FOOD SYSTEM PLANNING

18

MUNICIPAL IMPLEMENTATION TOOL #18

APRIL 2010

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

What is a Food System?

The food system is all the interconnected activities that get food from the farm to the plate, including growing, processing, preparing, buying and disposing of food. Greater Philadelphia is made up of many community or local food systems, is served by a regional food system, and fits within a global food system.

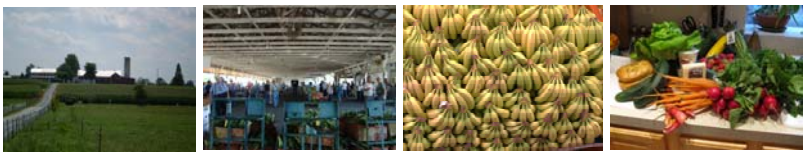
There are many reasons and benefits for governments to address food system issues, including:

- Food system activities make up a large percentage of land use in certain communities and create economic value through growing, distributing, processing, repackaging, retailing, preparing, and warehousing food and agriculture products;

- Access to affordable, safe, fresh, and healthy food is a benefit to residents and communities. There is a direct connection between access to healthy food and rates of diet-related diseases, such as diabetes, heart disease, and obesity; and

- Integrating sustainable food production into communities builds livable communities, strengthens the local economy, and reduces waste, soil erosion, the use of nonrenewable energy, and pollution of water from runoff.

By partnering with residents, private businesses, and other not-for-profit organizations to build stronger local and regional food systems, local governments can better prepare communities for climate and energy uncertainties, improve public health and environmental quality, and catalyze economic development.



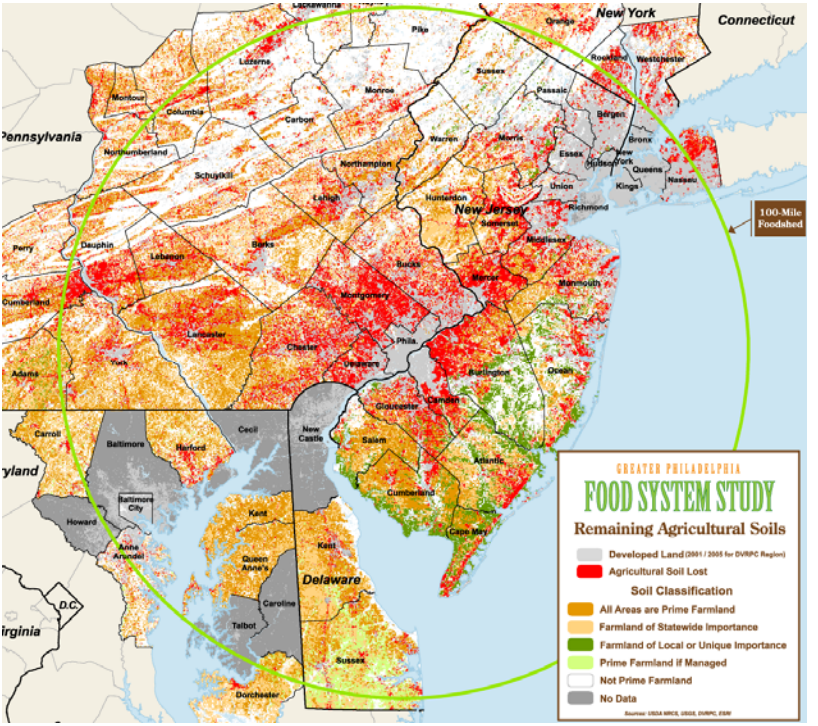
(L to R): Farm in Lancaster County; Leola produce auction; Imported bananas; CSA share.

Source: DVRPC, DVRPC, Jim Auchinleck, Becky Sweeger

Greater Philadelphia's Food System

DVRPC recently examined Greater Philadelphia's Food System to better prepare and envision a sustainable future. The Greater Philadelphia Food System Study assessed the social, economic, natural, and distribution resources within a 100-mile radius of Philadelphia. Moving forward, food planning efforts at local, regional, and national levels can build on the region's assets and address the challenges that emerged from this assessment, such as the fact that:

- The region has a significant amount of productive farmland but is threatened by extreme development pressures;
- There is more highly-processed food available in the marketplace at the same time as diet-related diseases, such as obesity and diabetes, are on the rise; and
- More organizations, agencies, businesses, and individuals are appreciating the connections between local farmers, healthy food, and healthy communities.



