



**Supporting Agricultural Viability and
Community Food Security:
A Review of Food Policy Councils and Food System Plans**

By

Julia Freedgood and Anelkis Royce

December 2012



The Mission of American Farmland Trust is to protect farm and ranch land, promote sound farming practices and keep farmers on the land.

Funding for this series is provided by the Healthy Farms, Healthy People Coalition through a CDC cooperative agreement administered by the National Network of Public Health Institutes. ChangeLab Solutions provided technical assistance for the series. The views and opinions of these authors and organizations are not necessarily those of CDC or the U.S. Department of Health and Human Services (HHS).

The authors would like to thank our expert reviewers for their thoughtful and provocative comments: Kate Clancy, Cris Coffin and Christine Fry.

©2012 AMERICAN FARMLAND TRUST

OVERVIEW

American Farmland Trust (AFT) is interested in ways communities can support food system development, specifically the joint objectives of agricultural viability, natural resource conservation and community food security. Toward that end, AFT identified and reviewed 134 food policy councils and food system plans to determine if they lead to state and local government actions to strengthen community food systems.

Overall, we found that both approaches have the capacity to make incremental improvements in the food system and contribute to public policy changes, especially at local levels. Both approaches successfully engaged diverse stakeholders in the food system, analyzed data and policies, fostered dialogue and educated the public about food and food policy issues. Whether or not they engender significant policy change is as yet unclear.

Food policy councils (FPC) are an increasingly popular way to engage diverse populations in food system issues. They tend to focus on policy analysis, education, coordination and partnerships, and generally address individual components, such as food access, rather than the food system as a whole. Of the 104 FPC's AFT investigated, while many identified the need to address agricultural viability and community food security, in practice most focused on parts of the system, with even fewer addressing capacity issues throughout the whole system. For example, while many addressed community food security, small farms and urban agriculture, few addressed rural issues or natural resource conservation.

Food system plans tend to be more holistic and suggest broad policy, program and investment recommendations. They are more likely to encompass rural and agricultural issues. Some employ a comprehensive "soil-to-soil" approach, recognizing environmental as well as social and economic components of the food system. However, it is too early to tell how much policy or public investment actually results because of these planning efforts.

Despite the lack of staff and financial resources, some food policy councils have made significant policy advances especially at the municipal level. With greater resources, they likely would be more effective. Food system planning is such a new practice it is too early to measure its impacts, but the practice holds promise of improving both community food security and agricultural viability. In some places, food system planning and food policy councils were connected, which appears to be a promising approach.

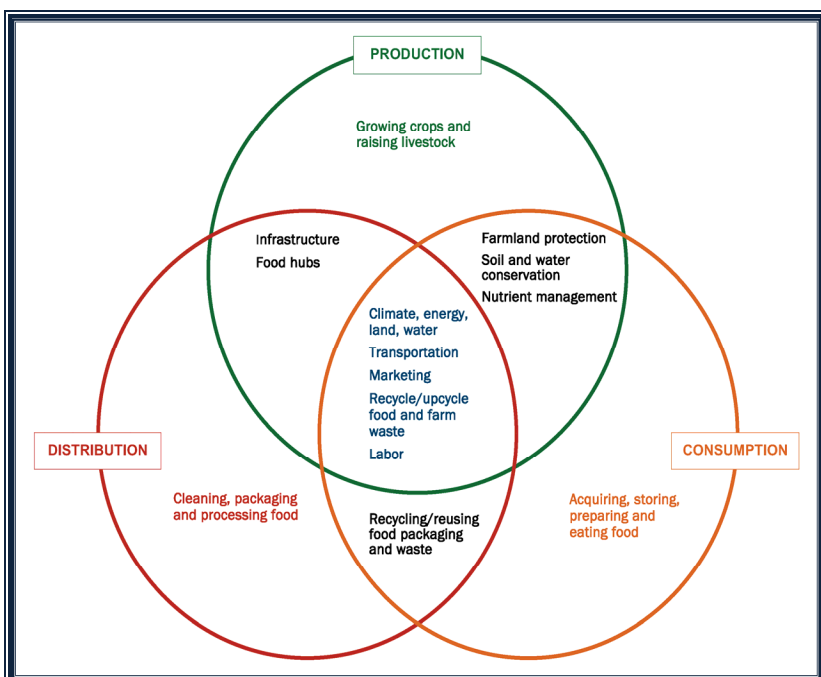
BACKGROUND

Demand for local food has grown tremendously in recent years. The number of farmers markets has increased steadily from 1,755 in 1994 to 7,864 in 2012 (USDA-AMS, 2011) Farm-to-school programs have expanded from a few pilot projects in two states in 1996 to more than 12,000 schools in all 50 states (National Farm to School Network, 2013). The United States Department of Agriculture (USDA) reports that local food sales—both direct to consumers or through intermediaries such as grocers or restaurants—amounted to \$4.8 billion in 2008 and predicts that sales will reach \$7 billion in 2012 (Low and Vogel, 2011). Demand appears driven by concerns ranging from food safety and security to childhood obesity, weak economy, catastrophic weather events and high gas prices. As a result, across the country many public and private efforts are underway to bolster local and regional farm production and improve access to healthy food.

Taking a Systems Approach

Professionals working in the fields of sustainable agriculture and public health increasingly have pointed to expanding local and regional food systems to simultaneously address agricultural viability and community food security. (For the purposes of this paper, local and regional food systems occur at the community, state and/or regional levels.) Planners, local food advocates, public administrators, academics and many others have suggested the value of a holistic systems approach. Systems-thinking is based on the ecological understanding of how individual elements influence each other within a whole environment or organization. It is based on the belief that the only way to fully understand why a problem exists—or persists—is to understand the parts in relation to the whole (Capra, 1996).

