices that are scarcely found in the county. This method allows the County to define new uses as they emerge and become more common throughout Lake County, as is the case now with many facets of sustainable local food systems.

The current definitions for "agricultural practices" and "crop raising" that the County uses are purposefully designed to be broad and permissive, but there are several concepts related to sustainable agriculture that are not currently defined, such as "local food," "beekeeping," and "debris." In such cases, the lack of specific terminology for these sustainable local food system activities could cause problems in the future, as emerging practices conflict with other definitions or restrictions on non-exempt land.

23 "Chapter 4: Environmental Resources, Open Space, and Farmland," Lake County Regional Framework Plan, adopted by the Lake County Board November 9, 2004 and revised February 13, 2007. Page 4-34.

24 2007 Census of Agriculture, Lake County, Illinois – County Profile, United States Department of Agriculture.



Chickens in agricultural field at Prairie Crossing. Photo courtesy of Liberty Prairie Foundation, 2013.

Emerging Local Food Practices

A number of practices that are related to sustainable, local food production — from crop rotation to composting to raising chickens, bees, or fish — are less familiar activities to many people in Lake County. As these newer agricultural practices emerge, the County will need to adapt to properly regulate and support such activities.

- ***Chicken keeping is currently prohibited on residential land in Lake County.***²⁵

While there are not many barriers to local food production caused by non-exempt classification, the limitation on chicken keeping prevents local producers from doing so on non-exempt land that is zoned for residential use. There are many examples of ordinances from other communities — including localities in the Chicago region such as Evanston, Naperville, and Will County — that allow chicken keeping in residential areas. Each of these model ordinances hinges on a certain set of parameters, which often include topics such as: the range or maximum number of chickens allowed; whether or not roosters are permitted; chicken coop building requirements; and setback requirements from any residence. Modest modifications to the UDO would allow for this form of sustainable agriculture to be more accessible to more residents of Lake County.

Accessory Uses

Accessory use regulations — that is, uses and structures that are subordinate to the principal use and structure on a given lot in terms of area, extent, and purpose — present another set of challenges for farming on non-exempt agricultural land. For residential and non-exempt agricultural uses, “accessory structures on a lot shall not exceed 1.5 times the total gross floor area of the principal structure on the lot.”²⁶ Furthermore, all accessory structures on non-exempt land are subject to building code standards (unlike accessory uses on exempt land), which regulate height, setback, wind load, anchoring, and ingress/egress for the structure.

- ***Accessory use restrictions can create a barrier for farmers on non-exempt land.***

The restrictions on the number, size, and type of structure(s) that a person can have to assist with agricultural activities can present a challenge for farmers on parcels smaller than five acres who want to extend their growing season or expand their operations to a scale at which they can sell their products for profit. Limitations on accessory uses were prominently mentioned in the stakeholder survey as a barrier for small-scale farms on non-exempt land.

This is problematic, since accessory out-buildings — including storage structures and seasonal-extension structures like hoop houses — have been identified as important infrastructure needed for small scale farmers to increase their economic viability by lengthening the growing seasons. While allowing a greater range of accessory uses on small residential parcels may not be desirable, for example lots less than one acre, expanding the allowable uses on parcels between one and five acres could be explored.

In Lake County, properly anchored temporary structures (like tents or other season-extending facilities) can be used on any type of non-exempt property for no more than 180 days per year, beyond which time those structures must be disassembled. Other restrictions exist, such as that the temporary structure should not be accessible by the general public. An example would be a hoop house on a residentially zoned, non-exempt property that is used to raise crops for wholesale beyond the spring and summer seasons, and which is only accessible to the property owners or farm staff.

25 Lake County Unified Development Ordinance, Section 6.3.3.2 (c).

26 Lake County Unified Development Ordinance, Section 6.4.2.5.

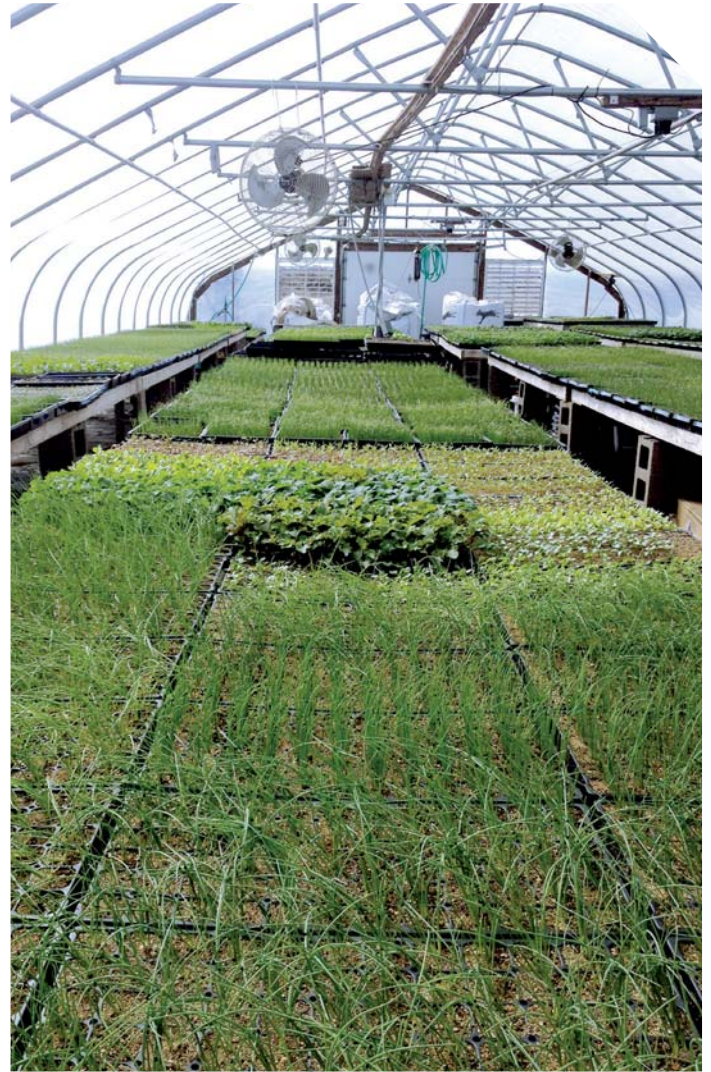
Temporary Uses

Temporary uses, such as farm stands and tents for produce sales, are regulated in the UDO, such that all temporary events and sales must be permitted by Lake County government. This process of temporary use permitting – which requires compliance with and approval from the Lake County PBD and Health Departments — has notable control over the incidence of local food preparation and sales.

- ***Temporary events and sales are an important way for farmers to connect directly with their consumers.***

Temporary sales and infrastructure (e.g., tents) are important for farmers to connect to customers directly, whether through community farmers' markets or on-site farm stands. Likewise, temporary use permits are required to run food service operations, such as cottage food production, a growing trend in the local food system. The PBD receives more requests for temporary use permits every year, which coincides with the increasing popularity of farmers' markets and signals the growing need for these types of temporary, direct-to-consumer sales.