This map shows (in red) the agricultural lands lost in the last 20 years in the 100-mile foodshed explored in DVRPC's Greater Philadelphia Food System Study.

Source: DVRPC

What is Food System Planning?

Food system planning is the integration of food system issues into policies, plans, and programming at all levels of government work. It has recently become a recognized expertise within the planning profession and a growing network of planners and their partners are engaged in strengthening the community, regional, and national food systems.

As the metropolitan planning organization for the nine-county region, the Delaware Valley Regional Planning Commission (DVRPC) became interested in the food system when it became apparent how food affects and is affected by many issues central to the Commission's work, including land use, transportation, economic development, and the environment.

Values identified by DVRPC's food system Stakeholder Committee as part of a vision-setting process (9/29/2009).

Source: DVRPC

Food system planning can include the following actions:

- Building partnerships and consensus
- Visioning and goal-setting
- Assessments
- Plan-making
- Creating standards and guidelines
- Regulating and codifying
- Marketing, outreach, and education
- Supporting catalytic pilot or demonstration projects
- Targeting public investments

Source: American Planning Association

Considerations for Governments

This brochure is specifically meant for local governments. Before beginning food system planning initiatives, local governments should keep the following in mind:

Do your homework

Before undertaking local food system initiatives or plans, local governments should first identify what information already exists and is missing about the local food system. Questions to ask may include: Is your community already engaged in food system issues? Who are the partners and organizations that are doing related studies or programs in the community? With whom can local governments partner? Partners and stakeholders may include farmers, landowners, school districts, county health departments, local or independent retailers, academic institutions, hospitals, Community Supported Agriculture (CSA) programs, non-profits, and neighborhood or business associations.

Strategy, strategy, strategy

Because this is a world of limited resources, local governments should ask themselves what particular tools, resources, and responsibilities they have as governmental entities that can improve the local or regional food system. Such tools can include council resolutions, land use plans, and zoning ordinances, among others. Be clear and aware of underlying goals. Is the community interested in healthy food access, supporting family farmers, or improving the local business district? What should be a priority, given available time, money, data, and public interest?

Responsibility and results

Be clear about how local food system initiatives will happen. Are there particular departments or individuals that will take the lead on certain components? Are there ways to ensure that food system issues are integrated where appropriate and not isolated to one program or policy? How will you measure success?

Tools

This guide provides local governments with the tools and resources to conduct local food system planning. There is no "one size fits all" to any approach, as each community is unique. Communities should reflect on their distinct challenges and opportunities and learn from other places.

DVRPC scanned food system planning efforts across the country, and identified a few common goals:

- Inform decision-making processes by compiling data, researching alternatives, assessing impact, and educating stakeholders;
- Encourage sustainable food production through plans, policies, and programming;
- Improve healthy food access through zoning, education, and incentives for retail operators;
- Support a local or regional food economy; and
- Reduce or reuse food waste.

The following chart provides example policies and programs organized by goal but many local policies or programs address more than one goal at a time. It should also be noted that many of these strategies would work in any type of community.

Local peaches ready for distribution to institutional and food service buyers. Source: DVRPC

(1) Inform Decision-Making Processes
Conduct needs assessments (e.g., community food, public health, food asset mapping)
Conduct a land Inventory for food production
Conduct or analyze an existing Cost of Community Services Study (COCS)
(2) Encourage Sustainable Food Production
Integrate zoning and comprehensive planning for sustainably grown and produced food
Create or promote residential livestock (chickens, goats, bees) ordinances
Encourage small-scale farming on lawns, roofs, municipal property
Create or promote right-to-farm legislation
Create or strengthen agricultural zoning
Preserve land for farming (through easements and outright purchases)
Provide incentives for food production on preserved land
Explore farming subdivisions
Explore zoning for farm labor housing
Explore design guidelines for food production
(3) Improve Healthy Food Access
Limit the addition of new unhealthy food or formula restaurants
Provide incentives for the development of healthy food retail in underserved communities (via supermarkets, food co-ops, CSAs, gardens, farmers' markets)
Create dietary guidelines for publicly procured food or menu-labeling legislation
Connect healthy food outlets with federal programs such as Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps) and the Farmers' Market Nutrition Program
Create or promote a walkability standard for healthy food access
Provide information on emergency food programs in 311 or other government information programs
(4) Support Local Food Economy
Explore local food procurement policies for governments, institutions, and schools
Create standards for siting farmers' markets, small retail markets, distribution and processing facilities, grain and other storage structures, and secondary businesses (vet hospitals)
Assess zoning, signage standards, and setback requirements for on-site farmstands and direct marketing outlets (farmers' markets, community supported agriculture pick-up sites, etc.)
Create, partner with or promote Buy Local marketing programs
Create new or partner with existing farm-to-school programs
(5) Minimize or Reuse Food Waste
Assess opportunities for zoning for composting on urban garden sites
Distribute community kits to encourage backyard composting