A food system is defined as one “in which food production, processing, distribution, and consumption are integrated to enhance the environmental, economic, social and nutritional health of a particular place” (Cornell University, n.d.). At its best, it is a comprehensive measure of the whole life cycle of food: from natural resource management and the cultivation of crops and livestock, through processing, packaging and distribution of food, to acquisition and

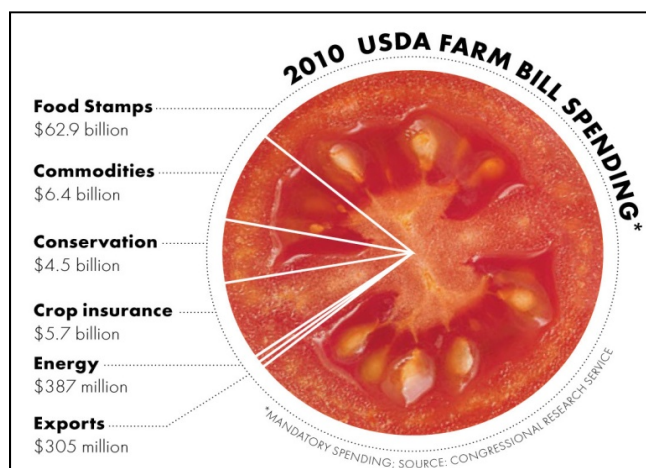


consumption at homes, cafeterias and restaurants, and ending with disposal in a waste facility or compost pile (Freedgood, Pierce-Quinoñez and Meter, 2011).

Recently, efforts have begun to promote a systems approach to developing state and local policies to address community food security and agricultural viability. In the past, food and farm policy mostly have been addressed through the federal Farm Bill, a major piece of legislation that is reviewed and renewed on a five-year cycle.

The current (although now expired) Farm Bill, called the Food, Conservation and Energy Act of 2008, authorized \$288 billion for everything from nutrition assistance, commodity programs, crop insurance and conservation, to energy, exports and rural development (Congressional Budget Office, 2012).

Farm Bill programs are divided into 15 different titles with little, if any, connection between them. Nutrition is by far the largest, representing about two-thirds of the total budget, with the Supplemental Nutrition Assistance Program (SNAP)—formerly known as Food Stamps—receiving the principal share. Commodity Programs are next, providing income support for crops such as wheat, feed grains, cotton, rice and oilseeds, followed by Crop Insurance and Conservation (Congressional Budget Office, 2012).



SNAP provides benefits to low-income households to purchase food. In 2011 it represented 95 percent of Farm Bill Nutrition dollars as expenditures increased significantly beyond predictions. This was due to several factors, including provisions in the American Recovery and Reinvestment Act, higher food costs and increasing program participation rates due to the recession. The number of SNAP beneficiaries and amount of spending increase automatically during tough economic times. In fiscal year 2011, program participation was as high as it has ever been—in an average month, nearly 45 million people (or one in seven U.S. residents) received SNAP benefits, and federal expenditures reached \$78 billion (Congressional Budget Office, 2012).

According to the USDA Economic Research Service (2013), food security means access by all people at all times to enough food for an active, healthy life. In the large sense, food security of a nation or a region means it produces enough food to feed itself in the event of crop failure or import shortfalls (Food and Agriculture Organization of the United Nations, 2003). Food policy councils and food system plans mostly focus on community food security “in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice” (Bellows and Hamm, 2003).

In 2011, ERS estimates that 15 percent of U.S. households were food insecure “at least some time during the year, including 5.7 percent with very low food security—meaning that the food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food” (Coleman-Jensen et al., 2012).

Food insecurity takes many forms, one of which can be obesity. Since the 1980s, changes in behaviors and diet have led to dramatic increases in obesity, which today has become a significant public health concern. While it may seem paradoxical, “this form of food insecurity indicates a lack of individual, private sector and public attention to a nexus of exercise, diet and nutrition issues” (Bellows and Hamm, 2003). Bellows and Hamm suggest that food insecurity also occurs as a result of the loss of farmland and small and medium sized farms. Efforts to improve food security while combating obesity emphasize increased access to and consumption of fresh fruits and vegetables.

A 2006 ERS report suggests that the current supply of domestically produced fruits and vegetables is insufficient for providing a healthy diet for every American. ERS estimates that the United States would need 13 million more acres of fruit and vegetable production to meet the 2005 recommended dietary requirements with domestic production (Buzby et al., 2006). While most Americans do not consume their daily requirements – and maybe never will – the gap is widening between demand and supply: fresh fruit and vegetable imports effectively tripled between 1990-92 and 2004-06 (Huang and Huang, 2007).

The gap is due to multiple economic factors, from extending the availability of seasonal products to cheaper land and labor abroad, but should be addressed in food policy efforts. And it is not limited to fresh produce. Imports of frozen, canned and dried fruits and vegetables are increasing, as well. According to ERS, the average import share of consumption increased over the past decade for all major categories of fruits and vegetables with the exception of dry peas and lentils. The highest growth was in imports of frozen vegetables (excluding potatoes). These accounted for about 27 percent of consumption in 2000-08, up from 16 percent during 1990-98 (USDA-ERS, 2013). Among other things, meeting this demand will require improvements in domestic food system infrastructure, which also should be addressed by food policy efforts.

Agricultural land that is used for food production, especially fruits and vegetables, is threatened by sprawling development patterns. From 1982 to 2007, 23.2 million acres of productive farmland were developed into non-farm uses. A disproportionate amount was high quality farmland—such as prime soils that are best suited to producing food and other crops with the fewest inputs (U.S. Department of Agriculture, 2009).

“Urban influenced” farmland, which is under the most development pressure, produces 91 percent of the U.S. market value of fruits and nuts, 78 percent of vegetables and melons, 67 percent of dairy, and more than half of poultry and eggs. Major farm states, such as California and Florida, are especially vulnerable. (Farmland Information Center, 2010.)



Not only do producers in these “urban influenced” areas have to contend with unpredictable weather, consolidation, global competition and labor shortages like other farmers, they also must compete with urban-related land values that favor non-farm development as the “highest and best use.” Being located in these areas brings a host of indirect influences, such as rising taxes, land rents, increased regulation and complaints from non-farm neighbors (Heimlich and Anderson, 2001; Irwin and Bockstael, 2007).

lue
re



ad
ad

Consolidation also has played a significant role. Since the 1980s, in each sector: food processing, distribution and wholesaling there has been an enormous amount of consolidation weakening farm profitability, especially of small and mid-sized commercial farms. Today farmers and ranchers only receive 15.8 cents of every food dollar with the rest going to other members of the supply chain: marketing, processing, wholesaling, distributing and retailing (Canning, 2011).

Given these factors, American Farmland Trust (AFT) is exploring the potential of planning practices and policies to enhance agricultural viability and community food security together, rather than trying to combat the problems of hunger, sprawling development patterns and the decline of small and mid-sized farms separately, as has been done in the past. This paper reviews and, to the extent possible, assesses the impacts of food system planning and food policy councils that have taken a holistic approach to improve agricultural viability and community food security by addressing them as elements of a whole system rather than separate or even competing parts.

