

# LOCAL FOOD SYSTEMS

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## INTRODUCTION

As a whole, the food production and distribution system in the United States is remarkably efficient. However, in recent years, efficiency as a top value of the food system has received some strong competition from environmental sustainability, public health and small business development. Some perspectives about sources of food are changing. Health concerns related to food quality and supply (such as rising rates of obesity and diabetes), methods of production (such as concentrated animal feeding operations), pollution and environmental issues arising from farming methods (pollinator die-off, water quality, etc.), and the continued loss of farms and farmland have prompted many to explore alternative options.



Communities interested in supporting local food infrastructure can include this support in their comprehensive and other local government planning efforts. Efforts to do this have been termed “local food system development.” This term refers to food that is produced in an area, whether it is a town, city or region. Acknowledging that all types of agriculture have value, a community can encourage additional development of local food-focused efforts through their policies, ordinances, zoning and related planning and regulatory tools. This includes both large-scale, commercial agricultural enterprises as well as small farms producing for local markets, whether this is via community supported agriculture (CSA) models or farmers markets, etc.

This chapter provides a look at how to incorporate food systems, including access and supporting environments, into planning and development efforts at the local and regional levels. This section begins with some definitions, followed by a look at why people are interested and then how food systems and economic development are related. The second section provides some context on including food systems in planning as well as some of the challenges and benefits faced by communities when doing so. The third section provides examples and short cases on how some communities have done this. The chapter concludes by listing some resources to aid you and your community’s efforts to embed food systems into planning and development policies and approaches.

## WHAT IS A FOOD SYSTEM?

Food systems are basically all the elements that combine to provide people with food. It is unlikely that small, local food systems can replace existing large-scale commercial methods of growing and distribution, so that is not the question. Rather, it is how communities can ensure that local, fresh and affordable food infrastructure is provided to help improve access, quality and even livelihoods by including some focus on locally and regionally produced and distributed food. In other words, if a portion of food dollars spent in a community is used to help foster local food systems, it can positively influence a whole range of outcomes. A locally focused food system can impact health and economic circumstances at the level of individuals, families and even the whole community. One way it can do this is by encouraging more direct and healthier links between those who produce the food (farmers) and those who consume it (individuals, organizations or institutions).

One definition of a local food system is based on the flow of food, from production to consumption, within a defined area. It goes beyond considering just the food that is eaten and its impact on health as an end result to one that includes issues and dimensions of food production, processing, distribution and access. These food-related activities and purposes could be described as a food system, and “local” when placed in geographic context, whether at the community or regional level.

## WHY ARE PEOPLE INTERESTED?

In some ways, it is simple – by including food in planning and development efforts, communities can help ensure that members have access to quality, affordable and safe food supplies. Food is a critical component of both individual health and the overall health of communities, regions and counties. Supporting food systems can also provide support for small and mid-sized food-based enterprises and farms in the area. Another reason? Preserving land for growing food is an issue in many places as development pressures sometimes push out agricultural land uses. Having access to and preserving land resources makes sense on many levels, not the least of which is to help ensure access to fresh and local food supplies. Similarly, communities can incorporate zoning and policies, such



as ordinances to support a local food infrastructure. More attention has recently been placed on “urban agriculture,” for example. This is where growing food is part of the landscape of the built environment, from fruit and nut trees planted on public property to vertical gardens included on buildings and even green roof installations for beekeeping and growing food. And one only has to look as far as the debates around whether or not city and town dwellers can keep chickens and other barnyard animals in their backyards to see how passionate and interested many have become about local food.

## RELEVANCE FOR ECONOMIC DEVELOPMENT

Growing local livelihoods via food-based businesses and farms can be a way to encourage more economic resilience at the local level. If even a small portion of food consumed within any given community can be grown and supplied from the local area, economic development benefits will be realized. This might include expanded capacity in a community to both produce and process foods, or new ways to distribute, such as a regional food hub or local community supported agriculture (CSA) models. It could include new businesses generated from adding value to agriculture products, as is the case with several rural communities that have started food-based business incubator programs. These help farmer entrepreneurs generate marketable products for their own areas and beyond. It can include supporting larger agriculture production in the regional context, such as packers in Indiana that buy from numerous farms (such as Red Gold, for example). It might include programs to help provide training for youth to develop skills transferrable to the broader marketplace, such as cultivating or culinary work experiences.

There are opportunities within food systems to bridge the gaps between production and consumption in ways that help foster economic development for communities as well as broader community development outcomes, such as improved well-being. Economic development is basically a way to try to increase quality of life by increasing people’s income and creating wealth (whatever is said, income is still the most efficient indicator of individual health and well-being) and standards of living, through methods such as encouraging quality and quantity of employment opportunities and other economic outcomes (Phillips & Pitman, 2015). Food systems in particular represent a way to help spur enterprise in local and regional areas because they combine both elements of economic development (food cluster to promote specialty food businesses, for example) as well as community development (for example, community gardens, farm-to-school programs, etc.). Local food systems can help make a contribution to economies and well-being, leading to more durable, resilient communities. See information from the Indiana State Department of Agriculture provided in this guide for checklists on site selection and food processing considerations.