(1) Inform decision-making processes

Government officials and planners regularly collect data and information and find effective ways to share it with citizens and decision-makers. Conducting a needs assessment that compiles information on food access, food production, diet-related health trends, and other information will illustrate the current state of the food system as well as identify opportunities for improvements.

Food asset-mapping is one specific type of assessment that articulates community needs and identifies the vital social, physical, or natural resources of a particular geographic area and their connections to a local or regional food system. Items that can be spatially and conceptually mapped include incidences of food insecurity and locations of grocery stores, community gardens, food assistance programs, and community food partner organizations. Food asset maps can inform policies about siting farmers' markets and other retail outlets such as small retail stores and buying clubs. Maps also identify areas where financial assistance and economic development tools can be introduced to meet identified needs, create market demands, or raise consumer awareness.

Food asset-mapping can be an independent effort or incorporated into a larger **Community Food Assessment** process. Community Food Assessments are focused on collaboration and participation by a broad range of stakeholders looking at a cross-section of issues, including food access, food availability, land requirements and agricultural production trends. They are meant to result in a successful framework for action just as much as they produce hard data.

A Cost of Community Services (COCS) Study takes an in-depth look at the fiscal impacts of different land use decisions for local governments to inform zoning and land use decisions. COCS studies calculate the fiscal contribution of productive land uses such as privately owned farms, forests, and open space, while calculating the costs and benefits if that land were to be developed for a particular use, such as residential or commercial use. The American Farmland Trust has conducted more than 100 studies to date and local organizations such as the Brandywine Conservancy, the Heritage Conservancy, and the Montgomery County Lands Trust have conducted many studies and produced local guides for the DVRPC region.

Land inventories identify land currently and potentially used for food production, urban agriculture, and community gardens. An inventory can identify land that is publicly or privately held and is usually combined with an analysis of barriers and opportunities for transitioning vacant or underused land into cultivated spaces. Deliverables commonly include databases, sets of maps, recommendations outlining collaboration with public, private, and non-profit partners, and policies for land access and lease agreements. Land inventories have often been completed through collaborations with local universities or non-profit groups. Land trusts can be particularly effective partners in land inventorying in more rural communities, as they often are already conducting many of these activities.

Trenton Community Food Assessment

In 2005, New Jersey-based non-profit Isles Inc. partnered with the Rutgers Community Development Studio to create the Trenton Community Food Assessment. To learn about food delivery, eating and shopping habits, and the extent of hunger, the studio interviewed food purveyors, conducted focus groups with residents, created food diaries with local school students, made price comparisons at food stores and analyzed data. The findings reveal complicated realities. There are few healthy food options in low-income neighborhoods and many people do not know how to cook, but prefer to eat meals prepared at corner stores because of the opportunity to socialize. Recommendations include linking curriculum with healthy food, forming a CSA program in lower-income neighborhoods, and building on Isles, Inc.'s success with community gardens.

Community Garden

Source: Marisa McClellan

(2) Encourage sustainable agriculture production

Local governments can remove barriers to and create incentives for producing food in more sustainable ways. **Comprehensive plans and zoning ordinances** are two direct ways to affect land use and encourage more local food production. County or local comprehensive plans set the long-term vision and priorities of a community and demonstrate a governmental body's commitment to working on food system issues.