In response, the PBD recently expanded the number of temporary events from a maximum of seven per year to 15 per year throughout Lake County. While the department acknowledges that adding more temporary events may cause an adverse effect on parking availability, they are choosing to support temporary, local food sales as both producer and consumer interest increases. Additionally, seasonal sale of farm produce grown on-site — for no longer than six months per calendar year — is allowed in all zoning districts with a temporary use permit. This flexibility in the Lake County UDO is important for facilitating a viable local food system in Lake County, since direct-to-consumer sales are central to the growing movement.



Growing greens in a hoophouse at Prairie Crossing.
Photo courtesy of Liberty Prairie Foundation, 2013.

Public Health and Food Safety Standards

Public health and food safety standards comprise a complex system that influences the preparation, processing, distribution, and sale of food. Given the breadth of this system of regulations, this analysis does not attempt to cover all public health and food safety rules. While most respondents to this project's qualitative survey did not indicate that health regulations are a barrier to farming or food preparation, as the local food system continues to grow and as more local food is processed and sold, these health regulations may become more relevant to local farmers and processors. Therefore this analysis looks at the existing condition of health and safety rules as they pertain to local food in Lake County, and then explores the opportunities that may exist – within the bounds of current sanitation standards – for the County to help foster the emerging local food industry.

These public health and food safety standards are regulated at the federal, state and local levels. The USDA's Food Safety and Inspection Service, the Illinois Department of Public Health (IDPH), and the Illinois Department of Agriculture each play a part in this system. State regulations – such as standards for food handling and wholesale distribution – are established by law and interpreted and enforced by the IDPH, which also develops and implements TIBs that pertain to food safety. In addition, counties and municipalities in Illinois maintain food safety standards and regulations; in some cases (for instance in “home rule” communities), these local regulations can be more stringent than state law. However, Lake County is not home rule and upholds the state regulations. The LCHD regulates the retail sale of foods – overseeing facilities that sell directly to schools, restaurants, and the general public – while wholesale producers are regulated by IDPH. Lake County's health regulations that pertain to food services and sanitation exist to ensure food safety, but they also affect the viability of the local food system, particularly as it relates to food preparation, processing, and sales.

Health Permits

The LCHD is responsible for implementing food protection and safety standards, and permitting is an important aspect of this function. The most common permit that the LCHD issues concerns general retail food distribution.

- ***The County Health Department plays a significant role in regulating the sale of local food.***

The LCHD regulates the retail sale of foods (while wholesale producers are regulated by IDPH). As discussed in the Zoning analysis, the primary permits that apply to local food producers are permits for temporary food service events. All temporary food service event permit applications are evaluated and categorized by risk of potential food-related hazards. Additionally, permits and licenses are needed for selling certain food products at farmers' markets, including meat and poultry products, as well as fish (currently, vendors who sell fish at farmers' markets are required to have a commercial fishing license).²⁷

Cottage Food Production

Another category of temporary use that requires LCHD permit approval is cottage food production. A “cottage food operation” is defined as a person who produces or packages non-potentially hazardous food in a kitchen of that person's primary domestic residence for direct sale by the owner or a family member, stored in the residence where the food is made.²⁸ Risk regulations defining the level of food hazard are important because they dictate what is allowed to be processed in a cottage food operation. Such cottage food producers must register their operation with the LCHD prior to selling any home-prepared foods at farmers' markets. Additionally, cottage food sales are restricted to farmers' markets, and those markets can determine which vendors they allow. This can be perceived as a distribution barrier for cottage food operators.

- ***There is room for growth of cottage food production in Lake County.***

Under the Cottage Food Operation Act (enacted in January 2012), in order to prepare and sell food, cottage food producers must obtain an IDPH food service sanitation manager certificate by completing a state approved 15-hour course and passing the examination. There are fees associated with both the training and the certificate. There are currently three cottage food producers that are registered in Lake County. Although the law has only been in effect for approximately a year at the time of this report, it is unclear whether this small number is a function of the limitations built into the state certification and local registration process, or whether local residents are simply not aware of the opportunity yet. Although the state legislation allows counties to charge a fee to cottage food producers that register, neither Lake nor any other county in northeastern Illinois exercises that condition, which should make the registration more feasible for small-scale cottage food producers who generate limited revenue through their retail sales.

27 Technical Information Bulletin Food #30, Illinois Department of Public Health.

28 The Cottage Food Operation Act, Section 4, Illinois General Assembly. 410 ILCS 625/4.

Commercial Kitchens

LCHD regulates the process for building and operating a certified commercial kitchen, which is a kitchen space that exists to prepare food for commercial sale (and is often a space shared by multiple users). The application requires review from both the Health and PBD Departments, thus depending on their close coordination to create an integrative, concurrent process rather than a sequential process for the local food applicant.

- ***There are currently few commercial kitchen operations in Lake County.***

Commercial kitchen operations must meet a number of requirements, from building construction provisions to sanitation compliance to water supply standards. These constraints are likely the reason that there are very few individuals in unincorporated Lake County who operate commercial kitchens in their residences, even while there are many institutions that have met the requirements and operate commercial kitchens out of restaurants and schools.

Processing

Regulations for processing, storage, and packing of food products reside largely under the governance of federal and state agencies. Food products – ranging from cut vegetables to dairy products to preserved goods – are required to be prepared in a facility that has been inspected by IDPH, and meat and poultry products also have to be inspected at a federal USDA or state-inspected facility. Given that most local food producers and farmers are not processing the fruits and vegetables they grow, these state regulations generally do not apply, except where producers are interested in selling value-added products. However, these regulations do pose barriers to local food processing operations, which are often smaller in scale than what the federal and state laws were designed to regulate.

- ***Federal and state processing laws often impose cost-prohibitive requirements on smaller-scale, local processing operations.***

For instance, federal and state regulations on dairy processing require the use of large equipment, which can be cost-prohibitive for smaller, localized processing operations. Small businesses working with dairy products, such as an artisanal ice cream maker, have to comply with federal pasteurization regulations, which call for this larger, expensive equipment. In 2012, efforts were made to pass legislation in Illinois (HB 4494 – Small Businesses and Pasteurized Milk) to allow smaller businesses to comply with provisions of the pasteurization rules without requiring them to obtain the cost-prohibitive equipment. While this legislative initiative failed, it could be pursued again to set a precedent for tiered regulations that will support the viability of small scale local food processors.



Processing operation for local food. Photo courtesy of Conserve Lake County, 2013.

Distribution and Sales Standards

There are health- and sanitation-related federal and state regulations that set standards for the distribution and sale of locally produced and processed products. These regulations apply to both wholesale and retail distributors in Lake County.

- ***Distribution standards do not significantly restrict local food producers.***

Unprocessed whole fruits and vegetables are exempt from these federal and state regulations. If operators of farm stands and concessions were to sell food products other than fresh, uncut, unprocessed produce, they would likely have to obtain a temporary food service permit from the LCHD.

Federal restrictions on interstate distribution of state-inspected meat and poultry products had decreased the viability of small, local processors to compete for decades. However, the USDA launched the Cooperative Interstate Shipment Program in 2011, which allows state-inspected processing operations with 25 or fewer employees to distribute their product across state lines if they bear an official USDA mark of inspection (see Appendix B, Matrix II). The economic benefits of participating in this voluntary program are attractive to local food producers and processors, who could expand their market access and potential income, leading to potential multiplier effects in the processors' home communities. Overall, the laws that regulate food distribution do not appear to pose significant barriers to local food producers and processors who are trying to sell their goods both locally and more broadly.

