



FOOD SYSTEMS
PLANNER'S PORTFOLIO
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PLANNER'S PORTFOLIO FOOD SYSTEMS

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Planner's Portfolio Series

The Planner's Portfolio Series is an outreach effort developed by Delaware County Council in order to explore the planning concepts available for communities to take advantage of the unique opportunities across Delaware County.

The pattern on the cover page, and found throughout this series, represents the importance of each individual component in the larger network. The Planner's Portfolio Series explores several of these components and how they can support community character in Delaware County.

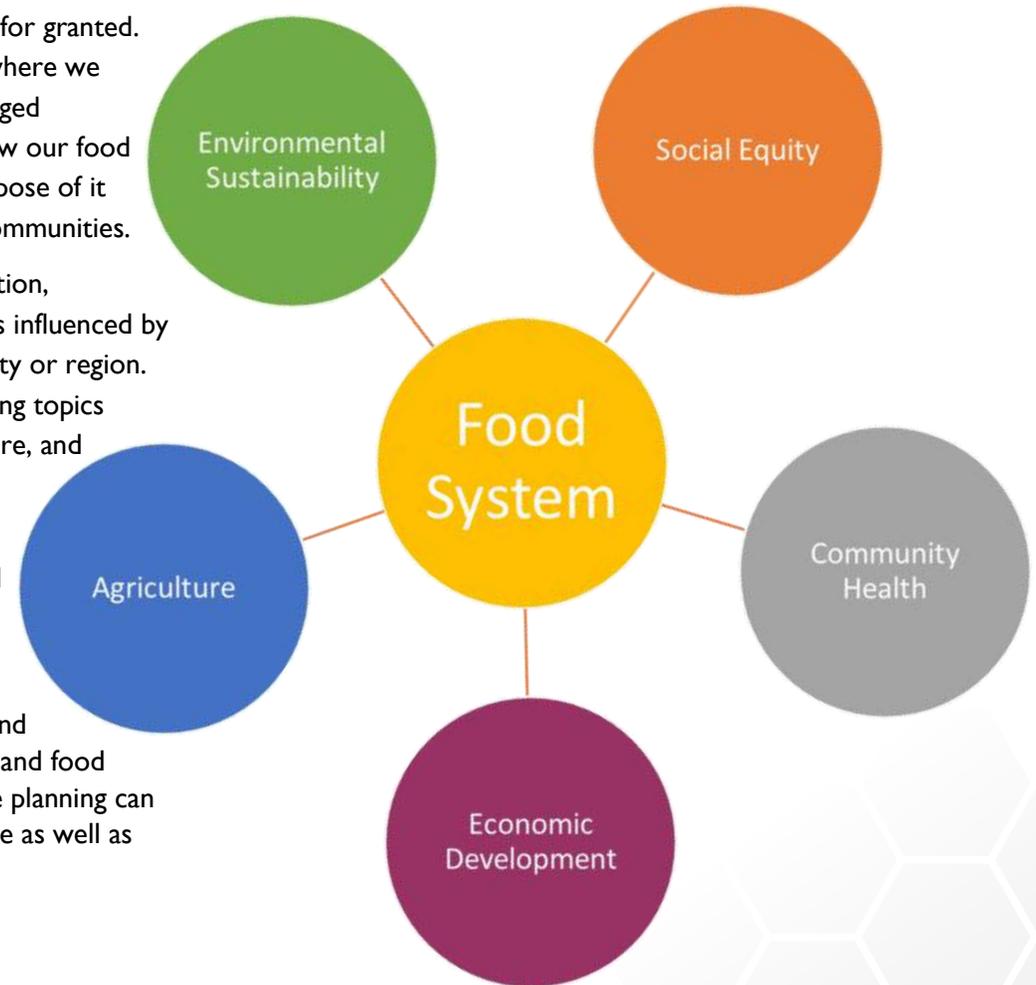
For more information, contact the Delaware County Planning Department at 610-891-5200 or visit www.co.delaware.pa.us/planning to see the complete Planner's Portfolio series.

