

The Planner's Guide to the Urban Food System

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ood affects the economic, environmental, and social

well being of every place, yet food choices and the issues that surround them are rarely part of the urban planner's agenda. With issues such as pollution, food safety, hunger, obesity, landfill capacity, and others rising on the planning agenda, planners can no longer ignore the potential of their intervention in the food system.

56%
of total U.S. farm production takes place in "urban-influenced" counties¹

Urban life is affected by food system activities such as agriculture, grocery stores, farmers markets, landfills, and gardens. Food systems represent a large part of local economies, including retail and industrial jobs and a variety of entrepreneurial opportunities. A city's transportation system not only distributes food and waste products, but also determines the accessibility of food distribution outlets (e.g.

15-20%
of the nation's workforce is employed in food system activities²

restaurants, grocery stores, farmers markets, food banks) for many residents. Finally, food is an integral part of cultural identity as a product of tradition, religion, climate, ethnicity, and art.

Many planning-related problems currently plague food systems. Food is now shipped farther than ever, but development continues to eat up prime local agricultural lands. Access to healthy foods in low-income areas is an increasing urban problem as supermarket chains continue to leave inner city locations and as financial incentives continue to favor fast food in low-income areas.

80%
of a city's sewage is contributed by food system activities³

25%
of fossil fuel use and air pollution is attributable to food production, processing, and transport⁴

Despite all the ways food issues affect a city, urban planners tend to ignore the food system.

Why Have Urban Planners Ignored Food?

Urban residents and policymakers have a false sense that nothing is wrong with the food system.⁵ They believe that rural policymakers are responsible for decisions about food, partly because urbanites have little interaction with the production

and processing phases of the food system. Planners may think that the food system is

governed by private markets, that food choices are a private matter for kitchens and dining rooms,

There is a general lack of knowledge regarding food system issues and opportunities for improvement and advocacy.

that the food system doesn't affect the built environment or their planning specialization, or that nothing

they do can help. Although food system issues

have recently received more attention among planners, research shows that there is still a general lack of knowledge

regarding food system issues, and opportunities for improvement and advocacy. To change this, read on...

20%
of all car trips are food-related⁶

*The material in this pamphlet is by no means completely objective; neither is the practice of urban planning. Instead, planning is based on a number of fundamental values about what makes a “good city,” which include safety, equality, economic progress, etc. The discussions and information in this pamphlet are based on pursuing three basic values: **equity**, **economic efficiency**, and **ecological integrity**. These values shape the following vision and goals.*

A Vision for the Urban Food System

A food system in which everyone has financial and physical access to culturally appropriate, affordable, nutritious foods that were grown without degrading the natural environment, and in which the general population understands nutrition and the food system in general.

This food system embodies the following goals:

- Food system understanding
- Entrepreneurial opportunity
- Cultural integrity
- Access/equity
- Nutrition education
- Closed waste cycle
- Less fossil fuel use
- Cleaner air, water, soil