Environmental Regulations

This examination of environmental regulations explores the potential influence on agricultural use and the development of Lake County's sustainable local food system. This analysis focuses on regulations that pertain to unincorporated Lake County, and does not review municipal regulations. The analysis does not address many of the environmental issues related to the agricultural industry, instead focusing on county policies and regulations that may be barriers to a stronger local food system. In the same way that an emerging local food industry could warrant modifications to public health regulations, so too could the local food system and its related sustainable agricultural practices require updates to current environmental standards.

Stormwater Management

Lake County has worked proactively to address stormwater management from a county-wide and interjurisdictional perspective. In 1990, the Lake County Comprehensive Stormwater Management Plan was completed to provide a guiding framework for coordinating stormwater management activities across the county; the Comprehensive Plan was updated in 2002.

The Stormwater Management Commission (SMC) is the authorized agency that oversees stormwater management in Lake County and administers community services, with the primary goal of flood damage reduction and surface water quality improvement. In addition, the SMC manages Lake County's floodplains and watersheds and focuses on natural resource protection by restoring and enhancing natural drainage systems. Lake County's WDO establishes the minimum requirements for the stormwater management aspects of development in Lake County, and is important to the effective management of stormwater and protection against flooding. The SMC upholds the WDO while also being supportive of agricultural activities in Lake County and has demonstrated a willingness to explore strategies within reasonable bounds of the local ordinances that would foster the local food system.

While it is important that agricultural use comply with stormwater management regulations to limit adverse impacts to drainage, the regulations appear to pose some challenges to local food farmers who are interested in constructing seasonal extension structures. The goal of these structures – such as hoop houses – is to extend the growing season both to start sooner in the spring and to continue later into the fall. Farmers can lengthen the growing season by two or three months by using hoop houses, thereby evading the cold weather that northern Illinois farmers typically face, and providing local food to meet customer demand for a greater portion of the year. These season extension activities can increase income for growers. Therefore, it is problematic if stormwater regulations make it difficult to construct these types of structures.

- ***Stormwater regulations may act as a disincentive for the erection of structures associated with food production.***

Typically, agricultural activities such as gardening, plowing, or otherwise working soil for agricultural use are exempt from stormwater regulation regardless of their location, so long as those activities do not involve filling, grading, or construction of levees. However, stormwater regulations and a Watershed Development Permit may be required in cases where agricultural operations seek to build temporary or permanent season-extension facilities such as greenhouses and hoop houses, or other outbuildings for drying and/or storage of equipment or farm products, regardless of whether this occurs on agriculture-exempt or non-exempt land. Generally, the thresholds that would trigger WDO requirements include projects that:

- Result in modifications within floodplains, floodways, wetlands, or depressional storage areas.
- Result in more than one acre of new impervious surface.
- Result in more than three acres of hydrologically disturbed area, unless the total new impervious surface area is less than 0.5 acre.
- Result in an impervious surface area ratio of 50% or greater, unless the total new impervious surface area is less than 0.5 acre.
- Hydrologically disturb 5,000 square feet or more.

Permanent structures that exceed these thresholds would trigger the WDO requirements and the need for a Watershed Development Permit. The permit application process can be complex and difficult for those unfamiliar with the process, and runoff management standards and requirements can be cost prohibitive for some landowners.

Temporary structures, however, are less likely to trigger stormwater permit requirements or other stormwater regulations. Temporary structures that disrupt hydrology by causing ground-disturbing activities to level the site, for instance, may or may not trigger WDO requirements depending on the size of structure and its location relative to a floodplain or other flood prone area. Such circumstances would likely be considered on a case-by-case basis by the SMC. Nonetheless, the idea of pursuing a permit or a variance for certain activities or structures may be a real or a perceived barrier on the part of a farmer or landowner.



Irrigation system for local food production.

Photo courtesy of Conserve Lake County, 2013.

Composting

A key component of a sustainable local food system is how waste is managed. Composting provides a sustainable option for diverting agricultural materials that are biodegradable from ending up in landfills. Organic waste can be composted and reused as fertilizer, which a gardener or farmer can then apply to their operations. The State of Illinois governs composting under the Illinois Pollution Control Act, and the regulations for composting vary between different land uses. This law dictates that in agricultural-exempt areas, any agricultural waste produced on-site can be composted on-site, but off-site waste is prohibited from being transferred and mixed with compost waste from another site. Transfer of compost is considered an industrial use since it is an intensive use. In Lake County, there is one known exception for a large farm (over 500 acres) that is allowed to process manure on-site with off-site landscape waste from off-site. In this case, the byproduct can be shipped off-site for final use, or applied to the farmland there. There are also entrepreneurial opportunities related to composting, as demonstrated by facilities in Lake County like Midwest Organics Recycling in Wauconda Township and New Earth Compost in Waukegan. Despite the regulatory challenges related to this scale of composting for public health reasons, these are examples of economically viable businesses that still comply with regulations while increasing organic waste diversion.

The Lake County Strategic Plan encourages the implementation of long-term solutions for increasing waste diversion through composting.²⁹ And though composting does appear to be a potential public nuisance in residential zones in Lake County, there have not been many reported issues between residential local food growers and their neighbors to date.

- **Composting regulations are not currently a barrier to local food production.**

Composting regulations are modestly restrictive, but they do not pose a barrier to local food producers in Lake County since growers and residents can compost their own agricultural waste on-site, and thus far composting has not caused significant conflicts. It is possible, however, that with an increase in local food production on non-exempt land a specific ordinance may be required to address small scale compost operations.

Irrigation

Lake County draws its water supply from three primary sources: Lake Michigan, shallow aquifers, and deep aquifers. Agricultural irrigation, which is nearly always a necessity for fruit and vegetable production, is dependent on the availability of a safe and abundant water supply.

Regulations that apply to food production operations relate primarily to the source of water supply. If a community water system is available, a local food operation can typically choose to use this community system³⁰ or opt to install an individual well and use groundwater. Regardless of the source of the water, community water systems have the right and the responsibility to restrict water use according to community conservation plans, during drought conditions, and for other reasons, which could affect a local food operation. Community systems that charge a fee for water use can pose an economic barrier to using this as a water source for agricultural uses, because the large volumes of water that may be needed for irrigation can be expensive.

The use of well water, on the other hand, is neither monitored nor restricted, and landowners with individual wells can withdraw as much water as desired. The primary regulatory challenge with individual wells relates to meeting setback requirements, which may be difficult on small parcels. However, smaller parcels are more typically associated with community water systems, which can be used as the irrigation source where a well cannot be installed.

In the absence of a community water system and adequate space to install a well, a local food producer may be out of luck unless they can capture a sufficient volume of rainwater. The Lake County SMC promotes a third potential source for irrigation: on-site stormwater detention basins, which present a means of sustainable water use and stormwater management.