Food Policy Councils and Food System Plans

The first food policy council (FPC) was formed in 1982 in Knoxville, Tennessee. “Food Policy Councils are innovative collaborations between citizens and government officials which give voice to the

concerns and interests of many who have long been under-served or unrepresented” (Drake University Agricultural Law Center, 2005). Over the past 30 years, state and local governments have stepped up efforts to bring together stakeholders from various segments of the food system to give them a voice in shaping food policy (Burgan and Winne, 2012). Thus, FPCs are a good place to begin an examination of systems approaches to agricultural viability and community food security.

Food system planning is a relatively new concept that is evolving into a new field for professional planners who want to address issues of food security and the protection of the environment and agricultural land. As early as 1974, the Commonwealth of Massachusetts evaluated “its food system as a total system” and created the first food system plan but it took another 30 years for the concept to be introduced to the professional planning community (Commonwealth of Massachusetts, 1974). It officially was launched in 2003 at the American Planning Association (APA) national conference when University of Wisconsin Professor Jerry Kaufman challenged planners to address the food system. In 2005, APA offered a food systems track at the conference (Koliba, Campbell and Davis, 2011) and in 2007, published a *Policy Guide on Community and Regional Food Planning*. In 2010, in concert with the American Dietetic Association, the American Nurses Association and the American Public Health Association, APA released a joint statement on more than a dozen principles of a healthy, sustainable food system including “accounts for the public health impacts across the entire lifecycle of food,” “conserves, protects and regenerates natural resources,” “supports fair and just communities” and “is economically balanced.”

Increasingly, state and local governments as well as regional planning organizations are developing comprehensive or strategic food system plans that integrate “food system issues into policies, plans and programming at all levels of government work” (Delaware Valley Regional Planning Commission, 2010). AFT examined 30 of these from around the country. While most tackle specific disconnects in the food system, some take a holistic, soil-to-soil systems approach.

APPROACH

AFT employed a multi-tiered strategy to identify and analyze the ability of state and local government policies to build healthier food systems by creating FPCs and/or food system plans to support local and regional production of and access to healthy foods. We were interested in finding out whether taking a more holistic approach that addressed the entire food system would lead to public policies that simultaneously improve food security, farm viability and environmental stewardship of agricultural resources.

We started with a literature search and then identified as many food system plans and FPCs as possible. We reviewed 160 listings for “Food Policy Council” on the Community Food Security Coalition’s North American Food Policy Council Web page and visited websites of 104 that had live links. We investigated the FPCs’ composition, characteristics, mission, goals, activities and what kinds of policies they support. We also made calls to some of the councils we believed were active but that did not have live Web links.

Based on these steps, we narrowed the field to 25 active FPCs for deeper analysis based on several factors. First we focused on those that were active and had live web pages, as well as those that were set up to be food policy councils, as opposed to being political alliances or coalitions. We also narrowed down to those that appeared most comprehensive and gave equal weight to agriculture and food security. We found 12 that appeared to address much, if not all of the breadth of a “soil to soil” food system: from natural resource conservation and agricultural viability to nutrition and health. We contacted seven of these directly by email and telephone: Connecticut Food Policy Council, Dane County (Wisconsin) Food Council, Fresno County (California) Food System Alliance, Missoula (Montana) Community Food and Agriculture Coalition, Oakland (California) Food Policy Council, Portland-Multnomah (Oregon) Food Policy Council and Sarasota (Florida) Food Policy Council. Although AFT followed up with numerous emails and phone calls, representatives of only two agreed to be interviewed: the Connecticut and Dane County councils. We attributed the low response to lack of staff and financial resources although we learned later about the 2012 electronic survey conducted by Johns Hopkins University (Scherb et al., 2012), so it may have reflected survey fatigue.

We also identified 30 food system plans that addressed the food system in a comprehensive way. Fifteen were selected for further study based on the same criteria we used for the FPCs. Six representatives were contacted for interviews: Central Ohio Local Food Assessment and Plan, Chicago (Illinois) Municipal Agency for Planning’s Go To 2040, Eating Here: Greater Philadelphia’s Food System Plan, Farm to Plate: A 10 Year Strategic Plan for Vermont’s Food System, Multnomah (Oregon) Food Action Plan: Grow and Thrive 2025 Community Action Plan, and the New York City Council’s Food Works: A Vision to Improve NYC’s Food System. We conducted interviews with representatives from four of these: Central Ohio, Greater Philadelphia, Multnomah County and Vermont.

OBSERVATIONS

After reviewing the literature and 134 food system plans and FPCs, AFT found that, to date, food system activities have focused on collecting data and conducting analyses, bringing diverse stakeholders to the table, creating definitions and establishing common ground. In addition, we found some promising examples of actual policy development but not enough to evaluate the effectiveness of either food policy councils or food system plans of engendering policy change.

Food policy is “any decision made by a government agency, business, or organization which effects how food is produced, processed, distributed, purchased, accessed, consumed, and recycled” (Iowa Corridor Food and Agriculture Coalition, 2010). It is important for state and local governments to be involved because regulations that affect food systems typically take place at the state or local level, especially “those related to public safety and health, or application of sales taxes” (Martinez et al., 2010). Also, because state and local food policy is developed in local settings, it is more accessible “to the influence of familiar individuals and institutions” (Hamilton, 2002).

In a 2007 report on ways counties can support local food systems to nurture healthy children, Dillon provides examples of food policy activities: FPCs, farm-to-school programs, infrastructure and agricultural conservation easements. These seemed like a good place to begin an analysis of food policy approaches.

Table 1. Methods to Support Local Food Systems

Method	Description	Best Practice Example
Food Policy Council	A group of stakeholders that provides support to governments and citizens in developing policy and programs related to the local food supply	Dane County, Wisconsin, is addressing the gap between government and food production.
Farm-to-School	When a school district or school purchases fruit, vegetables and other products from local farms	Missoula County, Montana, provides students with produce, dairy products and nutrition education.
Infrastructure for Local Producers	Land to grow food, suppliers for seeds, inputs, tools and machinery, facilities to store goods, processing and packing facilities to add value to raw products and shipping/distribution methods to deliver products	Woodbury County, Iowa, played a major role developing infrastructure support to expand access to fresh food, keep money in the community and increase direct sales and farm employment.
Agricultural Conservation Easements	Deed restrictions landowners voluntarily place on their property to protect land for agriculture	Lancaster County, Pennsylvania, created an Ag Preservation Task Force to take advantage of its state farmland protection program. The county has preserved nearly 70,000 acres of farmland.