Sample Language from Comprehensive Plans:

"The County should develop incentives that support local food production and processing to reduce energy use, increase food security and provide a healthy local food supply."
King County (Washington) Comprehensive Plan 2008

"Promote environmentally and economically sustainable agriculture through which the industry of farming is protected, agricultural soils are conserved, and agriculture is maintained as an economically viable land use."
Landscapes2 Chester County (Pennsylvania) Comprehensive Policy Plan 2009

"Establish Baltimore as a leader in sustainable, local food systems. Increase the percentage of land under cultivation for agricultural purposes."
Baltimore Sustainable Plan

Agricultural zoning and farm labor housing are two tools that underlie and support larger-scale sustainable food production in rural areas. **Agricultural zoning** stabilizes the land base and encourages agriculture as the preferred use for land. Some land use experts suggest agricultural zoning that establishes a density of one dwelling unit per 20 acres (with practices ranging from 10-25 acres). Density restrictions should consider exceptions such as on-site retail and secondary businesses, e.g., the woodworking shops in the Plain Sect community. Restrictions can be more effective if there is a larger-scale Transfer of Development Rights (TDR) program that directs the growth from agriculturally zoned areas to already developed or developing communities that are open to more development.

In the interest of supplementing agricultural zoning, **right-to-farm provisions** establish support for farming and create standards to ease tensions between farmers and non-farming neighbors. Taking the form of Agricultural Security Areas and ACRE in PA and Right to Farm or "Country Codes" in NJ, right-to-farm provisions allow farmers consistent with good management practices to be protected from nuisance complaints for issues such as farm odor, noise, and traffic.

A related tool is **zoning for farm labor housing**. Farm labor is important for larger-scale operations and zoning for farm labor housing ensures conditions are safe, fair, and consistent. Ordinances and plans should make clear the minimum standards for the application and development of farm labor housing and the districts in which it is a designated use. Common considerations include a management entity, housing duration (temporary, seasonal, permanent), water needs, sewage disposal, location, and erosion and drainage controls.

The Burlington County Community Agriculture Center. Source: Burlington County Farmland Preservation Program

Burlington County, New Jersey, with American Farmland Trust, has created a collection of **model ordinances** that municipalities can use for right- to-farm, creating agricultural advisory councils, farm labor housing, and on-farm direct marketing.

In the interest of preserving a farming culture and an agricultural industry in transitioning communities, some local governments are **providing incentives for food production on preserved land** The Burlington County Community Agriculture Center is one example**.** The Center promotes "public awareness of and appreciation for local agriculture." The county owns and preserved a 65-acre former dairy farm to host a farmers' market and a CSA program along with space for community events, festivals, and workshops by community partners. There are also on-site demonstration projects for rainwater conservation.

Farming subdivisions are another strategy for preserving farmland *and* farming, although their success is debated. These developments preserve a section of the property through a conservation easement, which can then be used to grow food for sale to new and existing residents. Not all farming is appropriate for farming subdivisions but operations often involve grazing animals, organic or low-pesticide input, and direct marketing. However, critics argue that they facilitate leapfrog residential development and further the loss of farmland.

Recently, more local governments in both urban and suburban areas are considering the adoption of food-producing **livestock ordinances**, increasingly called "honey and egg" ordinances. These regulations outline the approval process and site requirements for keeping urban livestock. Some cities have allowed both owner-occupied residences and apartment-dwellers to raise chickens and bees, with common restrictions on the number (e.g. "four hens, no rooster") in order to address neighbor concerns.

In more urban areas, sustainable food production can be incentivized on a variety of spaces -- vacant or municipally owned land, public parks, rooftops, backyards, and window boxes. **Urban agriculture zoning** ordinances establish standards for these efforts, including signage, parking and walkways, public space, fencing, height requirements, and structures, such as greenhouses, hoophouses, farmstands, and composting bins. Agriculture ordinances also consider the extent to which practices such as the spreading of manure, the use of tractors, or the application of chemicals are allowed by right or on a conditional basis.

Madison, Wisconsin is one of several cities actively engaged in revising zoning codes to allow food production. Still in draft form, Madison's agriculture ordinance specifies dimensional standards and permitted and conditional uses. The **Agricultural District** adapts an existing district to support both food production and public health in areas of the city that already have agricultural uses but are currently threatened by urban development. The **Urban Agricultural District** is a new district that permits community gardens and urban farms while ensuring compatibility with neighboring uses. It requires the submittal of a management plan as part of the site plan review process, if activities include intensive agricultural operations such as food processing or animal husbandry.