## BACKGROUND

There are several aspects to consider when linking food systems to comprehensive and related planning efforts. The first is how it is done, which is the topic of the following section. A few of the benefits as well as challenges of doing so are then considered.

## INCLUDING FOOD SYSTEMS IN LOCAL PLANNING

While not all communities include food systems in their comprehensive plans, it is increasingly becoming more common to partner long-term planning and policy initiatives with fostering healthy food environments and a strong food system infrastructure. One can see why – food systems could touch on just about every aspect of the typical elements in a comprehensive plan. Food



systems influence the economic and environmental health and well-being of communities, and are directly tied to other systems – energy, housing, land use, transportation and resources. Food systems are also tied to the waste stream and supporting infrastructure as well, with an estimated 25 percent of all food produced ending up in landfills and food overall as the largest component of waste. Beyond that, some estimates state that a quarter of the nation’s water ends up supporting food that ultimately ends up in landfills as waste. Persistent food insecurity for many U.S. residents must also be considered. Because local and regional governments manage resource allocation and determine who participates in decision-making for these systems, it is important that food systems be included. Further, infrastructure needs for larger

producers can be impacted by attention from local and regional governments to needs around transportation and water, for example. The issues discussed in this section can be readily addressed at the local and regional levels to create visible, immediately impactful results.

## BENEFITS

As noted, food systems have a role in many dimensions of community and regional planning and development. The benefits seem both inherent and explicit because supporting healthy food choices and accessibility creates positive outcomes for members of a community. In the Minnesota Food Charter’s Food Access Planning Guide, the benefits of including food systems in planning are noted as efforts that can,

*“...go a long way in reducing rates of preventable diseases, fostering community and economic development, and achieving equity for everyone. For example, many communities need to make specific improvements to ensure people have reliable access to affordable, healthy food, while also nurturing a robust infrastructure for the growing, aggregating, and processing of this food. Planners can assess existing food access disparities, shape the food environment of communities, and facilitate healthy eating.”*  
(Minnesota Food Charter, n.d.).

Prioritizing healthy food access in a community, and including it in comprehensive planning, along with policy to support this, can make a difference. Including goals such as local food retail and enabling urban agriculture uses can make a difference in a community. Other benefits of including food systems in comprehensive plans, zoning codes and other public policies such as design regulations include or can more significantly allow for the provision of:

- Affordable, safe and reliable transportation to food sources
- Support for small and mid-sized food and farm enterprises as well as farm-focused enterprise zones and commercial shared kitchens
- Zoning that supports a healthy food infrastructure such as proximity of food outlets to schools and residential areas
- Access to and preservation of land for food production

- Development of community food assets such as community gardens, pollinator-friendly habitats, food hubs and farmers markets (Minnesota Food Charter, n.d.).

There are other approaches that communities can support or include in their public policy beyond zoning regulations or comprehensive plans. They can be embedded within other local or regional regulations or plans, or may function separately. These can include designing a food charter, developing school food policies, collaborating with the civic and private sectors on joint initiatives for food-based business development or increasing cultural and social assets in the community. Community and regional health plans, created from local and regional healthcare providers and local health departments, are another potential point of intersection for food systems and planning. Supporting or establishing a food policy council is an effective way to start initiatives and build interest in a community or region. There are hundreds of food councils in the US now, and many are connected to government. The areas of focus for food councils typically are on supporting healthy food access and economic development. The Food Policy Network at Johns Hopkins University Center for a Livable Future provides resources and tools for those interested in supporting food councils in their areas (Food Policy Networks, 2018).

## CHALLENGES

As noted earlier, food systems need to be included in decision-making at the local and regional government levels; however, there are inherent challenges that might prevent integration. For one, it might be difficult to have local government buy-in to include plans, policies and regulations to support food systems, or they might not yet see the benefits of doing so. If included, existing policy and regulations might need to be strengthened in order to have any meaningful adoption or implementation.

## EXAMPLES

There are numerous examples of communities integrating food systems into local planning and development plans, policies and efforts. A few have been provided for gaining insight as well as inspiration for developing ideas feasible at the community level.

The following section includes examples of how communities have been able to overcome challenges and pursue opportunities to foster a healthier, stronger local food system.

## MODEL POLICIES AND ORDINANCES

There are many various local ordinances and regulatory tools to support healthy food systems, ranging from zoning ordinances to inclusion of food system elements in comprehensive plans at the local or regional level. From large cities to small towns and entire regions, there is now more inclusion of overlay districts and permitted uses for small farms in most zoning districts, community gardens, urban agriculture uses, green roof installations, use of vacant publicly owned lots for community gardening, allowance for sale of fresh foods grown on site in districts or areas zoned for agricultural uses and greenhouses, plant nurseries and related uses in most commercial and manufacturing districts.