Source: Dillon, C. (2007). *Counties and Local Food Systems: Ensuring Healthy Foods, Nurturing Healthy Children*. National Association of Counties. Adapted and updated by author.

AFT found many examples of these approaches being used by Food Policy Councils and in food system plans, but also that the repertoire has become far broader. For example, beyond farm to school, over the last five years many jurisdictions have begun to promote farm-to-institution policies that include hospitals, prisons and senior centers. Other policies that are receiving increasing attention include:

- Bee and chicken ordinances, especially in urban areas;
- Best management practices for sustainable agriculture;
- Electronic Benefits Transfer (EBT), which is now widely adopted in farmers markets;
- Establishment of city and community seed banks, giving growers access to locally grown, locally harvested seed;
- Food access to low income populations;
- Subdivision review to provide adequate land for things such as community gardens, urban farms and farmers markets, including policies to allow use of public lands; and
- Zoning laws to encourage mobile vending and access to healthy food for low income people living far from supermarkets and other venues that provide a diversity of food choices.

Food Policy Councils

State and local governments have created FPCs to stimulate discussion of opportunities and potential impact of government food policies (Martinez et al., 2010). FPCs are umbrella organizations that engage diverse stakeholders in identifying and proposing ways to improve local and regional food systems. While they define policy broadly, they mostly identify issues that can be addressed through policy and educate the public about food policy issues (Scherb et al., 2012).

Of the 104 councils AFT investigated, some were created through government actions such as an Executive Order while others resulted from grassroots efforts. One size does not fit all; FPCs are at their best when they build off the momentum within their own communities, addressing locally important issues and coming up with locally based policies and programs. The strength of FPCs lies in their ability to be locally relevant (Harper et al., 2009) "and their success comes from an array of factors including strong leadership, vision, experienced members, government engagement and persistence" (Clancy, Hammer and Lippoldt, 2007).

Many provide a "source of food education" for citizens, addressing issues such as: nutrition, food-related health issues, sustainable farming, equitable access to healthy food, and economic development related to food (Burgan and Winne, 2012). AFT's research corroborated others' that FPCs play an important role in bridging "the divisions in public policy making—representing issues to sectors of government that might be unaware of the effect of their mandates, policies and actions on health, nutrition and the environment" (Harper et al., 2000). But AFT also found that published research is scant (Scherb et al., 2012) so there are gaps in knowledge that this and other recent research are trying to fill.

Most FPCs focus on education and dialogue between sectors, although some have actively engaged in policy activities such as developing policy proposals and participating in the regulatory process (Scherb et al., 2012). For example, the goals of the Oakland [California] Food Policy Council are to: increase food security and literacy, build greater public health and support local agriculture that is economically viable, environmentally sustainable and socially responsible. This includes promoting a “closed loop” food system that addresses energy efficiency and reducing energy consumption as well as protecting environmental resources (Oakland Food Policy Council, 2012). One of the strategies Oakland used to address these goals was to strengthen municipal zoning policies, such as creating definitions and operating standards for urban agriculture, advocating for regulations to protect and expand farmers markets, and expanding mobile vending regulations to include additional areas and encourage fresh food vending. It is creating a city “Fresh Food Financing Initiative” and has partnered with city government to develop and implement “Environmentally Preferable Purchasing Protocols” for new RFP and nutrition standards for all city contracts and to develop a city-wide waste management contract to expand composting and food scrap recycling. It also proposed to build upon neighboring counties’ GMO bans to inform county-wide policies on pesticides and GMO-free zones.

The Sarasota Food Policy Council focused more on the development and adoption of sustainable farming practices, as provided by Florida’s Sustainable Agriculture Programs. Based on its Future Land Use Map, the Sarasota FPC supported policies to protect farmland within the Rural Area, protect existing agricultural uses in the Semi-Rural Area so that they are not deemed “incompatible with existing or subsequent or residential nearby uses” and support other farmland protection initiatives such as land trusts, farmland mitigation, conservation easements and small farms. It called for greater coordination with neighborhood planning efforts and subdivision review to provide adequate land for community gardens, farms and farmers markets and, where appropriate, to encourage the use of county parks for community gardens and farms as well as farmers markets. It also is encouraging marketing and increased purchase of local food by public institutions such as the School Board and encouraging the expansion of existing agricultural uses and development of new businesses involved in agriculture to allow urban and small scale farming opportunities.

A Deeper Look: Connecticut and Dane County Food Policy Councils

Notably, of the total group of 104, only 25 FPCs appeared to address agricultural viability and community food security as part of the same system. In the end, AFT only found 12 (about 12 percent) that comprehensively addressed agricultural viability, natural resource conservation, nutrition and health. The other 13 addressed parts of the system, generally focusing on access to food but also to increased food production and improved market opportunities for farmers, but not addressing the food system in a truly comprehensive way.

Two of the seven we contacted agreed to be interviewed: the Connecticut Food Policy Council (CFPC) and the Dane County [Wisconsin] Food Policy Council.

Connecticut Food Policy Council

The Connecticut Food Policy Council was established by the Connecticut State Legislature in 1997. Housed within the state Department of Agriculture, it addresses issues related to food production, distribution and consumer concerns. Specifically, it is charged with: “(1) developing, coordinating and implementing a food system policy linking local economic development, environmental protection and preservation with farming and urban issues; (2) reviewing and commenting on proposed state legislation and regulations that would affect the food system of the state; (3) advising and providing information to the Governor; and (4) preparing and submitting annual reports to the General Assembly” (State of Connecticut General Assembly, 1997).

Its composition points to its commitment to represent the full gamut of food system stakeholders. By statute it must be comprised of: “Two agriculture representatives; one representative each from an anti-hunger organization, Cooperative Extension, a food retail business, and a produce wholesale business; the Commissioner or a designee each from the state departments of Agriculture, Administrative Services, Education, Transportation, Health, and Social Services. The remaining members are appointed by legislative officials” (State of Connecticut General Assembly, 1997).