OVERVIEW

Food is among the most basic of daily human needs, yet it often gets taken for granted. Planners have long focused on other aspects of daily life – where we live, where we work, how we get around – but a focus on issues related to food has emerged relatively recently. Food is indeed a significant part of the urban system; how our food is produced, where and how we purchase and consume it, and how we dispose of it can have significant economic, environmental, and health impacts on our communities.

A **food system** is an interdependent network that integrates food production, processing, distribution, consumption and disposal. It operates within and is influenced by the social, political, economic, and, environmental conditions of a community or region. Therefore, the food system has strong connections with many other planning topics including economic development, community health, social equity, agriculture, and environmental sustainability.

Due to its interconnected nature, it is difficult to separate the food system from other areas. **Food system planning** involves the integration of food system issues into policies, plans, and programming at all levels of government, but also involves buy-in from private businesses and the general public. More and more planners have engaged in encouraging a comprehensive food system planning process at the community, regional, and national levels. Concerns about food production, insecurity in food access, and food waste have led to the demand for a more sustainable food system. Effective planning can help to create a local food system that is sustainable, healthful, and equitable as well as efficient and profitable.



Sustainable Food Systems in Character Areas

This Planner's Portfolio focuses on a number of key issues related to food systems, in particular food production, food access, and food waste, and provides municipalities with tools and techniques for effective food system planning. The Character Areas of the County – Mature Neighborhoods, Growing Suburbs, Central Places, and Activity Corridors – have unique characteristics and face different challenges in the food system. Thus the Food System Planner's Portfolio examines issues and provides municipalities with planning techniques that are suitable for each Character Area.

FOOD PRODUCTION

Food production is the first and most important step in any food system. Whether on a large industrial farm or in a backyard garden, the location and manner in which food is produced can influence how it moves through the remainder of the food system. The closer food is produced to its final consumers, the less processing it is likely to need, and the less energy is required to distribute it to consumer markets. Sustainable and responsible regional food production can be supported by a number of policies and practices such as those related to farmland preservation, incentives for farmers, and allowances for agriculture and livestock in urban and suburban areas.

Although Delaware County is largely built out, it does retain 4,725 acres of agricultural land and a number of farms. However, development pressures and rising land values have continued to affect the remaining farmland. An increase in land values has made it more profitable for farmers to stop farming and sell their lands to developers.



Rose Tree Park Community Garden



Credit: Chicago Metropolitan Agency for Planning



Lancaster County (Credit: Rlevse)

Food production in Greater Philadelphia as a whole has become increasingly industrialized. In the last century, the increased practice of mechanized harvesting and government price support have encouraged an increase in size of farms for better economic efficiencies. During this time, the average size of farms in the region nearly tripled. As the farm sizes in other parts of Greater Philadelphia have increased, farmers have left Delaware County due to a lack of large tracts of remaining farmland. The focus in Delaware County is more on allowing small family farms to continue to operate rather than supporting or attracting large-scale agricultural practice. Another source of local food production is community gardens, as well as growing produce and raising small livestock in backyards. Although these are not large-scale food productions, they can allow access to local food in developed areas.



Red Hill Farm, Aston Township



Media Borough (Credit: Lori Imbesi)

PLANNING TOOLS FOR SUSTAINABLE FOOD PRODUCTION

- **Agricultural Zoning**
- **Transfer of Development Rights**
- **Urban Agricultural Ordinance**
- **Farming Subdivision**

FOOD ACCESS

Food access is all the issues related to connecting people to a variety of fresh, healthy, and quality food options. Access to healthy food may be hindered by a number of factors ranging from economic issues such as income to physical issues such as distance to food markets. In some areas, distribution of both healthier and less-healthy food options may be unequally concentrated in different neighborhoods.