Ordinances can vary, from extremes of declaring food sovereignty, such as the case with several communities in Maine (irrespective of state and federal food-related laws). You can view those examples at <https://www.localfoodrules.org/lfcsgo-templates/>. Another example is the healthy food zone ordinances in a small town in Texas that have received national attention. In the latter case, Hutto, Texas, with a population of 27,000, has designed a form-based Smart Code that incorporates many types of food production in five of its six zones. (View those ordinances at <https://www.huttotx.gov/DocumentCenter/View/111/SmartCode-PDF?bidId=>.) These types of food production include farms, vegetable gardens, urban farms, community gardens, vertical axis gardening, green roofs and agricultural plots; there is also code to support opportunities for composting and recycling solutions.

Since economic development is often the focus of interest in communities, some sample language regarding food systems and economic development has been included:

“We will pursue activities that both improve healthy food access and advance economic development.

- Review and refine ordinances to allow for new food, beverage and farm-related enterprises.
- Highlight a community or region’s food culture as a community branding strategy.
- Support agritourism efforts as a means of enhancing income streams for small farmers and producers.
- Purchase healthy foods from local food businesses when catering events, meetings and other gatherings.
- Review local ordinances to ensure that they don’t unduly restrict sidewalk and rooftop dining.
- Establish a Food Policy Council with a strong focus on improving the food economy.
- Partner with local education and training institutions to develop workforce skills and to promote workforce training.
- Partner with neighboring communities to pursue a regional food marketing strategy.
- Support the development of living-wage jobs so that community members can afford to purchase healthy food and support local businesses”  
(Minnesota Food Charter, n.d.).

For additional information related to economic development in Indiana, see the resources provided by the Indiana State Department of Agriculture. Some ordinances now are more issue oriented, such as the aforementioned model offered to communities with the intent of discouraging or disallowing fast food restaurants near schools to improve the nutritional quality and choice of foods provided to children. These types of changes in planning and development planning represent a significant departure from many existing regulations. In the past, agriculture activities may have been prohibited within city limits, for example, in the interest of protecting public health, and there might have been little restriction on where a restaurant could be located. Changes such as the discouragement or disallowing of fast food restaurants near schools is a different direction that some communities are taking when considering public health issues.



Another example is from Orange County, North Carolina where a district for agricultural uses was added to existing zoning regulations. You can learn more here. This example is provided by the Center for Environmental Farming Systems in North Carolina. They have quite a few resources and links to information sources that are very useful to local governments seeking information about including food systems in planning and development regulations. You can learn more at <https://cefs.ncsu.edu/>. Likewise, the American Planning Association provides an archive of information on local comprehensive and sustainability plans for incorporating food access via comprehensive planning, ordinances and supporting regulations and policies. There are many examples of planning practices at the local and regional levels for moving forward (Haines 2018; Hodgson 2012; Phillips & Wharton 2016). The International City/County Management Association in conjunction with Michigan State University’s Center for Regional Food Systems provides a report profiling four communities from small in size (less than 10,000 in population) to a larger regional area at the county level of over 350,000 in population – Catawba County, North Carolina; Decatur, Georgia; Topsham, Maine; and Washtenaw County, Michigan. These cases illustrate how food systems are included and supported by local and regional government efforts (Goddeeris et al., 2015). Incorporating food systems at all levels of communities, whether small, mid-sized, or large and regional seems a focus for many local and regional government efforts now more than ever.

## PURDUE EXTENSION PROGRAMS AND RESOURCES

Programming and Technical Assistance	Diversified Farming and Food Systems	Community Development
Food Production and Processing	Beginning Farmer Signature Program	Beginners Guide to Grant Writing
	Urban Agriculture Certificate	
	Safe Produce IN	
	Shared-Use Kitchen Development Toolkit	
Coordination	Community or Local Food Summit	
	Technical assistance for Food Hubs	
Markets	Farm to School Training for Action Committees	Enhancing the Value of Public Spaces
	Market Basket 360	
	Annual Farmers Market Forum	
Consumers	FoodLink	Enhancing the Value of Public Spaces for Health
	Market Basket 360	
Community	Local Foods Indiana Data	Community Leadership Development
	Support for Food Policy Councils online Professional Development Course	Facilitative Leadership
	Indiana Food Policy Council Network	
	Community Wellness Coordination through the SNAP Ed Program	

### PURDUE RESOURCES

The Purdue University Extension Local Food Program and Community Development programs provide a wealth of programmatic, technical assistance and facilitative skills critical for the implementation of planning and policy documents. Working from farm to plate, these programs offer education to re-localize the food system for many stakeholders, including beginning farmers, farmers markets, public school systems, food processors, food entrepreneurs and consumers. Visit [www.purdue.edu/dffs](http://www.purdue.edu/dffs) and [www.cdext.purdue.edu](http://www.cdext.purdue.edu) to learn more.

### REFERENCES

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