The purpose of the CFPC is to promote communication and collaboration between the government and food system stakeholders to advance food policies that will bring positive change to the food system. It does not have the authority to propose legislation but instead is charged with advising both the Governor and the General Assembly on issues of food security and on legislation that may affect the state’s overall food system. Council members have provided testimony and supported legislators who have introduced food security legislation. As a result, the CFPC is credited with successfully streamlining food assistance applications to a single application form to serve multiple state assistance programs and providing more Electronic Benefit Transfer (EBT) machines at farmers markets. It also worked with the Department of Transportation to create a map to identify local farms where people can go to pick their own vegetables or fruit.

The CFPC is funded through the Connecticut Community Investment Act, a state act that provides funding for open space, farmland preservation, historic preservation and affordable housing, and receives \$25,000 per year primarily to cover consultant fees for education and outreach: publications, website and conferences (Connecticut Department of Agriculture). In addition, the Connecticut Department of Agriculture assigns staff for small amounts of work. The council also published reports evaluating the food system: *Community Food Security in Connecticut* (2005) and *Making Room at the Table: A Guide to Community Food Security in Connecticut* (1998). It hosted a well-attended conference on farmland preservation (Save the Land 1999), which resulted in a statewide farmland preservation initiative the following year and the launch of a new statewide coalition to educate and advocate around protection of the state’s working lands. Finally, CFPC achievements include working with the University of Connecticut to allow locally owned business to compete for University food supply contracts.

Dane County Food Council

The Dane County Food Council (DCFC) is an all-volunteer organization with no dedicated funding, although it sometimes receives small grants to support projects. Created in 2004 through an act of the County Board's Environment, Agriculture and Natural Resources Committee, its goal is to increase local food consumption and develop food and agriculture policy recommendations. It takes a holistic view, addressing farmland protection, agriculture sustainability/viability, nutrition and health and develops educational programs, conducts research, helps increase municipal procurement of local foods, supports direct marketing opportunities for local growers and assists with the development of local food projects.

Each member of the DCFC provides a unique perspective on food issues in the county. Members have backgrounds in agriculture, business, nutrition, economic development, academia, urban planning and food security. The council consists of three County Board Supervisors appointed by the County Executive, three citizen members appointed by the Environment, Agriculture and Natural Resources Committee Chair and three citizen members appointed by the Extension Committee Chair.

The DCFC helped pass a Local Food Purchase Program Policy that committed Dane County agencies to purchase locally grown food and a symbolic Right to Food resolution calling for every person to have the right to fresh and affordable food. It partnered with the Institutional Food Market Coalition on a pilot program with the Badgerland Produce Auction to get consolidated food service to serve more than 7,500 lbs. of fruits and vegetables. It organized "Planting Seeds for Our Future," a conference that brought together more than 150 people from diverse sectors of Dane County to focus on social, environmental and economic linkages within the county food system and discuss a wide range of food topics. It partnered with other groups in co-sponsoring the "Southwest Regional Hunger Forum," which was attended by 100 people in Richland Center and focused on hunger, nutrition and food access issues. The DCFC also co-sponsored and helped facilitate the Community Food Security Coalition Midwest regional training for emerging FPCs.

The CFPC and the DCFC take different approaches to food policy due to their structure and funding. As a council created through state statute, the CFPC has an enumerated list of responsibilities, which include commenting on legislation and regulations which affect the state's food system and advising the Governor on state food policy. Because its members include representatives of state agencies, it is both better able to address tensions and inconsistencies between state agencies on issues affecting the food system, and less able to initiate and advocate for specific policies with federal and state lawmakers. On the other hand, the DCFC is not tied to a public agency and therefore can propose legislation. As a result, it successfully introduced and passed two resolutions. However while DCFC has the power to introduce policy, it lacks dedicated funding and must keep its goals focused and manageable. Thus it must choose carefully among projects are of high priority. These two models of councils seem typical—they either are tied to public agencies and so are

limited in their ability to create policy, or they are private but not well funded, which also limits their reach.

That said, AFT found some notable successes despite little funding or staff. While by and large FPCs lack the “power to single handedly develop and implement policy” (Fox, 2010), AFT found cases where they have had real impacts on local zoning and establishment of healthy food venues such as farmers markets and mobile vending, improved healthy food access to vulnerable populations by pressing for EBT in farmers markets, increased infrastructure and market opportunities for local producers and in some cases even supported farmland protection efforts. While only a fraction are truly holistic, it does appear that FPCs have the capacity to address agricultural viability and community food security holistically, especially in places where taking a systems approach is deemed to be locally relevant. They provide an important vehicle for information sharing among state and local authorities with competing/conflicting missions around the food system, and have helped those agencies/entities understand the need for better coordination and collaboration.

Food System Planning

The planning profession helps create communities with good choices for where people live, work and play, providing a good balance of essential services, such as transportation, housing and environmental quality. According to APA, planning “works to improve the welfare of people and their communities by creating more convenient, equitable, healthful, efficient and attractive places for present and future generations” (American Planning Association, 2012).

The planning process is grounded in research and data analysis, and involves techniques to engage diverse stakeholders, help them envision the future and set goals to balance development, preservation and community services. A good planning process addresses implementation from the outset, identifying policies and strategies to help communities achieve their vision and accomplish their goals.

While the outcomes of planning are intended to help people and communities, operationally planning can take place at any level, from the federal government to states and regions as well as counties, cities and towns. Likewise, plans take many forms from comprehensive or master plans to site plans, from policy recommendations to regulatory and incentive strategies, from transportation to economic development, emergency preparedness and historic preservation plans.

However, while planning is supposed to address the breadth and depth of issues that improve public welfare, it is only in the last decade or so that planning professionals began to address food and food system issues. Since 2007 when APA published its *Policy Guide on Community and Regional Food Planning*, local and regional food systems increasingly have been integrated into traditional master and other planning efforts. A report just published by APA, [Planning for Food Access and Community-Based Food Systems: A National Scan and Evaluation of Local Comprehensive and Sustainability Plans](#) identified 80 comprehensive plans and 25 sustainability plans that explicitly addressed one or more aspects of local or regional food systems. The five most-

cited topics included rural agriculture, food access and availability, urban agriculture, food retail and food waste. The report evaluated 21 plans in depth and conducted case studies with local government planners and other stakeholders from 15 of these to learn more about the food access and food systems planning process. One important finding is that “local level plans” hold great promise in providing a roadmap for how local governments can guide food policy development and implementation. Because they control most land use decisions, they have the potential to address community needs, establish long-term goals, and develop an approach to achieve community goals. And unlike the efforts of individual departments—such as health, economic development, planning, public works, engineering or transportation—both comprehensive and sustainability plans can coordinate and facilitate food planning efforts between local government agencies and departments. Thus, complicated topics such as food access can be more holistically addressed” (American Planning Association, 2012).