THE URBAN FOOD SYSTEM

INPUTS INCLUDE

Water
Solar energy
Fossil fuels
Seed
Capital
Labor

Fossil fuels
Infrastructure
Materials
Labor

Fossil fuels
Materials
Marketing
Labor

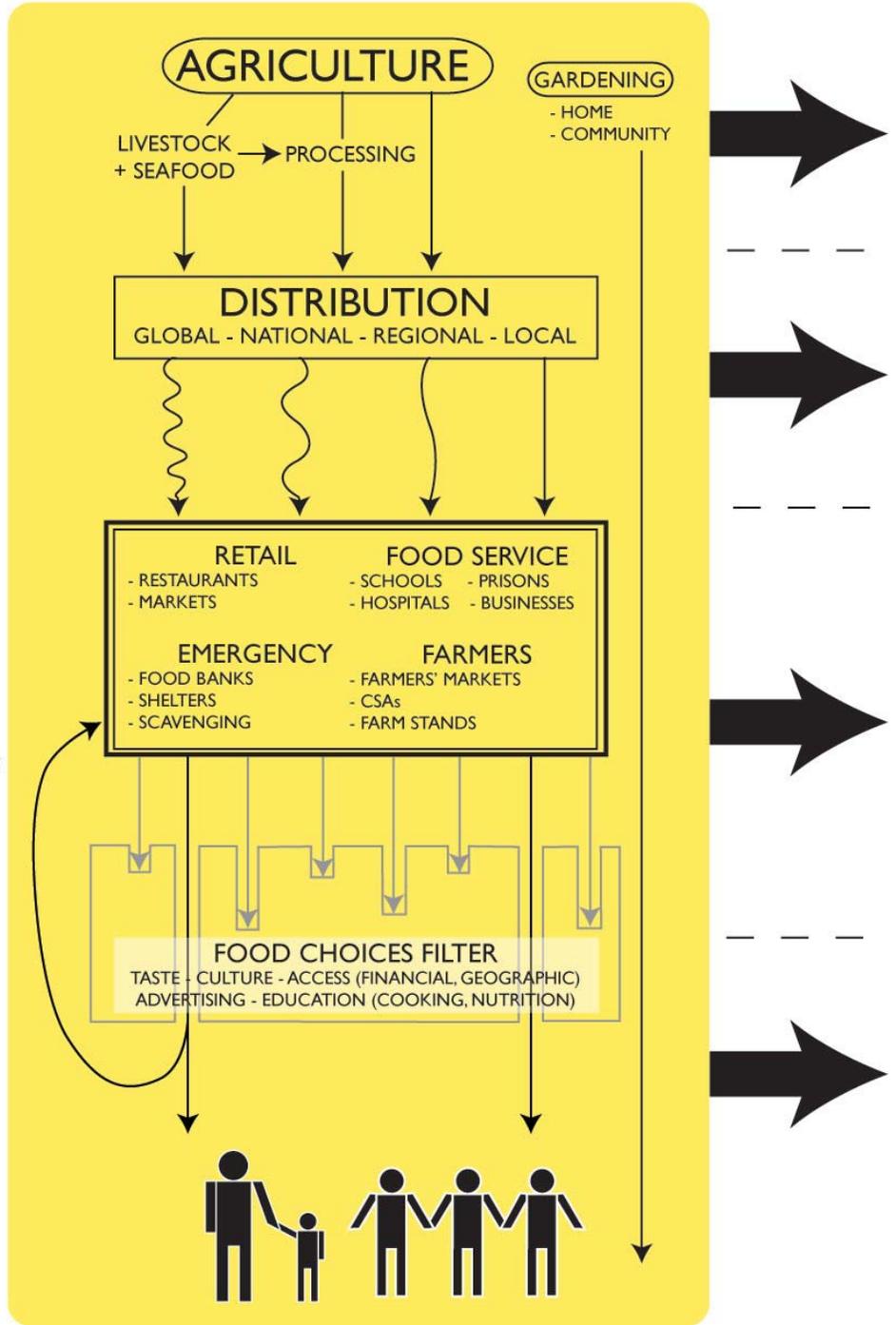
Thought process
Fossil fuel
Equipment
Labor

PRODUCTION

DISTRIBUTION

ACQUISITION

CONSUMPTION



FOOD SYSTEM COMPONENTS

OUTPUTS INCLUDE

Pollution
Jobs
Innovation
Erosion
Regional identity
Tourism

Pollution
Transport
Diet/nutritive variety
Jobs/Economic dev.
Tax revenue

Pollution
Jobs/Economic dev.
Tax revenue
Ease

Happiness
Good/poor health
Pollution
Cultural identity
Regional identify
Art

WASTE: Solid, Green, Animal



PRODUCTION: the growing and raising of food

In this phase, seeds are planted and livestock are born. Most crops must be irrigated; some are fertilized and, when ready, food is harvested by hand or by machine. Larger, industrial farms usually grow only one crop at a time in each field, while smaller farms tend to grow a more diverse array of crops together. Livestock can be raised and slaughtered in large operations or on small ranches and farms, and seafood is either caught in the wild or raised in farms. People also grow food in community or personal gardens.