- **Policies and regulations associated with irrigation do not appear to be a significant barrier to local food production; however, irrigation needs should be balanced with the County's conservation and water supply management goals.**

Local food production could increase the demand for water use in Lake County, since fruits and vegetables typically require much more irrigation than commodity crops. Though the supply of water available for irrigation is currently not restrictive, future water supply shortages are predicted for parts of Lake County, which could impact food production activities. For local food production operations using community water systems, conservation plans may restrict the use of community water systems for irrigation, which could affect food production operations. The price of water could also create an economic disincentive to using a community water system, though the cost to install a well can be an economic obstacle as well.

²⁹ Lake County Strategic Plan, Lake County Illinois, adopted September 2009.

³⁰ Not all municipalities allow the use of municipal water for irrigation or other agricultural activities.

Section 2.4.

Review of Local Food Organizational Structures

Food systems involve a wide array of stakeholders from different sectors, all of whom are influenced by different governmental functions and regulations. In recent years, stakeholders have begun to form partnerships to address food-related challenges in a more holistic way, comprehensively addressing concerns about food security, economic development, public health and nutrition, soil and water health, and other issues.³¹ Such partnerships vary in their organization, ranging from formal advisory bodies with direct connections to state or local governments to community-based advocacy organizations independent of government participation. Food-related groups pursue a variety of activities which seek to influence policy or support programs in the following areas:

- Food and resource assessments for a locality
- “Farm to table” education, including “farm to school” initiatives
- Food security and food access
- Zoning laws and other land use regulations
- Farmers’ markets and direct-to-consumer food sales
- Institutional food purchasing programs
- Farmland preservation
- “Buy local” initiatives and other economic development campaigns

Examples and characteristics of various types of food policy and advocacy groups are detailed in Appendix D.

A Definition for Food Policy

“Food Policy consists of the actions and inactions by government that influences the supply, quality, price, production, distribution, and consumption of food.”

- Mark Winne, “Local and State Food Policies: What Can We Do?”
Food Policy Councils: Lessons Learned, 2009.

Origination and Connection to Government

Food Policy Councils (FPCs) are a common model for these food-related groups. FPCs generally have ties to government; in some cases government representatives are members of the council, in other cases the group advises a government body directly. Many state-level FPCs are established by official government action — for instance, through an executive order or public act — while county and local FPCs tend to be more independent of a government directive.³²

Some FPCs are housed within a governmental department or agency, while others are formed as an appointed group with the task of analyzing and recommending actions to enhance the food system of the target jurisdiction. For example, the Cleveland-Cuyahoga County Food Policy Coalition is an independent entity, but City and County officials are involved with the coalition and the group advises local governments. Other FPCs form as the result of grassroots networks rather than governmental mandate. For instance, the Milwaukee Food Policy Council was first initiated by an informal urban agriculture network. In Pima County, Arizona, a regional food bank was an integral partner to launching their council. In both of these cases, a broader collaborative grew out of advocacy efforts that had been more narrowly tailored to a single issue, like food access and security.

The word “policy” in Food Policy Council can be a misnomer, as FPCs are frequently responsible for researching, advocating for, and monitoring policies, rather than actually setting and implementing policies, which is the role of government.³³ The formation of a FPC may be driven by the gaps found through analysis of existing local food conditions, or conversely, such a food system assessment report may be identified as the council’s first task. The Knoxville Food Policy Council, for example, was formed in response to both a food assessment conducted by the University of Tennessee and a county study on food access and equity issues (see Appendix D).

31 Presentation by Mark Winne at the Chicago Metropolitan Agency for Planning, July 27, 2011.

32 Harper, Althea, et al., Food Policy Councils: Lessons Learned, Food First: Institute for Food and Development Policy, 2009, page 24.

33 Clare Fox. (2010) Food Policy Councils, Innovations in Democratic Governance for a Sustainable and Equitable Food System, Los Angeles, CA: UCLA.
http://goodfoodlosangeles.files.wordpress.com/2011/01/fpc_final_dist-5-indd.pdf

34 Mark Winne coined the term “Local Food Organizations” to differentiate them from Food Policy Councils. This term will be used throughout this document to refer to any organizations focused on local food issues that are not FPCs. 24. 2007 Census of Agriculture, Lake County, Illinois – County Profile, United States Department of Agriculture.

Other food-related groups, sometimes called Local Food Organizations (LFOs),³⁴ focus their efforts on running programs and initiatives to improve community food systems. LFOs work to increase access to fresh food, protect natural resources and farmland, and educate communities about buying locally grown food, but do so without formal ties to government or a policy-driven agenda. While these LFOs may not have a formal advisory function, cities and counties are often represented on their boards or steering committees, and these LFOs are often effective in bringing particular issues to the attention of government bodies.

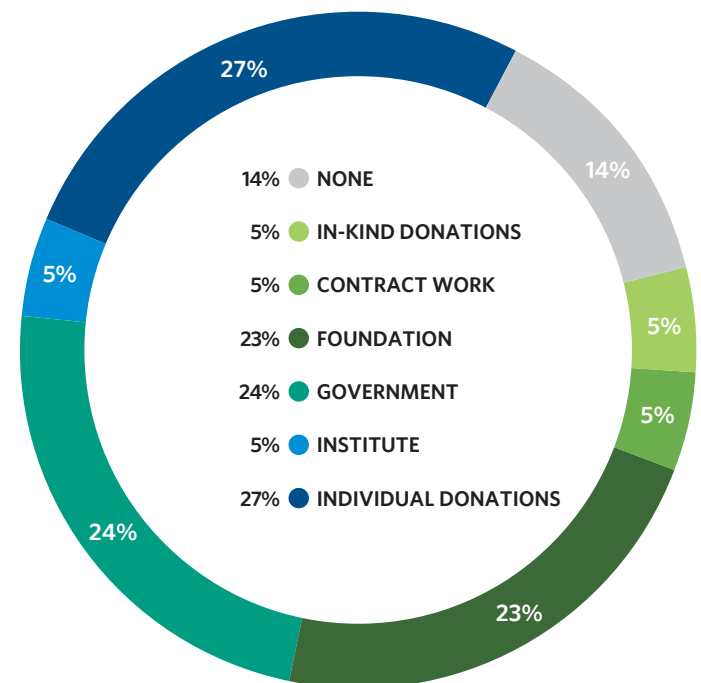
A number of LFOs started as nonprofit organizations, such as the Valley Food Partnership — a merger of two existing nonprofits with similar missions in Western Colorado. Others, such as the Local Matters group in Central Ohio, started as a loose collaboration of advocates and later evolved into a 501(c)(3) organization. Membership to these LFOs is generally self-selected and open for all who are interested, rather than involving the process of application and governmental appointment typically found with FPCs.³⁵ For instance, the organization Treasure Valley Food Coalition — serving southwestern Idaho and eastern Oregon — was launched in 2011 by two restaurant owners and now has a steering committee comprised of farmers, teachers, and nonprofit leaders.

Organizational Structure, Staffing, and Funding

Despite this distinction between the origination of FPCs and LFOs, all food-related organizations — whether they are called networks, alliances, coalitions, etc. — face an overlapping set of structural, staffing, and funding challenges. Organizationally, these food-related groups can have sub-groups or working committees that focus on one particular topic and make recommendations to the larger group.