While food system issues are beginning to be incorporated into traditional planning practice, food system planning itself is becoming an explicit, multi-disciplinary practice that addresses issues related to food access, agricultural viability, economic development, environmental quality, transportation and more. According to the Delaware Valley Regional Planning Commission (DVRPC) it is “the integration of food system issues into policies, plans, and programming at all levels of government work” (Delaware Valley Regional Planning Commission, 2010). The field is growing rapidly and many good examples are emerging at different levels of government.

Little research has been conducted on food system planning, given its newness as a stand-alone practice, and AFT found none that evaluated its effectiveness at driving policy change. Evaluation is difficult because the practice is complex, addressing a myriad of interrelated factors instead of focusing on individual food system sectors (such as food access), which might be easier to measure.

To get a better sense of what is occurring in this dynamic and emerging field, AFT reviewed 30 plans and focused on four for deeper investigation. The four included two regional, multi-county plans—one of which included two states, one state level plan and one county level plan. Overall, we found that they were stakeholder driven, took a comprehensive approach and sought to improve both agricultural viability and community food security.

All four of the plans addressed the food system in a holistic way, and their top priorities or recommendations included farmland protection, resource conservation and farm viability on the production side, and nutrition, health, obesity and food access on the consumption side. In addition, Eating Here and Central Ohio addressed regional economic development, and Central Ohio also addressed food waste and composting.

Table 2. Profile of Four Food System Plans

Eating Here: Greater Philadelphia's Food System Plan	Central Ohio Local Food Assessment and Plan	Multnomah Food Action Plan	Farm to Plate: A 10 Year Strategic Plan for Vermont's Food System
<ul style="list-style-type: none"> ➤ Access to affordable farm land ➤ Natural resource protection through market-based approaches ➤ New business development: encourage entry for food entrepreneurs, new, beginning, and minority farmers, value-added activities ➤ Healthy food awareness and access ➤ Farm to school 	<ul style="list-style-type: none"> ➤ Agricultural viability ➤ Processing and development ➤ Health and food access together ➤ Farmland preservation ➤ Composting 	<ul style="list-style-type: none"> ➤ Local food ➤ Healthy eating ➤ Social equity ➤ Economic viability for the food system 	<ul style="list-style-type: none"> ➤ Economic development and jobs ➤ Farmland access and stewardship (soil and water quality) ➤ Increase economic viability of businesses in farm and food sector to increase food access ➤ Protecting farmland for future agricultural use and positive net outcome to the environment

Regional Plans

Eating Here: The Greater Philadelphia's Food System Plan

One of the first and most groundbreaking plans was *Eating Here: The Greater Philadelphia's Food System Plan*. Published in 2011 by the DVRPC and the Greater Philadelphia Food System Stakeholder Committee after a three-year planning process, it focused on the nine-county DVRPC region: Bucks, Chester, Delaware, Montgomery and Philadelphia counties in Pennsylvania and Burlington, Camden, Gloucester and Mercer counties in New Jersey but ultimately covered a 100-mile radius around the City of Philadelphia. It was based on DVRPC's comprehensive study of the Greater Philadelphia foodshed, which analyzed agricultural resources, distribution infrastructure and regional economy, among other things, and identified key challenges, including development pressure and constraints on the agricultural land base, contradictory issues such as malnutrition and obesity, food access and distribution, and economic development.

DVRPC is a regional planning organization, which is funded by a variety of state and local funding sources as well as federal grants from the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration. Part of DVRPC's mission is "to build consensus on improving transportation, promoting smart growth, protecting the environment, and enhancing the economy." Toward this end, its staff engaged more than 150 stakeholders in a three-year collaborative process to create the plan, including the formation of a stakeholder committee to help guide the process, which included public officials, farmers, anti-hunger advocates, small business owners, farmland preservation experts and others.

The plan's mission is to "cultivate a Food System to support local agriculture and grow the local food economy while improving profitability for farmers; protect the environment; ensure safety, security, and healthfulness of food and food supply; improve nutrition while reducing obesity and preventable diseases; ensure residents of the region have access to enough nutritious food to eat; encourage collaboration between individuals, organizations, and government agencies" (Delaware Valley Regional Planning Commission, 2011). The plan regards the food system as "a set of interconnected activities or sectors that grow, manufacture, transport, sell, prepare, and dispose of food from the farm to the plate to the garbage can or compost pile. Greater Philadelphia is comprised of many community food systems, but is also served by a regional food system, and fits within a global food system" (Delaware Valley Regional Planning Commission, 2011).

The plan identifies a set of 10 indicators that illustrate trends and can be used to suggest changes or interventions to better support a regional food system that reflects stakeholder vision, goals and values. Indicators include agricultural factors such as farm profitability, farmland protection and keeping land in production; environmental factors such as surface water quality; economic factors such as employment and wages; and food security factors such as healthy food purchases and affordability of healthy food. The plan also makes a series of 52 recommendations from policy reforms, to expanding current initiatives and programs, to new approaches and innovations. Its top five recommendations include:

- **Access to affordable farmland:** Maintain affordable land for farmers through a range of potential innovations and business models. These include addressing the retirement needs of farmers, identifying opportunities to transition preserved land into food production and creating investment vehicles for long-term agricultural production on preserved land.
- **Natural resource protection through markets:** Develop technical assistance programs or market-based solutions that enable farmers to protect natural resources.
- **Agricultural enterprise development:** Create or expand new and specialized programs to reduce the barriers of entry for new food entrepreneurs and new, beginning and minority farmers, and encourage value-added activities. Examples include training programs and revolving loan, micro-loan and low-interest loan funds.
- **Healthy food awareness and access:** Promote the use of new technology and community-based communication outlets by all partners—government, private sector and nonprofits—to educate people about healthy food.
- **School system solutions:** Integrate all aspects of Farm to School programs into a robust and comprehensive education program.