DISTRIBUTION: the moving of food

In this phase, food travels from the field to the seller. This includes packaging and processing facilities and distribution centers. Most food is washed, boxed, and shipped to locations near and far. Food usually travels via large trucks, airplanes, or ships. Some food ends up locally, while other food travels 1000s of miles before being sold. Livestock is usually transported live via truck or train, then slaughtered. Most meat is butchered in large processing plants and then shipped to selling points.

ACQUISITION: the getting of food

People purchase or obtain food from many different places. Most people purchase food from a store or restaurant, but many rely on emergency supplies. Some people have trouble finding save, affordable, easy ways to get to food sources or face a general lack of healthy food options, both of which create additional barriers to the acquisition of healthy, local, culturally appropriate foods. These barriers are represented in the model's Food Choices Filter.

CONSUMPTION: the eating of food

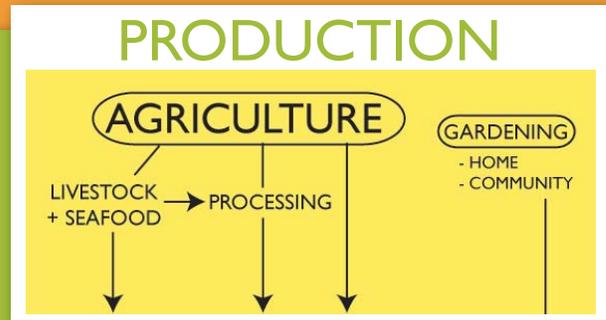
Consumers can get their calories anywhere, from a sandwich to sushi to traditional ethnic foods. Some people prefer healthier foods, while others enjoy unhealthy options, and these decisions can be influenced by nutrition and cooking education. Certain dietary choices, traditions, or allergies can restrict the food a person can or will consume. These might be religions, moral, ethnic, or regional in nature, and are represented in the model's Food Choices Filter.

WASTE: the disposal of food and food products

Every part of the food system produces wastes, which exist when a product is not or cannot be reused. For example, plant material that can't be eaten can be used for compost, but instead is often thrown away. Each of the four components above produces both natural and synthetic wastes.

What Can Planners Do?

Planners can encourage more sustainable local food production, conserving agricultural resources and encouraging backyard and community gardens. Planners can also regulate and decrease the pollution, waste, and environmental degradation caused by food production and processing activities.



Opportunities and Immediate Actions

- Conduct an assessment of urban public lands that could be used for agricultural activities, paying attention to spaces like utility corridors that are otherwise unused
- Assess zoning and land use policies for how they encourage/discourage agricultural activities and how they protect agricultural resources
- Use tools such as transferable development rights and conservation easements to protect local agricultural resources
- Create a regulation about community gardens/capita (see case study below)
- Educate urban food producers about sustainable techniques and practices
- Start a community garden program, creating partnerships with other public agencies that can provide resources (e.g. water hook-up, mulch supply, educational programs)
- Encourage rooftop gardens and street trees as a viable source of food production

Challenges - Difficulties include the federal agricultural subsidies system, which often encourages environmentally degrading agricultural methods and can make it difficult for farmers to change their practices. Also, developers often offer farmers lucrative deals to sell their farmland for residential or commercial development. Community gardens and urban agricultural uses may be seen as a less valuable form of development and are generally located on vacant land meant for other uses, eventually losing their right to be there.

Case Study: City of Seattle Community Garden Policy⁷

Since 1992, the City of Seattle's Comprehensive plan has required "one dedicated community garden for each 2,500 households." This provision has funneled significant funding, staff, land, and other resources into urban, community-based food production.

Seattle now features over 60 gardens with over 2,000 plots that serve approximately 6,000 families. While 15 gardens have been lost over the past 30 years due to



uncertain land tenure and land owners' desire to develop, the City has established community gardens as a priority use for surplus City property and other available sites.