Access to healthy and affordable foods in low-income urban and rural areas is an increasing problem throughout the Philadelphia region. In Delaware County, supermarkets and grocery stores have left low-income, urban neighborhoods and moved to Growing Suburbs with higher income levels. Areas with a lack of fresh food sources are known as “food deserts.” According to the USDA’s 2015 Feeding America “Map the Meal Gap” research, 13.2% of all people and 14.6% of children in Delaware County suffer from food insecurity, meaning that they do not have physical and economic access to enough sufficient and nutritious food for a healthy life. Lack of access to healthy food and the prevalence of fast-food restaurants and convenience stores concentrated in Central Places and Activity Corridors have led to the over-consumption of foods that contain high sugar and fat levels and under-consumption of whole and fresh foods, contributing to obesity, diabetes, and hypertension.



Dining Under the Stars, Media Borough



Lansdowne Farmer's Market



Media Farmer's Market



Fresh backyard produce (Credit: Suzanne Panossian)

PLANNING TOOLS FOR HEALTHY FOOD ACCESS

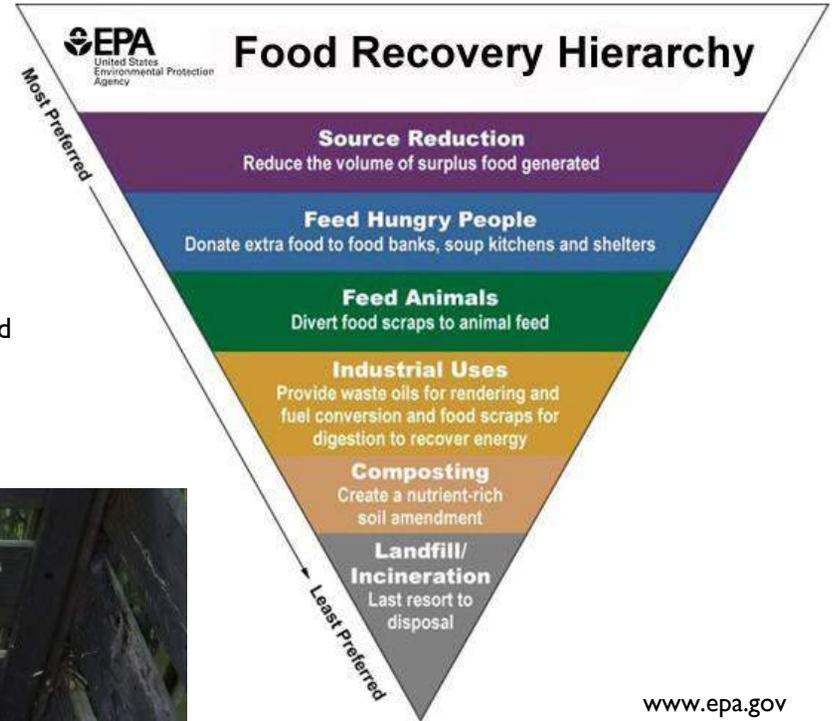
- **Zoning Regulations** for location and type of food outlets
- **Food Asset Mapping**

FOOD WASTE

Food waste is a pervasive problem in the food system. Approximately 40% of the food in the U.S. is wasted. This means that Americans are throwing out 133 pounds and \$161 billion worth of food every year. Ninety seven percent of food waste generated ends up in the landfill, producing a huge amount of methane emission. More importantly, this amount of food waste can potentially feed a large number of people suffering from hunger. Indeed, reducing food waste by 20% would provide enough food for 25 million people. Thus, it is critical to reduce the amount of wasted food as much as possible. Recycling or reusing food waste can decrease environmental impacts, save municipalities money through reduced landfill costs, and renew the food cycle.



Composting Food Waste (Credit: Ben_Kerckx)



www.epa.gov

PLANNING TOOLS FOR REDUCING FOOD WASTE

- Encouraging or facilitating **composting**



Compost (Credit: nonnack)