Some of the less formal groups may take an approach that is not as comprehensive as FPCs in formulating strategies to improve local food systems and may focus on a more selective range of activities. For example, the Valley Food Partnership has a 15-member steering committee that includes county agency representatives and makes recommendations to public agencies. While this is similar to the structure of many FPCs, the Partnership's exclusive focus is on food access by connecting growers with institutions and restaurants, which is a somewhat narrow focus compared to the more comprehensive approach of some FPCs.

Figure 7. Funding for county-level food policy councils



Source: Institute for Food and Development Policy, 2009.

35 Harper, Althea, et al., Food Policy Councils: Lessons Learned, Food First: Institute for Food and Development Policy, 2009, page 27.

Most food-related organizations rely either on volunteer staff or on less than one full time staff person,³⁶ which may reflect a lack of attention to and funding for these types of activities or may simply be due to the fact that these types of groups are relatively new. For example, the Detroit Food Policy Council formed in 2009 without any staff members, but today has a Coordinator and Program Manager on staff. Some groups that operate as independent nonprofit organizations, such as Local Matters, manage to maintain a staff that is dedicated to local food issues. Other organizations, such as the Pima County Food Systems Alliance and the Cleveland-Cuyahoga County Food Policy Coalition, receive staff support and space from universities and extension services.

Additionally, consistent public funding sources are difficult to obtain and secure for many of these food-related organizations. Funding is often more likely to come from foundations, donations, and membership dues than from government. For instance, for county-level FPCs in North America, the largest funding source is individual donations (see Figure 7).³⁷ It is common for groups to receive small grants for their first year of operations, after which they must secure other, more dedicated funding. The Dane County Food Council in Wisconsin received \$15,000 in seed money from a partnership between the County, the City of Madison, and the University of Wisconsin. Additionally, a small number of food-related groups received start-up grants from USDA's Community Food Projects competitive Grant Program. The USDA and the Communities Putting Prevention to Work initiative have provided support to some of these organizations, but typically not on a continuing basis. Other funding sources may be found through health care providers, grocers, restaurants, and other local businesses.



Local food advocates gathered at College of Lake County's "County Green" Conference in 2012.

Lessons for Food Group Formation

As noted previously, there is not always a clear set of characteristics that defines a robust, functioning local food group. Some groups, like many FPCs, have strong ties to governmental entities and therefore often have more direct influence over the formation of local public policy as it relates to food issues. Other groups might be less formal — such as those classified as LFOs — and while they may not have the direct sway over policy formation, their powers lie in their position as independent advocates that can promote their interests outside of politics. By and large, these food-related groups maintain some level of connection to government, as it is helpful to be in a position of collaboration in order to influence the regulations that dictate local food systems.

These groups face similar challenges, such as:

- Maintaining a committed and diverse membership.
- Securing adequate funding.
- Identifying the channels through which to move their agendas forward amidst complex political environments.³⁸

36 Ibid, p. 23.

37 Ibid, p. 26.

38 Ibid, p. 5.



Lettuce in a Community Supported Agriculture (CSA) farm box. Source: USDA.

3. Recommendations

These recommendations are designed to address the primary barriers to a more robust and sustainable local food system in Lake County that were uncovered during this project. The recommendations are directed primarily at Lake County, but also at other policy makers and stakeholders within the sustainable local food system. Local food systems of the sort envisioned for Lake County and the region are highly complex networks, many pieces of which are currently missing. The intent of this project was not to identify all potential barriers to a more robust system, but to examine the county policy and regulatory environment in which it exists. A few non-policy oriented barriers that were uncovered are included in the discussion below.

Lake County Regional Framework Plan policies currently support the creation of a local food system and economy (see sidebar). Challenges remain, however, and there is a significant role for counties and other local governments to provide support by addressing regulations, land access, facilities, coordination, and supportive market conditions. Opportunities for Lake County to strengthen this system will be supported through the Sustainability Chapter amendment to the Regional Framework Plan.

In general, the project steering committee found that Lake County policies and regulations are permissive of sustainable local food system activities, while the major barriers identified by stakeholders centered on land access, scale of production, and connections across sectors of the food system. Nonetheless, minor modifications to Lake County policies and regulations could strengthen the regulatory environment and support for local food production. A number of recommendations suggest a more proactive role for Lake County to stimulate the local food market, provide clear and accessible information, and create a streamlined and permissive permitting process. Other recommendations extend beyond the purview of Lake County government. These should be considered by a Lake County local food working group that includes Lake County as a participating member. This cross-sector working group should be established to encourage collaboration, address some of the challenges identified in this report, and solidify the importance of food systems to economic prosperity and quality of life.

Lake County Regional Framework Plan Policies

Goal 4.8. Preserve select remaining farmland.

Policy 4.8.1.

Promote new and expanded farming activities...that provide fruits and vegetables...and other agricultural products directly to consumers.

Policy 4.8.3.

Analyze the impacts of County regulations on farming operations ... to identify County regulations that make it difficult to start, expand, or continue agriculture operations.

Policy 4.8.4.

Establish partnerships to protect farmers who want to keep farming but need financial incentives.

Policy 4.8.5.

Help retain the farming, open space, and scenic vistas for future generations.

General recommendations for local governments include the five points below; more specific recommendations for Lake County and for the proposed local food working group (Recommendation #12) follow.

- Explore ways to encourage better access to land, facilities, and infrastructure to help the local food system grow and become more economically viable. This can include entering into farming leases for food production on public land; supporting the development of facilities for storage, processing, and packing through supportive financing tools (but not necessarily capital funding) or donation of county resources; and supporting business incubation centers or clusters of mutually beneficial activity.
- Adopt or modify policies and standards to encourage local food uses and operations and to reduce the cost and uncertainty of projects. This can include expedited permitting, supportive zoning, land use, and public health regulations, and financing tools such as guarantees, revolving loans, and tax rebates.
- Encourage the market, innovation, business, and entrepreneurs by adopting local food procurement targets; supporting workforce development efforts; and linking hunger assistance programs to local food producers.
- Focus effort on incorporating local food system in economic development plans as a positive and economically valuable land use.
- Participate in a forum (such as a local food working group) to discuss and address local food system issues. Such a forum or council can serve to coordinate policy initiatives, research, education, programs, and events; support governments and business; and connect stakeholders, buyers, and sellers.

It should be noted that the following recommendations represent the opinions and perspectives of the individuals serving on the project steering committee and do not necessarily represent the positions or recommendations of the organizations that these individuals represent.



Fields in local food production.

Photo courtesy ofLiberty Prairie Foundation, 2013.

RECOMMENDATION 1:

Recognize agriculture and food production as a positive, legitimate, and economically valuable land use.

Section 1 of this report presents national, regional, and local trends indicating a shift in farming practice and consumer demand. This presents an opportunity for Lake County to capitalize on the potential benefits of a more robust local food system. Counties that border metropolitan regions, such as Lake County and the other collar counties, hold great potential for capitalizing on the demand for local products by urban populations. Lake County has already established a positive policy direction for such a system, and it is recommended that the County continue to strengthen and endorse the local food system, both through its land use and development authority, and by strengthening perceptions of agriculture as a valuable, legitimate, and long-term land use that benefits Lake County's economy, character, and quality of life. Often perceived as a declining land use or a "holding place" for future development, agricultural land should instead be regarded as one of the county's irreplaceable and productive natural assets that provide benefits and services to county residents. The County should also work closely with Lake County Partners to include local food systems in economic development plans as an economic, employment, and entrepreneurial opportunity.