Farming Subdivisions in Cities

Communities can creatively combine residential development with sustainable food production through farming subdivisions. For example, Troy Gardens is a 31-acre **Planned Unit Development** within Madison, Wisconsin city limits that combines agriculture, open space, and 30 units of affordable and market-rate housing. There are woodlands, community gardens, and a community-supported farm. A non-profit called Community GroundWorks at Troy Gardens manages the food production and provides programming to residents.

Troy Gardens is a new urban development in Madison, Wisconsin that incorporates community gardens and urban farming with affordable housing.

Source: City Farmer

www.cityfarmer.info

(3) Improve healthy food access

Local governments can inadvertently decrease healthy food access in a variety of ways. Zoning regulations or permitting requirements can unintentionally restrict farmers' markets, community gardens, produce trucks, or supermarkets, and facilitate disproportional numbers of fast food restaurants, which often do not have as many healthy options. To address this, governments can strengthen zoning restrictions on the number or concentration of unhealthy food outlets. **Zoning regulations that prohibit the development of new fast food outlets** can specify if the prohibition is only within a particular area, such as neighborhoods with disproportionately high numbers of existing fast food restaurants, or a minimum distance from facilities that serve children, such as schools. Note that these restrictions require due diligence by the municipality to assess the current landscape of fast food, whether a restrictive ordinance would be beneficial, and the appropriate buffer distance. The Model Healthy Food Zone Ordinance, available at www.nplan.org, gives examples and sample language for areas around schools.

Zoning restrictions on unhealthy food options are best combined with **incentives for healthy food alternatives**. Strategies to increase healthy food retail can focus on the creation of new food retail outlets, the improvement of healthy food options within existing food retail outlets, and the creation of alternative food outlets such as farmers' markets or community gardens. For example, Milwaukee, Wisconsin has established a leasing process for community gardens that utilizes a non-profit intermediary and outlines terms of use and short-term tenure. For farmers' markets, general zoning ordinances can determine if farmers' markets and street vending of food is a permitted or conditional use in particular districts, and further delineate where vending can take place, when exemptions can occur, if there is a cap on the total number of vendors, the vending area, and which entity is managing authorization and compliance.

In addition to zoning and other regulations, governments can create standards for healthy food access such as a **walkability standard**. For example, the City of Philadelphia's Greenworks plan sets a target of "Bringing 75% of Philadelphians within a 10 minute walk of healthy food." While such a standard is useful as a planning tool, it requires accurate and comprehensive data on food outlets and demographics as well as sophisticated mapping and analysis resources. Thus, the creation of a walkability standard is more effective if it is done in conjunction with a food asset mapping process.

Other actions outside of planning and zoning include the **enforcement of dietary guidelines** for food services provided by public institutions and the creation of **menu-labeling laws**. These laws require restaurants and other eateries to provide nutritional information on the menu so consumers are more aware of the health consequences of food choices. Methods such as standards, dietary guidelines, and menu-labeling can be relatively cost-effective interventions with potentially high returns.

Local governments can also leverage state and federal food assistance programs to merge **food access with healthy food options**. The U.S. Department of Agriculture has prioritized and made funding available for Electronic Benefits Transfer (EBT) technology at farmers markets. Similar to debit cards, EBT technology allows people to use their Supplemental Nutrition Access Program (SNAP, formerly food stamp) benefits to purchase food from local farmers. Some governments are also trying to stretch SNAP dollars further. The New York City Health Department runs a Health Bucks program in which people using SNAP at farmers' markets will receive an extra $2 for every $5 they purchase. Finally, the Farmers' Market Nutrition Program vouchers are a similar source of support in buying local food for seniors and participants in the Women, Infants and Children program (WIC).

Underlying any effort to increase healthy food retail is an initial analysis of communities that suffer from a lack of fresh food retail outlets and a higher prevalence of diet-related diseases. It is also recommended that there be an initial assessment of stakeholders and an understanding of the business development process and the food retail industry.