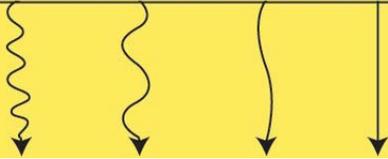


\$1 of investment in an average urban garden results in **\$6** of produce⁸

DISTRIBUTION

DISTRIBUTION

GLOBAL - NATIONAL - REGIONAL - LOCAL



Planners can help reduce pollution and create a robust local food economy by shortening and strengthening the connections between producers and consumers.

Opportunities and Immediate Actions

- Meet with food-related companies to discuss how to keep their business operations local
- Preserve agricultural lands near cities and towns
- Reduce pollution and congestion by shortening the distances that food travels
- Encourage farmers' markets, community supported agriculture, and farm-to-institution programs to keep the food economy locally based
- Require that public institutions purchase a percentage of their food locally
- Start farm-to-institution programs at schools, prisons, and hospitals
- Foster a network between local producers, processors, transporters, and restaurants, grocery stores, households and other purchasers

Challenges - Not all climates allow for local growing year round. Even in temperate climates, loss of urban agriculture land means that even "local" produce is traveling farther distances. Local produce also often costs more, since it usually comes from smaller farms that pay their workers more and benefit less from economies of scale. It can be difficult to coordinate the delivery of local foods, which are often dropped off by each individual farmer, rather than as a single delivery from a distributor.

1,500
miles is the average
distance between
producer and U.S.
consumers⁹

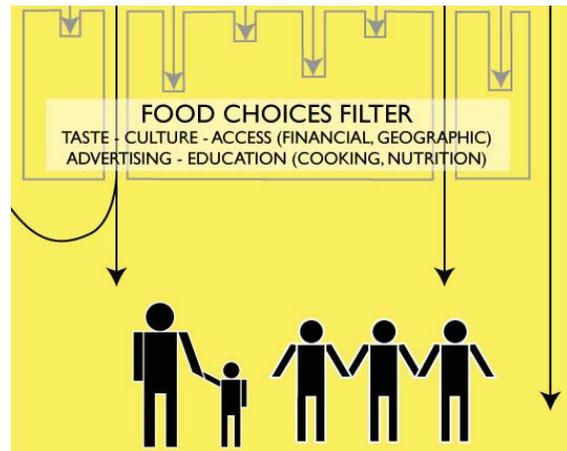


Case Study: Buy Fresh, Buy Local¹⁰

Buy Fresh, Buy Local (BFBL), a nation-wide grass roots organization, has chapters even in snowy places like Massachusetts and Iowa. A recent BFBL promotional meeting had grocers, restaurateurs and farmers mingling and enjoying locally grown gourmet food. The group works to strengthen ties within the local food economy; the Iowa chapter specifically works to connect residents with local producers.



CONSUMPTION



Planners can encourage healthy eating options through education and advertising guidelines.

Challenges - Institutional policy can be slow to change, and garden and kitchen facilities may be expensive to upgrade. Even when healthy meals are available, people often ignore them in favor of “tastier” and less healthy options.

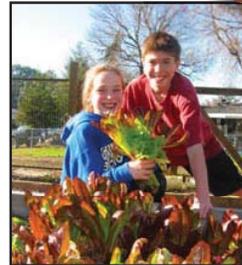
Opportunities and Immediate Actions

- Couple nutrition and environmental education curricula with the development of schools gardens
- Provide nutrition education through local food banks and other emergency food sources
- Provide funding for school field trips to community gardens and local farms so children learn how food is produced
- Provide nutrition and cooking education, especially in low income or high obesity areas

65.9%
of Americans
were overweight
or obese in
2004¹³

Case Study: Marin Food Systems Project¹⁴

The Marin Food Systems Project has worked with over 45 schools and education programs to build supportive relationships between schools and farms. School gardens, cooking classes, farm tours and healthy food options at school are all part of the program. A robust website allows interested community members, parents and students to continue their food education online.



Case Study: Jamie Oliver's School Lunches¹⁵

In the United Kingdom, popular television chef Jamie Oliver recently tried to create healthy school lunch menus, but has found that most students continue to prefer junk food. The menus not only failed to attract greater numbers—or even to hold regular buyers—they also discouraged some families due to the higher prices. Nineteen of the 27 schools participating said that the number of students eating school meals had dropped, with numbers ranging from a 9% to 25% decrease.