RECOMMENDATION 2:

Investigate the potential to provide access to public land for food production.

One of the most commonly expressed barriers in the stakeholder survey was the need for better access to affordable farmland. Surveyed farmers reported that right-sized, affordable land for smaller-scale sustainable farming is difficult to find in Lake County. This is primarily due to the high cost of purchasing and/or renting agricultural land, which is inflated beyond its value as agricultural land due to development potential. For this reason, this report recommends examining publicly owned land as a potential land resource for food production. This is not to suggest that local food production operations should depend on public subsidy to be financially viable, since many private local food operations are successful and profitable in Lake County and the region. Rather, the use of public land should be considered a temporary support to help build the supply side of the local food economic system until market forces can drive local food production through the private land market.

The Lake County Local Food Working Group (Recommendation #12) could address this challenge by trying to evaluate and identify suitable land parcels in the County that could be repurposed for short- or long-term sustainable agriculture, particularly public land that is not intended for other uses in the short term. For instance, Kane County, Illinois is working with CMAP to inventory underutilized County-owned land that could be leased to private entities for sustainable food production, which involves identifying criteria and setting a framework for evaluating public lands for food production potential. In Lake County, the Forest Preserve District owns 2,600 acres of farmland, and Libertyville Township currently owns 750 acres of farmland, which could be a starting point for examining the potential to implement this recommendation.



Cover cropping as part of crop rotation practice. Photo courtesy of Conserve Lake County, 2013.

There are a variety of models in which public landowners cooperate with private enterprises to support sustainable agriculture. One notable case study is the Countryside Initiative, a partnership between the Cuyahoga Valley National Park, the Countryside Conservancy, and private sector farmers. This initiative was founded on the basis that responsible land management is just as important as profitable farming and preserving the agricultural heritage of the area. The program grants up to 60-year farming leases on existing farmsteads within the National Park, which were in need of more careful land management after years of irresponsible farming practices caused damage to soil and water health. In exchange for these long-term leases, the program requires farmers to commit to sustainable farming practices and live on the farm, enabling farmers to commit to long-term best practices such as crop rotation, low-pesticide farming, and humane grazing techniques. In order to help ensure that management measures are having the desired effect, the National Park Service sets and monitors environmental standards.

RECOMMENDATION 3:

Consider farming infrastructure in land use planning and explore economic development strategies for supporting infrastructure needs.

Access to affordable, right-sized land for local food production is a significant barrier to entry for many farmers. Access to infrastructure and utilities for small scale, local food operations, such as outbuildings, electricity, and an irrigation source can also be barriers, primarily due to the cost of installation. As part of its land use planning and policy decisions, Lake County should consider the location of existing farming infrastructure and utilities, and the feasibility and potential to install or otherwise provide necessary infrastructure and utilities. For instance, areas with existing infrastructure could be designated as high priority for local food production operations, the aggregation of which can benefit farmers by facilitating the sharing of infrastructure such as water sources and season-extension facilities. Similarly, areas that may be good locations for local farming operations could be designated as priorities for the extension of infrastructure and utilities, either via county or municipal resources and networks. The County could also explore ways to support the installation of infrastructure, such as small loan or revolving loan programs, or incentives for farmers to coordinate and share resources with other sources of public financial assistance.



Consumers and producers interacting at farmers' market.

Photo courtesy of Liberty Prairie Foundation, 2013.

RECOMMENDATION 4:

Integrate best practices and standards into farm lease terms.

Studies have found that what is best for land health is often the most economical practice as well.³⁹ A common topic of conversation throughout the project was how to encourage agricultural practices that better protect land and water health without dictating to farmers what to grow and which practices to use. Performance standards emerged as one concept that may hold promise in this regard, which could be integrated into leasing and licensing terms for tenant farmers. With performance standards, land managers are required to meet specific targets for indicators such as soil organic matter, soil erosion, water use, and runoff water quality. Setting such standards is a complex undertaking – both in establishing and enforcing the standards. Despite potential challenges, such standards could provide great benefits, helping target sensitive or at-risk lands for better land management, and facilitating the increase of sustainable agriculture and local food production in Lake County.

There has been growing interest across the country in leasing arrangements that encourage better land stewardship. Frequently, a short lease term does not easily allow enough time to adequately establish the type of agricultural practices that would meet ecological performance standards. This was corroborated through the survey of agricultural stakeholders in Lake County, which revealed that some farming leases are too short for a farmer to implement sustainable land management activities, which can be considered as a farmer's investment in the land. A farmer at risk of losing a lease is unlikely to invest heavily in land health and infrastructure. For instance, if a farmer works under an annual lease, they could be less likely to invest in improving land and water health through crop rotation, increasing soil organic matter, and other actions. Short lease terms also increase the risk and uncertainty for farmers making other investments in infrastructure, from wells to outbuildings to electricity. However, lease tenure also has to make

sense for land owners, who often prefer not to encumber land in a single use for a long period of time, reducing control over the use and management of property.

Generally, three- to five-year leases are being considered as target minimum lease period in Lake County to encourage more sustainable practices. This length can provide some security for tenants while allowing the landowner some flexibility to modify the lease terms, including performance standards, as needed to encourage the farmer to care for the long term health of the land. However, while three to five years may be appropriate for land where infrastructure and good soil health are already present, longer term leases may be required to allow a farmer to achieve a return on investment for installing infrastructure or improving soil health. In summary, some land is appropriate for shorter lease terms and other land is not. When considering the length of a farming lease, the landowner should consider a variety of factors including soil health, future use, restoration potential, and the presence of infrastructure.

Arrangements also can be made within a longer lease to allow flexibility for both parties, contributing to a better tenant-landlord relationship. For instance, an *annual rent adjustment* adjusts the annual rent according to farm productivity and profit within a longer term lease. This option recognizes that crop yields and profits can be lower during the earlier years of a sustainable farming operation, giving a farmer time and financial support to establish sustainable practices.⁴⁰ *Crop sharing arrangements* are partnerships in which a proportion of the crop harvest is “paid” by the tenant farmer to the land owner as compensation for occupying and exploiting the rented land. This arrangement spreads the yield and price risk of food farming between the tenant and the landlord and can naturally lead both the landowner and the farmer to practice sound land management to increase yields and improve the productivity of the land. Alternatively, a landowner could charge lower rent in return for the implementation of sustainable practices, which establishes a shared interest in the long-term health of the land and demonstrates support for the farmer to pursue more sustainable practices like crop rotation.

39 “Land Leases: Share, Cash, and Flexible Arrangements in Changing Times,” Agricultural and Applied Economics Association (AAEA) Extension Section Webinar, May 16, 2012.