The Pennsylvania Fresh Food Financing Initiative is a successful program begun in Philadelphia and operating state-wide, with funding from the Commonwealth of Pennsylvania to support the development of supermarkets and other fresh food outlets in previously underserved communities. The program provides technical assistance and gap financing to retailers. New Jersey has started a similar program and New York City recently passed legislation authorizing the Food Retail Expansion to Support Health (FRESH) initiative. The federal government has also just announced plans for a National Fresh Food Financing Initiative. More information is available at www.thefoodtrust.org.

Incentives for Healthy Food Retail

The lack of fresh food in underserved communities has demonstrated connections with diet-related diseases and diminished economic opportunities.

Common barriers to healthy food retail

- Lack of viable sites
- Cost of land and development
- Lengthy approval process
- Negative perceptions of neighborhood or community
- Lack of political will
- Perceived lack of spending power or market share
- Inadequate funding to cover higher development and operating capital

Strategies to improve healthy food retail

- Expedited, streamlined development approval process
- Zoning Incentives such as increased floor-area ratio
- Tax benefits, such as real estate tax abatements or sales tax exemptions
- Site assembly for development or reduced price for land
- Gap financing, often provided by revolving loan fund
- Conditional use zoning ordinance requiring a certain percentage of healthy food before approval granted to supermarket developments

Source: *Getting to Grocery* by Public Health Law and Policy

Owner and shopper at a new supermarket supported through the Pennsylvania Fresh Food Financing Initiative. Source: The Food Trust

(4) Support the local food economy

Food is not only a source of nutrients and calories but can also be a significant component of an economic development strategy. Food and farming businesses employ residents and produce valuable goods. Local governments can positively impact the local food economy by recognizing that food and farming are components of economic development, and removing barriers to successful food businesses.

Many local governments have active land preservation programs, usually funded by voter-approved dedicated taxes or bonds. Viable farmers are just as critical as preserved farmland when defining a successful preservation program. Governments can link their economic development and farmland preservation resources in order to ensure that farmers receive support in financing, business planning, site assembly, marketing, and transition planning. The combination of preservation and economic development is often called a **farm viability program**. Programs often exist formally at a state level, and sometimes at a county level, but the concept can also be applied by municipal governments.

Farmers benefit from the ability to operate on-site farmstands, markets, and stores and small-scale value-added processing. Particularly in more rural areas, local governments could create **on-farm direct marketing ordinances**. These ordinances allow and determine appropriate setbacks, accessory use structures, and signage. Often, it gives farms the opportunity to sell more of their product and increases residents' access to and awareness of fresh, locally - grown food.

Appropriate siting of, and long-term access to, off-farm food retail locations is just as important as preserving farming and on-farm retail opportunities. Not all farmers' market locations need to be permanent or housed in a structure, but all farmers' markets should be appropriately sited - as should CSA and buying club pick-up locations. Managers and organizers of these programs could benefit from local government assistance in gaining access to sites that have appropriate lighting, parking, transit access, restroom facilities, and foot traffic and are coordinated with health regulations. Some governmental entities have also reduced or waived permitting fees for farmers' markets and food vendors.

Some local governments may be able to establish a **procurement policy preference for local food businesses**, including farmers, processors, and local food distributors. These purchases have a multiplier effect –- more money circulating within the local economy creating local jobs. Examples of governmental institutions include public school districts, community colleges, and even prisons. While rewriting procurement policies can be daunting, local governments can also take the initiative to sponsor farmers' markets and CSA pick-up sites, buy local food on an ad hoc basis for special events, and make public land available for community gardens and urban farms.

Example Language from Woodbury County, Iowa Local Food Purchase Policy for Rural Economic Revitalization

"Woodbury County shall purchase, by or through its food service contractor, locally produced organic food when a department of Woodbury County serves food in the usual course of business. The Woodbury County Jail, Work Release Center, and Juvenile Detention facilities are presently serving food in their usual course of business. The contractor may cover for unavailable local organic supply through its current procurement practices with preference to be given to local non-organic food products. An arbitration board shall be established to assure fair value to Woodbury County. A single-point-of-contact broker, located in Woodbury County, shall interact with a food service contractor, for availability, price, quality, presentation, and delivery terms of all locally produced organic food. The current food service contract shall be modified to carry out the intent of this policy."

www.woodbury-ia.com/departments/EconomicDevelopment/WC%20LFPP%20v3.pdf

Governments may also partner with the local school district or higher education to start **farm-to-school programs**, which can include nutrition education, food-focused curriculum, local food snack bars, on-farm visits, and school gardens.