PLANNING TOOLS

SUSTAINABLE FOOD PRODUCTION

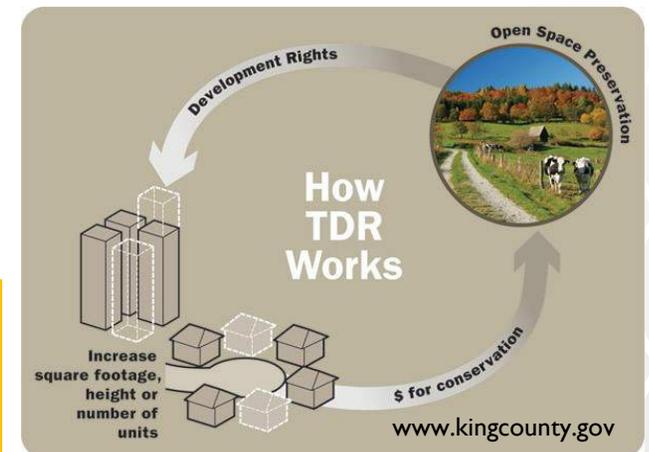
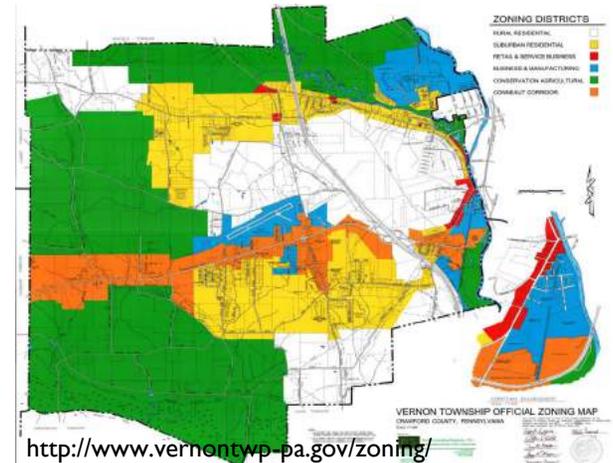
AGRICULTURAL ZONING is used by communities that seek to protect farmland and agricultural activities. The purpose of agriculture zoning is to conserve open land for farming, encourage systematic growth, and prevent land use conflicts. As municipalities develop, there are often conflicts between farming activities and non-farming activities. Agricultural zoning avoids these controversies by separating agricultural lands from non-agricultural land uses and preserves the agricultural industry by limiting both the density of development and the non-farm use of land.

- **Best in:** Growing Suburbs
- **Pros:** low cost; effective protection tool for large tracts of land and valuable agricultural soils
- **Cons:** not permanent, can be changed with ordinance; can sometimes reduce value of land

TRANSFER OF DEVELOPMENT RIGHTS allows landowners to sell development rights from their land to a developer. The developer will use this right to develop another location at a higher density. The land still belongs to the seller of development rights, but no further development is allowed. Transfer of Development Rights has two main elements:

1. Sending Parcel is the preservation zone from which development rights are transferred. The sending parcel can be agricultural land, open space, historic landmarks, or any other areas that the community desires to protect. After the development rights have been transferred, future development on that site is limited.
2. Receiving Parcel is the development zone to which development rights are transferred. The developer can build at a higher density than currently permitted in the zone. The receiving areas are also located close to existing utilities and development.

- **Best in:** Growing Suburbs
- **Pros:** permanently protects farmland; provides additional income to landowner
- **Cons:** often a complicated process – requires appropriate sending and receiving parcels, plus developer willing to purchase development rights



SUSTAINABLE FOOD PRODUCTION CONT.

An **URBAN AGRICULTURE ORDINANCE** establishes standards for growing food or raising small livestock in urban or suburban areas. Urban agriculture may take the form of backyard, balcony, or rooftop gardening; roadside agriculture; community gardens in unused lots and parks; and even keeping chickens, goats, or bees. Municipalities can consider allowing urban agriculture as a primary use, meaning more intensive cultivation of crops and livestock on a large lot within an urban area, or as an accessory use, meaning allowing the growing of plants or keeping of small animals on portions of already developed lots that are primarily used for another purpose.

- **Best in:** Mature Neighborhoods; Growing Suburbs
- **Pros:** can help improve food intake and food quality in areas with less access to fresh food; helps build community and serves as an educational tool
- **Cons:** can be an economically inefficient use of vacant property (vs. redevelopment); relatively small space for production; urban lots may have water access, soil and air quality issues; potential for noise and nuisance complaints from neighbors depending on the intensity of the operation



FARMING SUBDIVISION preserves a section of a traditional suburban development through a conservation easement, and the preserved land can be used to grow food for sale for residents. Some types of agriculture are more appropriate for farming subdivisions, such as production of vegetables, fruits, nuts, hay, corn, trees or grasses for biofuels, or even grazing animals. Organic or low pesticide input production methods can reduce concerns from neighboring residents.