40 Ibid.

RECOMMENDATION 5:**Strengthen connections within the food system.**

The qualitative survey found that farmers seek stronger networks with others in the food system, from connections to other, more experienced farmers to relationships with distributors and consumers. Assessing current networks and fostering stronger connections would be an important economic development step in Lake County, since strengthening these links between stakeholders will create new business opportunities and encourage innovation. There are a number of programs and initiatives that could be pursued to encourage stronger connections within the Lake County food system.

- *Training programs for beginning farmers.* These could complement training initiatives at the College of Lake County and the Farm Business Development Center at Prairie Crossing.
- *Business recruitment for entrepreneurs.* The County could work to attract processing, distribution, and warehousing services to Lake County, which could strengthen connections between producers and consumers.
- *Product aggregation services.* A centralized food hub and storage facilities that would help Lake County farmers reach a wider consumer base throughout the food shed.
- *Small farm aggregation.* Encouraging small farming operations to cluster together can help them achieve synergies, share information, resources, and equipment, achieve economies of scale, and generally support the efforts of others.

RECOMMENDATION 6:**Expand accessory and temporary uses.**

Restrictions on the number, size, and type of structure(s) allowed to assist with agricultural activities can be a barrier for farmers on parcels smaller than five acres who want to extend the growing season or expand operations to a scale at which they can sell products for profit. A number of potential modifications could be made to county policies to allow for larger accessory structures for some parcels.

- Change the UDO standard for the size of the accessory structure from the current requirement (based on the floor area ratio [FAR] of the principal use structure) to a new size limit based on the accessory structure size as a percentage of the total lot size, as in Chicago, Illinois and Baltimore, Maryland (see Appendix B, Matrix I). As an example, the revised requirement could allow larger accessory structures (i.e., a greater percentage of the total lot size) on parcels that are larger than one acre in size.
- Increase the allowable size of an accessory structure on lots greater than one acre from the current standard of 1.5 times the FAR of the principal use structure to something larger such as 2.5 or 3 times the FAR of the principal use structure.
- Make exceptions to the UDO standard for season-extension structures that are explicitly used for food production.
- Create a new land use category for local food production operations on non-exempt parcels. The new use category would allow a broader range of accessory uses than on typical non-exempt parcels, so long as such operations register with the county as a “small farm.”
- Rezone non-exempt properties on a case-by-case basis, if the property owner wants to change the principal use on land from a non-agriculture zoning district to agriculture. The new agricultural zoning would allow greater flexibility in the number and size of the accessory uses allowed.

The County PBD and LCHD are open and responsive to temporary use requests, and it is recommended that the County continue to clarify which aspects of the temporary use permits are regulated by which department, such as with Food Service Permits. Overall, these two departments work well together to create a fairly straightforward permitting process, and they should continue to do so and improve their processes wherever possible.

The County should also continue to be responsive to the growing interest in local food production and sales, such as when the PBD expanded the number of temporary events allowed in Lake County annually. This flexibility is important for facilitating a viable local food system in Lake County, since direct-to-consumer sales are important to the growing movement. However, the county should consider increasing the length of a Temporary Use Permit for onsite seasonal sale of produce from six months to eight or nine months to allow for greater production and sales of local agricultural products.

Another way to further facilitate direct-to-consumer sales would be to allow farmers’ markets at churches, schools, and other institutional uses in commercial and industrial zones, as these civic entities are often more accessible to a wider group of consumers.

RECOMMENDATION 7:**Support the local food system through information and coordination.**

Relevant rules about allowable uses, accessory uses, temporary uses, and health and safety regulations should be summarized in a simple brochure format and readily disseminated to interested parties and local food system stakeholders. Educational materials, such as information packets or fact sheets, could be extremely helpful to people who are new to various sustainable local food system operations whether they are starting a farm, a cottage food operation, or a commercial kitchen.

Overall transparency between departments and with the public should remain a robust goal for Lake County. The LCHD and PBD should maintain their strong and transparent partnership as it relates to the permitting processes that affect local food preparation and sales. From the temporary permitting of food sales event to the review of food plans for commercial kitchens, these departments should continue their cooperative relationship, which aids a new farmer or processor navigating the regulatory process in Lake County. Additionally, these departments could examine their administrative processes in issuing permits to make sure that permitting is as efficient as possible.

As the primary regulators of the food system in Lake County, the LCHD and PBD could encourage cooperation and coordination across the local food system, assist stakeholders in meeting permitting and other regulatory requirements, and connect participants in the system to one another. For instance, the LCHD could facilitate sharing arrangements between restaurant operators and local food producers to allow the producers to access the restaurant's commercial kitchen space during non-business hours. These types of partnerships have positive outcomes for all parties involved, as local restaurants can potentially gain new income from sharing their commercial kitchen space, and farmers can utilize kitchen refrigeration, clean hot and cold running water, and food processing equipment at lower cost than purchasing and owning these resources themselves.

There may also be a role for Lake County Partners to become involved in connecting various parts of the local food system. It is recommended that Partners be invited to participate in the local food working group.

RECOMMENDATION 8:**Expand definitions and allowable uses to support local food activities.**

Lake County can improve clarity about permitted agricultural activities by establishing definitions in the UDO for new sustainable local food system activities, both to clarify the permitted agricultural uses on non-exempt agricultural land and to recognize the significance and economic opportunity of the emerging local food movement. Defining "local food" would enable the County to set economic targets for local food sales and establish support for local food production in the County. Another example is clarifying the term "debris" as it relates to sustainable agriculture. The byproducts of weeding and maintenance from community gardens or small farms in residential zones can often be construed as "waste," and therefore deemed an incompatible use in certain zones. By clarifying what is permitted and where in terms of the byproduct of agricultural practices, the County would be taking proactive steps to avoid problems with public nuisance in the future. CMAP offers an ordinance toolkit that is a resource for local governments that would like to strengthen their regulatory support for local food.⁴¹

Lake County can further establish its support for a local food system by amending the UDO to specifically permit the keeping of honeybees and hens in non-exempt residential zones. Regarding bee keeping, this amendment should designate the number of allowable bee hives according to lot size, the location and setback limitations for where hives can be located, and any relevant management practices that need to be specified. Regarding chicken keeping, this amendment should include parameters including the number of chickens allowed (for instance, between two and six hens, which is a common range permitted in other municipalities⁴²), building requirements for coops, setback limits from any residential structure, and other restrictions the County finds appropriate.

These regulatory modifications can be achieved by directly updating existing UDO language (in *Section 6: Use Regulations*) and by augmenting this section with specific limitations to these activities.

41 "Municipal Strategies to Support Local Food Systems," Chicago Metropolitan Agency for Planning, September 2012. <http://www.cmap.illinois.gov/documents/20583/2d991e68-a884-483b-947c-844b91ab418e>.

42 LaBadie, KT. "Residential Urban Chicken Keeping: An Examination of 25 Cities." University of New Mexico. May 2008.

RECOMMENDATION 9:**Enable composting for local food production.**

Under the goal of promoting a sustainable environment, the Lake County Strategic Plan outlines a strategy that encourages the implementation of long-term solutions for increasing waste diversion through composting.⁴³ To that end, this report recommends the facilitation of small-scale organic waste composting on non-exempt land to enhance sustainable agricultural practices and minimize agricultural landfill waste. This report recommends regulations that exempt small-scale compost operations (such as those found in residential backyards) from restrictions as long as they are well-managed, as with the City of Chicago composting ordinance. This could be transferrable to help control composting activity on small farms in Lake County, which often strive to manage and reuse agricultural byproducts.