There can also be **zoning and regulatory incentives for commercial and community kitchens**. For example, the New York City Economic Development Corporation is providing a city-owned marketplace for a kitchen incubator project. The space will be managed by a private company, solicited through a Request for Proposal process and used by emerging food entrepreneurs. In less urbanized areas, fire halls, religious facilities, and vocational high schools are some spaces that may be encouraged to make kitchen facilities available to food entrepreneurs.

Lancaster County (PA) runs the "Edible Ventures Kitchen," a certified kitchen space for food entrepreneurs to use housed in the Career and Technology Center's Mt. Joy campus. Users can include new food entrepreneurs, producers wanting to do value-added processing and caterers, restaurants, and community groups. Self-operating a community kitchen, rather than incentivizing and supporting their use in other facilities, does require staffing support to make it effective.

Communities can also participate in marketing programs such as **Buy Fresh, Buy Local** that advertise the location of farmers' markets, agritourism opportunities, community gardens, and restaurants that buy from local farmers. Buy Fresh, Buy Local is a national program that provides adaptable and appealing marketing materials to local chapters, similar to a franchise. More information about Buy Fresh, Buy Local is available at www.foodroutes.org. If a local chapter already exists, there may be an opportunity to partner and increase promotional efforts.

Chester County (PA)'s "Feedability" Guide connects consumers with farm fresh resources within the county including over 80 local food producers, wineries, and breweries along with maps for consumers of farmstands, community supported agriculture programs, restaurants, retail outlets and farmers' markets. The guide profiles agencies and other entities "committed to strengthening Chester County's food system." This resource was the result of innovative collaboration between the national Food Routes Network, the local Chester County chapter of Buy Fresh, Buy Local, the Chester County Planning Commission, and the Chester County Agricultural Development Council. More information is available at http://dsf.chesco.org/agdev/.

5) Reduce or reuse food waste

Food waste is an often neglected part of the food system. Yet recent studies have shown that U.S. per capita food waste has risen more than 50% since 1974 and that wasted food in landfills produces substantial amounts of methane, a gas with more global warming implications than carbon. There are also estimates that food accounts for 12 to 36% of municipal waste. Thus, reducing or reusing waste from food can save the government money in diverted landfill costs, supply inputs to community gardening and other food-growing efforts, while reducing emissions from landfills.

Composting is the most common way to reduce food waste. Government-supported composting programs can vary from the distribution of bins and composting classes to encourage household or backyard composting, to curbside pick-up of food compostables from residences and larger businesses.

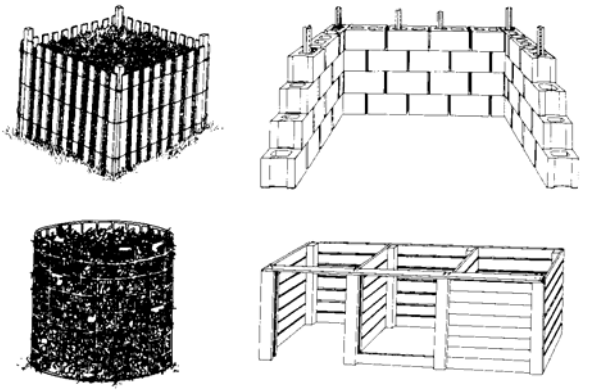
Advocates say that composting not only creates a new product out of waste, but also leads to reductions in over-consumption as users are more aware of how much food is wasted through participation in composting.

A study of university and college cafeterias showed that simply removing trays reduced consumer waste of food products. This may be applicable to government-run or other public institution cafeterias as well.

Backyard and Municipal Composting

Collingswood, NJ encourages residential food composting. For $10, residents can purchase a composting bin and attend a half-hour class on composting basics. More information is available at www.collingswood.com/node/4663

San Francisco, CA is implementing a mandatory municipal composting program for both residents and businesses. The Bay Area now sends over 400 tons of food scraps per day to a nearby composting facility, which then sells the material to vineyards, landscape companies, and construction companies for highway erosion and control projects. More information is available at www.sfgov.org/site/mayor_index.asp?id=106733



Examples of different compost holding units for backyards.