A sixth top recommendation was to continue to convene the Stakeholder Committee and encourage shared efforts, which DVRPC is still doing. With grant funding from the William Penn Foundation, from 2009 to 2012 DVRPC administered a Local Food Economy Financial and Technical

Assistance Program to help implement the plan's goals and offered competitive grants available through a Food System Implementation Grants program "to transform the plan's recommendations into reality." It also produced a brochure to provide local governments with the tools and resources needed to conduct local food system planning. It is interesting to note that DVRPC's food system planning efforts followed Mayor Nutter's creation of a Philadelphia Food Charter and Food Policy Council in 2008 to bring local food within 10 minutes of 75 percent of city residents.

Central Ohio Local Food Assessment and Plan

Another good example of a regional food system plan was the 2010 Mid-Ohio Regional Planning Commission (MORPC) *Central Ohio Local Food Assessment and Plan*. MORPC convened the Central Ohio Agriculture and Food Systems Working Group, a 12-county team, to do a food system assessment and create a plan to promote the production, processing, distribution and consumption of food within the region. The plan was premised on the idea that local food production helps make farms viable, preserves farmland, promotes healthy eating, improves accessibility for all, keeps consumer food dollars in the region and creates jobs.

MORPC conducted a *Central Ohio Local Food Assessment*, which was crucial to the plan's creation. The *Assessment* provided a review of what was occurring within the food system and what areas needed attention. While less detailed than DVRPC's research, it provided a good overview of the challenges and opportunities in the regional food system and was meant to connect the dots in a meaningful way by using available research and data to provide a snapshot of current conditions.

MORPC was committed to being inclusive and stakeholder driven, working hard to bring the right mix of people to the table and to get buy-in from across the region. Many stakeholders were involved in creating the plan. They included: farmers, the nonprofit Local Matters, local food advocacy groups, anti-hunger groups, city government in Columbus, Franklin County government, faith groups, The Ohio State University, Columbus Health Department and businesses involved in food production and distribution.

The plan sought to support "fresh, safe, healthful, and affordable local foods that are easily and equally accessible to everyone in Central Ohio and distributed through a system that promotes sustainable farming practices and resilience in the region" (Mid-Ohio Regional Planning Commission, 2010). One of its main recommendations was to establish local FPCs to help the region's 12 counties implement other recommendations. Five councils have been established and at least three other counties have laid the foundation to create their own local councils. MORPC also has fulfilled another key goal, which was to create a website (<http://centralohiolocalfood.org/>) to serve as an "information hub" with links to anything Central Ohioans and organizations want to know about local food systems in the region.

Lastly, in 2010, MORPC received a Housing and Urban Development (HUD) Community Challenge grant to create a plan to incorporate local food into the revitalization of Weinland Park, a neighborhood in transition just southeast of The Ohio State University. The plan includes community gardens, commercial production, local-food processing, distribution, retailing, accessibility and education.

In April 2012, more than 100 food system stakeholders from across the state of Ohio met to discuss local food policy councils and decided to create a state food policy council network. The network will become a hub and a conduit for peer learning and exchange, capacity building and technical assistance for local food policy councils, and represent their collective interests at the state level.

Single State or County Plans

Multnomah Food Action Plan

At the county level, the Multnomah Food Action Plan grew out of a county Food Initiative to develop a shared food system vision, goals and an action plan to promote issues of health, social justice, economic vitality, and sustainability within our regional food system. It was guided by a Steering Committee of 32 diverse food system stakeholders who provided guidance and support to shape this strategic, 15-year community-based plan. Building off the findings of the Multnomah Food Report and stakeholder input from the 2010 Food Summit and community workshops, the plan addresses the shared vision, goals and collaborative actions the public and private sectors can take to advance a “regional food system that engages the community in healthy food production, equitable food access, opportunities for collaboration, low environmental impact, living wages and local economic vitality” (Multnomah County Office of Sustainability, 2010). Community engagement was organized around four action pillars: local food, healthy eating, social equity and economic vitality.

The Multnomah Food Action Plan builds upon the existing work of the community, provides a roadmap of the community’s vision and goals, and is a call to action to advance key collaborative actions critical for achieving these goals. Adopted by the County Board of Commissioners in 2011, the plan was endorsed by more than 500 organizations and individuals who signed the Declaration of Support. The plan includes 16 goals and 65 community-wide collaborative actions for local government, businesses, nonprofit organizations, faith communities and learning institutions, as well as 40 actions for individual citizens to take.

Multnomah County continues to act as convener of the Multnomah Food Initiative with the Office of Sustainability and Health Department, partnering to host the annual Multnomah Food Summit and to work with community stakeholders towards implementation of the plan. The Multnomah Food Initiative maintains an interactive map of organizational supporters that shows primary business locations along with the organizations’ level of commitment to different pillars of the county’s Food Action Plan.

Vermont Farm to Plate

Lastly, *Vermont Farm to Plate* is an excellent example of a state-level food system plan that addresses agricultural viability and community food security as well as economic development and environmental performance. It took a whole systems “soil to soil” approach including all types of farm production and markets, and addressing all scales of agriculture and food enterprises (micro-, small-, medium- and large-scale operations).

Published in 2011, this strategic plan was a result of The Farm to Plate (F2P) initiative, which was approved by the Vermont legislative session in 2009. It came as the result of two member-based public policy organizations, Vermont Businesses for Social Responsibility and Rural Vermont, which crafted and helped win legislative approval for the creation of a F2P Investment Program. The legislation tasked the Vermont Sustainable Jobs Fund (VSJF), in consultation with the Vermont Sustainable Agriculture Council, to craft a strategic plan based on a broad scope of work.

The VSJF is an economic development authority created by the Vermont Legislature in 1995 to accelerate the development of Vermont’s green economy. They were charged with creating and overseeing the development of “a 10-year strategic plan to strengthen Vermont’s food system” to “encourage policies and strategic investment that accelerate the movement toward strong local and regional food systems” (Vermont Sustainable Jobs Fund, 2011). The primary goals of the legislation were to: increase economic development in Vermont’s food and farm sector, create jobs in the food and farm economy, and improve access to healthy local foods for all.

The plan is a blueprint to address food concerns in the state of Vermont. It was created to help coordinate and maximize existing food system activities. Like the regional plans above, it was data driven, based on a detailed food system assessment—in fact, one of the most comprehensive assessments AFT has reviewed. A most interesting aspect of this data gathering was an economic impact analysis that found that for every 5 percent increase in production, total food sector employment increases by an average of 1,500 jobs. The direct impact of a 5 percent increase in production would be \$135 million in annual output per year from 2011 to 2020, and with multipliers the total output would increase by an average of \$177 million per year.