WASTE

WASTE: Solid, Green, Animal

Planners can assist in cutting down the waste stream by diverting reusable or compostable food wastes and showing people how to recycle or sustainably dispose of leftover food, food scraps, and food-related packaging and material wastes. For instance, planners can connect sources of food, such as restaurants, grocery stores, and farmers with emergency food sources, providing hungry people with safe, edible leftover foods, and can provide education and materials for household composting.

Opportunities and Immediate Actions

- Integrate household and business composting into the area's waste management services, providing composting materials and picking up excess compost as part of normal waste pick-up
- Encourage emergency food sources to solicit donations of unsold food from farmers' market stands at the end of each market day
- Adopt a "zero-waste" goal for food scraps
- Explore ways to make it easier to recycle and reuse food packaging, requiring local grocery stores to offer plastic bag recycling and other such programs

Challenges - Health and safety laws may inhibit the donation of already cooked food (e.g. restaurant leftovers), and may complicate the use of other unsold items. Building and safety regulations may also make it difficult to enact a composting program, and the general population may see composting as an unappealing practice.



1/3
of all solid wastes
generated by a city
are related to food
consumption¹⁶

Case Study: Fork it Over!¹⁷

In 2003, the Portland metropolitan area's tri-county government started allowing and coordinating donations of unserved or unsellable (but still safe) leftover foods from restaurants, grocery stores, caterers, and other such food sources to local food banks and rescue agencies. This program not only finds a good use for extra food that would have been thrown away, reducing waste management costs, but also provides healthier offerings for emergency food sources that often only offer boxed, canned, and other non-fresh foods.



Want to know more? Here are some helpful resources.

Resources

These three resources can be particularly helpful in planning for a sustainable urban food system:

1. American Planning Association Community Food System Planning Policyguide - www.planning.org/policyguides/food.html
2. Community Food Security Coalition - www.foodsecurity.org
3. World Hunger Year Food Security Learning Center - www.worldhungeryear.org/flsc

AGRICULTURAL PRESERVATION

- American Farmland Trust - www.farmland.org

COMMUNITY GARDENS & URBAN AGRICULTURE

- American Community Garden Association www.communitygarden.org
- National Gardening Association "Moss in the City" page www.garden.org/urbangardening
- UC Cooperative Extension Community Garden Startup Guide www.celosangeles.ucdavis.edu/garden/articles/startup_guide.html

FOOD SECURITY AND THE BUILT ENVIRONMENT

- Active Living by Design www.activelivingbydesign.org
- Public Health Law and Policy Planning for Healthy Places program www.healthyplanning.org

COMMUNITY FOOD SYSTEM ASSESSMENT

- Community Food Security Coalition Assessment page www.foodsecurity.org/cfa_home.html
- USDA Community Food Security Assessment Toolkit www.ers.usda.gov/Publications/efan02013

FARMERS MARKETS

- National Sustainable Agriculture Info Service Farmers' Market page www.attra.ncat.org/attra-pub/farmmrkt.html
- USDA Farmer Direct Marketing site www.ams.usda.gov/directmarketing

FOOD POLICY COUNCILS

- Drake University Agriculture Law Center Food Policy Councils www.statefoodpolicy.org



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DO YOU KNOW HOW **FOOD** AFFECTS ... ?

AGRICULTURAL
MANAGEMENT

POLLUTION

JOBS AND
ECONOMIC
DEVELOPMENT

WASTE

LAND
USE

HEALTH

TRANSPOR-
TATION

- WHAT IS THE FOOD SYSTEM? HOW IS IT IMPORTANT TO PLANNING?
- WHY HAVE PLANNERS IGNORED FOOD AS A USEFUL TOOL?
- HOW CAN THE FOOD SYSTEM BE USED TO IMPROVE YOUR PLANS?

This guide is meant to help planners better understand the food system and how food affects and is affected by urban planning. It also describes a variety of actions planners can take to improve the food system and urban areas.