Source: Kansas State University Agricultural Experiment Station and Cooperative Extension Service.

Next Steps in Regional Food Systems Planning at DVRPC

The tools and resources outlined in this brochure are ways that local governments can play a role in improving and strengthening the regional food system. Systemic change is possible with participation from all levels of government, from the private sector, and by individual consumers who, in turn, will create a more equitable, sustainable, and healthier food system.

More information about DVRPC's food system planning activities, including work on a Regional Food System Plan, is available at www.dvrpc.org/food.

General Resources

- Delaware Valley Regional Planning Commission (DVRPC). The Greater Philadelphia Food System Study. January 2010.
- Food Planning Listserv. Subscribe at http://mailman2.u.washington.edu/ mailman/listinfo/foodplanning
- National Policy and Legal Analysis Network to Prevent Childhood Obesity (NPLAN). Model Food Systems Policy Tools for Local Communities. www.nplan.org
- Provincial Health Services Authority. "A Seat at the Table," www.phsa.ca
- Raja, Samina, Branden Born, and Jessica Kozlowski Russell. "A Planner's Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating." American Planning Association Planning Advisory Service. Report Number 554. 2008.
- Sustainable Jersey Municipal Certification: www.sustainablejersey.com
- University of Denver, Sturm College of Law. "Sustainable Community Development Code - 7.4 Food Production and Security." http://law.du.edu/index.php/rmlui/programs/sustainable-community-development-code
- World Hunger Year. Food Security Learning Center. www.whyhunger.org/programs/fslc.html

Inform Decision-Making Processes

- Cost of Community Services Studies:
  - AFT info sheet: www.farmlandinfo.org
  - Heritage Conservancy: www.heritageconservancy.org
  - Montgomery County Lands Trust www.mclt.org/
  - Penn State Adaptation for Pennsylvania: http://pubs. cas.psu.edu/FreePubs/pdfs/ua327.pdf
- Community Food Security Coalition. What's Cooking in Your Food System? A Guide to Community Food Assessment. 2002 http://www.foodsecurity.org/pub/whats_cooking.pdf
- Dubbeling, Marielle. Handout on Land Use Mapping. ETC Urban Agriculture/RUAF. 2007. Session 9.

Encourage Sustainable Food Production

- American Farmland Trust. Farmland Protection Toolbox. www.farmlandinfo.org
- Burlington County (with American Farmland Trust) Model Ordinance for On-Farm Direct Marketing.
- New Jersey Sample Country Code: www.nj.gov/agriculture/divisions/anr/pdf/countrycode.pdf

- Pennsylvania Association for Sustainable Agriculture: www.pasafarming.org
- Philadelphia Harvest Report. 2009 http://sites.google.com/site/ harvestreportsite/
- Rodale Institute: www.rodaleinstitute.org

Improve Healthy Food Access

- National Policy and Legal Analysis Network to Prevent Childhood Obesity (NPLAN). Model Healthy Food Zone Ordinance: Creating a Healthy Food Zone Around Schools by Regulating the Location of Fast Food Restaurants (and Mobile Food Vendors). www.nplan.org
- PolicyLink and Local Initiatives Support Corporation (LISC). "Grocery Store Attraction Strategies: A Resource Guide for Community Activists and Local Governments." 2007. www.bayarealisc.org/bay_area/assets/strategies_11011.pdf

Support the Local Food Economy

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Thanks are due to the following people and organizations for their time, expertise and feedback:

- Tara Tracy and John Thielacker, Brandywine Conservancy Environmental Management Center
- Julia Freedgood, Farmland and Communities Initiatives, American Farmland Trust
- Kimberley Hodgson, Planning and Community Health Research Center, American Planning Association
- Members of the FoodPlanning Listserv

ABOUT DVRPC

The **Delaware Valley Regional Planning Commission** is dedicated to uniting the region's elected officials, planning professionals and the public with a common vision of making a great region even greater. Shaping the way we live, work and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region – leading the way to a better future.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for the findings and conclusions herein, which may not represent the official views or policies of the funding agencies.

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The cover image shows hoophouses at Pennypack Farm in Horsham, PA, with overlays (l to r) of a distribution center, a local farmers' market and an Amish farm. Source: DVRPC, Marisa McClellan