- **Best in:** Growing Suburbs
- **Pros:** provides fresh food; can be an incentive to developers and residents
- **Cons:** relatively small areas for production; potential for noise and nuisance complaints from neighbors depending on the intensity of the operation

HEALTHY FOOD ACCESS:

ZONING REGULATIONS can permit or allow different types of food outlets which influence people's access to healthy, affordable food. Zoning regulations can reduce the growth in fast food outlets, make more room for healthier food options, and ameliorate health problems in the communities where the issues are most severe. Through food access zoning, municipalities can:

- Allow or encourage the development of supermarkets and grocery stores that sell nutritious and affordable foods;
- Allow farmers' markets and community gardens;
- Prohibit or restrict the location, concentration, and number of unhealthy food outlets; or
- Regulate distance between fast-food outlets and other places including schools, public recreational areas, hospitals, etc.

- **Best in:** Central Places, Activity Corridors, Mature Neighborhoods
- **Pros:** zoning is a familiar tool to municipalities; can be tailored to an individual area's needs
- **Cons:** cost and difficulty may hinder adoption

FOOD ASSET MAPPING is an assessment that identifies and maps a community's food needs, as well as the social, physical, and natural resources that contribute to the food system. Food asset mapping also allows municipalities to examine the level of food security and the presence of any food deserts in the community. Food asset maps provide information on stakeholders related to the planning of the food system and resources needed to transform the food system. Items that can be mapped include resources, locations of supermarkets and grocery stores, locally-grown farms (including urban farms and community gardens), farmers' markets, food assistance programs, and community food partner organizations. Municipalities can create a walkability standard in conjunction with a food asset map. For example, the City of Philadelphia aims at "bringing 75% of Philadelphians within a 10 minute walk of healthy food." Along with the walkability standard, food asset mapping is a useful tool to improve healthy food access in Delaware County.

- **Best in:** All Areas (Countywide)
- **Pros:** promotes conversations among municipalities, planners, and other significant actors in the food system
- **Cons:** on-going project that any changes must be measured and mapped

REDUCING FOOD WASTE:

COMPOSTING is a great way to significantly reduce food waste. Food composting is a process that uses the decomposition of organic matter to turn food waste into usable soil and replace commercial fertilizers. Food waste such as vegetables, fruits, coffee grounds, tea bags, grains, egg shells, and old spices can be composted. The best way to store food waste is in a composting bin. Municipalities can support composting programs in various ways including:

- Distributing composting bins to residents;
- Offering composting classes to encourage incentives for food waste reduction;
- Creating composting sites and compost holding units for households, community gardens, and urban farms through zoning; and
- Establishing composting regulations including setbacks, maximum height, size restriction, fencing, water, and drainage.

- **Best in:** All Areas (Countywide)
- **Pros:** reduces the volume of waste disposal, enriches the soil, and decreases disposal cost, wastewater treatment cost, and energy use
- **Cons:** space requirements; maintenance; expense of municipal curbside operations



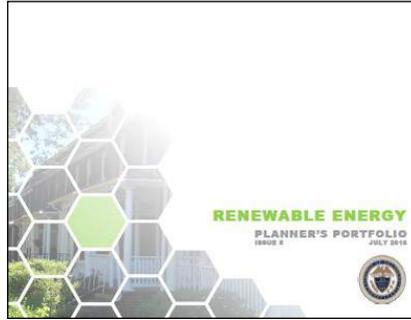
Scott Arboretum Community Garden

OTHER PLANNER'S PORTFOLIOS:



CHARACTER AREAS

March 2016



RENEWABLE ENERGY

July 2016



DOWNTOWN CASE STUDIES

October 2016



Court House and Government Center
201 West Front Street
Media, Pennsylvania 19063

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