RECOMMENDATION 10:**Ensure that processing regulations suit the local scale.**

The County Health Department should examine how federal and state health regulations impact the development of a local food system and advocate for the innovative application of those codes to best suit local agricultural practices in Lake County. For instance, federal and state regulations on dairy processing require the use of large equipment, which can be cost-prohibitive for smaller, localized processing operations. Local food advocates and the County should examine the likelihood of food-borne illness between food products produced in small versus large scale operations in order to determine proper scales of regulation, and advocate for a tiered regulatory system appropriate to the findings. The Illinois Honey Production Act is a good model to explore, since it limits the IDPH from regulating honey operations that produce or sell less than 500 gallons per year.⁴⁴

Other best practices exist for adapting regulations to fit local-scale processing. For instance, the 2011 USDA Cooperative Interstate Shipment Program allows state-inspected processing operations with 25 or fewer employees to distribute across state lines if they bear the USDA mark of inspection. Lake County should encourage local processors to participate in this program.

RECOMMENDATION 11:**Align water management goals with local food production activities.**

Stormwater regulations may act as a disincentive for the erection of permanent and temporary greenhouses, hoop houses, storage buildings, or other structures associated with food production. In order to encourage local food production on exempt and non-exempt land, the County should consider case-by-case exemption of certain temporary structures used for food production from WDO stormwater regulations. For instance, the County might conduct a site visit to determine the actual impact of proposed structures and adjust permit requirements accordingly. Permanent structures that meet the threshold for WDO permitting should continue to be required to meet ordinance requirements.

The County should also work with growers to implement conservation-based irrigation strategies, such as drip-irrigation, that will support the needs of local food production operations while meeting its water supply conservation and management goals. The County's support for the use of captured rainwater as an irrigation source is an example of current efforts. It is not recommended that water pricing strategies and community conservation plans be modified to create exceptions for local food operations. It is also not recommended that the county modify well setback requirements solely to accommodate local food operations, except as allowed as a variance sought through the County's normal application process.

43 Lake County Strategic Plan, Lake County Illinois, adopted September 2009.

44 Illinois Public Act 96-1028, approved in July 2010, amended the Sanitary Food Preparation Act to provide that: "If a producer is engaged in the sale of honey...and packs or sells less than 500 gallons of honey produced in this State per year, then the Department [of Public Health] may not regulate or inspect the producer's honey house."

RECOMMENDATION 12:
Support and participate in the Lake County Local Food Working Group.

At the outset of this project, it was anticipated that a formal food policy council would be formed as an outcome of the project to help maintain the momentum and to carry the project recommendations forward. At this time, the organizational, funding, and political support systems are not aligned to warrant the formation and adoption of a formal food policy organization in Lake County. However, based on the needs identified through this report, it is recommended that the project steering committee formed to guide this project continue to convene as an informal working group to address issues and barriers. Lake County should have a prominent role in the working group activities, and should provide support in the form of staff participation, assistance with funding requests, and involvement of elected officials in discussions. Members of the steering committee that have committed to continuing efforts to develop a more sustainable local food system in Lake County include CMAP, Conserve Lake County, Liberty Prairie Foundation, College of Lake County, and Openlands. At a September 2012 presentation by members of the steering committee to the Lake County Planning, Building and Zoning Committee, the Committee voiced its support for continued participation by the County in local food issues and the proposed working group.

Additional actions should be considered when forming this working group:

- Identify a local organization to take responsibility for leading and coordinating working group activities.
- Identify representatives from other sectors that should be included in the working group as members or ad hoc advisors, such as community and economic development practitioners (such as Lake County Partners), food distributors, local markets and restaurants, and institutions with large buying power.
- Investigate opportunities for technical, staff, or financial support for the group, such as the University of Illinois Extension, Lake County Farm Bureau, College of Lake County, or similar institutions.
- Starting with the recommendations in this report, identify priority issues to be addressed during the first year, as well as identifying what type of further research is needed to identify priorities and strategies, and how that research can be accomplished. The literature on this topic advises starting small and identifying “quick wins.”



The Learning Farm at Prairie Crossing.
 Source: Chicago Metropolitan Agency for Planning, 2012.



Hay farming at Casey Farms. Source: Conserve Lake County, 2013.



Tomato planting by Sandhill Organics Farm. Source: Conserve Lake County, 2013.



Droplets on a seedling growing in a greenhouse. Source: Liberty Prairie Foundation, 2013.



The farmers' market at Prairie Crossing. Source: Liberty Prairie Foundation, 2013.

4. Conclusion

Sustainable, local food production has been linked to improved local economic conditions, high levels of agricultural productivity, increased farm income, and an appropriate use of agricultural land where large scale commodity crop production is difficult or impossible. National, regional, and local trends indicate a shift in farming practices, consumer demand, and an opportunity for Lake County to capitalize on this growing economic sector. Market demand for food that is grown and processed here by our own neighbors generates and circulates money within our region and county rather than sending it elsewhere. By supporting and strengthening the sustainable local food system, Lake County is poised to tap into the economic potential of increased jobs, production, and economic activity.

This report offers recommendations to Lake County – as well as other local governments and entities – that address a number of barriers to strengthening the sustainable local food system. Generally, the County’s role can include the following:

- Encourage and facilitate better farmer access to right-sized land with the needed infrastructure for food production.
- Examine and consider modifying policies that might impede the growth of the local food system.
- Support the local food system by partnering with others to encourage workforce development and training, business incubation, and entrepreneurship within the food system.
- Actively participate in a county-level working group or forum of stakeholders to help coordinate and promote various efforts.

Many different entities should be involved with carrying these objectives forward in Lake County, from economic development interests to the conservation community. Ultimately, the collaboration of these various stakeholders will be necessary to strengthen the sustainable local food system in Lake County. As a regional and county priority, a stronger, more robust local food system holds much promise for improving the quality of life and diversifying our local economies.



A group of "crop mob" volunteers at a hoop house at Prairie Crossing. Source: Liberty Prairie Foundation, 2013.

List of Acronyms

CMAP	Chicago Metropolitan Agency for Planning
CSA	Community Supported Agriculture
FAR	Floor Area Ratio
FPCs	Food Policy Councils
IDPH	Illinois Department of Health
LCHD	Lake County Health Department
LFOs	Local Food Organizations
LTA	Local Technical Assistance
PBD	Planning, Building, and Development Department
SMC	Stormwater Management Commission
TIBs	Technical Information Bulletins
UDO	Unified Development Ordinance
USDA	U.S. Department of Agriculture
WDO	Watershed Development Ordinance



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Photo by David Johnson.



Photo courtesy of USDA.



The Chicago Metropolitan Agency for Planning (CMAP) is the region's official comprehensive planning organization. Its GO TO 2040 planning campaign is helping the region's seven counties and 284 communities to implement strategies that address transportation, housing, economic development, open space, the environment, and other quality of life issues.

See www.cmaphillinois.gov for more information.

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Photo by Jason Lindsay.