Vermont F2P also involved an integrated stakeholder engagement process that included the Sustainable Agriculture Council and 1,500 Vermonters as well as multiple regional summits, open public forums where complex issues were discussed. The engagement process also included 24 focus groups, eight regional summits and more than 200 in-depth interviews. Three primary goals emerged: increase economic development in the food and farm sector, create jobs in the food and farm economy, and improve access to healthy local foods. The original F2P plan had 33 goals, but when it was revised the goals list was trimmed to 25.

One of the plan's outcomes was the formation of the Farm to Plate Network, a self-governing network of 150 members, which is responsible for implementing the plan. Other outcomes include: launching new private enterprises through targeted investment and collaboration among various funding streams, the deployment of more than \$1.26 million from the Vermont Agriculture Innovation Center, Jobs Bills, and Vermont Farm Viability Program funds—which has leveraged an additional \$2.7 million in funding—to strengthen Vermont's food system, and to date the addition of about 450 private sector jobs and 120 food system establishments since the F2P was released.

CONCLUSIONS

Both FPCs and food system plans appear effective at engaging diverse stakeholders, giving them a voice, fostering dialogue and educating the public. Otherwise, AFT found significant differences between them. Partly these come as a result of their design and structure: FPCs tend to be volunteer organizations established to convene stakeholders to engage in education and policy analysis over time, whereas food system plans are a short-term activity intended to engage stakeholders to chart a course for future policy action and investment. While both may address community food security and farm viability, food system plans tend to be more holistic whereas FPCs are more focused on specific interventions within the system.

Most FPCs focus on the nexus of healthy food access, especially for vulnerable consumers, small farms and urban agriculture, typically through direct marketing and local procurement policies. Food system plans also focus on the relationship between agricultural viability and community food security but tend to be broader in their view and approach, with more focus on rural communities, bolstering commercial agriculture and complex approaches to keeping farmland in farming.

With few exceptions, FPCs focused most on the middle parts of the system—between producers and consumers—with less emphasis on capacity issues throughout the whole system, especially labor, the protection and conservation of both acres and inches of farmland, and environmental performance, such as recycling and upcycling food and food packaging waste. Food system plans were more comprehensive, addressing infrastructure and capacity issues as well as focusing on increasing urban food production, expanding the local food infrastructure, implementing business development strategies, creating opportunities for local producers to access existing institutional and wholesale markets, improving access to healthy food to underserved populations, increasing public awareness and educating the public on access to healthy food.

Both FPCs and food system plans are effecting incremental policy change. It is less clear whether they bring about transformational or systemic change. This paper confirms previous findings that limited knowledge among state and local policy makers and planners about methods and tools has hindered local efforts (Raja, Born and Russell, 2008) —especially those that seek to be truly holistic. However, both FPCs and food system planning are dynamic approaches, and much progress has been made over the past few years to move them forward. While so far often fragmented and localized, FPCs and food system planning represent two important approaches that state and local governments are using to increase food system knowledge and create or improve policies to support local farmers and consumers to improve community food security and agricultural viability. In addition, these examples suggest that combining both approaches may have the most lasting impacts.

BIBLIOGRAPHY

American Dietetic Association (ADA). 2007. Position of the American Dietetic Association: Food and Nutrition Professionals Can Implement Practices to Conserve Natural Resources and Support Ecological Sustainability. *Journal of the American Dietetic Association*, 107(6), 1033-1043.

<http://www.eatright.org/About/Content.aspx?id=8360>

American Medical Association. 2009. Report 8 of the Council on Science and Public Health: Sustainable Food, Resolution 405, A-08.

<http://www.ama-assn.org/ama1/pub/upload/mm/443/csaph-rep8-a09.pdf>

American Planning Association. 2007. Policy Guide on Community and Regional Food Planning.

<http://www.planning.org/policy/guides/adopted/food.htm>

American Planning Association. 2011. Principles of a Healthy, Sustainable Food System.

<http://www.planning.org/nationalcenters/health/foodprinciples.htm>

American Planning Association. 2012. Planning for Food Access and Community-Based Food Systems: A National Scan and Evaluation of Local Comprehensive and Sustainability Plans.

<http://www.planning.org/research/foodaccess/pdf/foodaccessreport.pdf>

American Public Health Association. 2007. Toward a Healthy, Sustainable Food System.

<http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1361>

Andrews, M. 2010. More Americans Relied on Food Assistance During Recession. *Amber Waves*. USDA Economic Research Service.

<http://www.ers.usda.gov/AmberWaves/December10/Findings/FoodAssistance.htm>

Bellows, A. C. and M. W. Hamm. 2003. International Effects on and Inspiration for Community Food Security Policies and Practices in the USA. *Critical Public Health* 13(2), 107-123.

Borron, S. M. (2003). Food Policy Councils: Practice and Possibility. *Lane County Food Coalition, Hunger-Free Community Report*. Eugene, Oregon.

http://www.lanefood.org/pdf/food_policy_councils/food_policy_council_report_february_2003.pdf

Burgan, M. and M. Winne. 2012. Doing Food Policy Councils Right: A Guide to Development and Action. *Mark Winne Associates*. <http://www.markwinne.com/wp-content/uploads/2012/09/FPC-manual.pdf>

Buzby, J. C., H. F. Wells and G. Vocke. 2006. Possible Implications for U.S. Agriculture from Adoption of Select Dietary Guidelines. *Economic Research Report Number ERR-31*. USDA Economic Research Service. <http://www.ers.usda.gov/publications/err-economic-research-report/err31.aspx>

Canning, P. 2011. A Revised and Expanded Food Dollar Series: A Better Understanding of Our Food Costs. *Economic Research Report Number ERR-114*. USDA Economic Research Service.

<http://www.ers.usda.gov/publications/err-economic-research-report/err114.aspx>

Capra, F. 1996. *The Web of Life: A New Scientific Understanding of Living Systems*. Anchor Books. New York, NY.

Cassidy, A. and B. Patterson. 2008. *The Planner's Guide to the Urban Food System*. University of Southern California School of Policy, Planning and Development Center for Sustainable Cities.

<http://www.planning.org/thenewplanner/2008/spr/pdf/PlannersGuidetotheFoodSystem.pdf>

Clancy, K., J. Hammer and D. Lippoldt. 2007. Food Policy Councils: Past, Present and Future. In *Remaking the North American Food System: Strategies for Sustainability*, eds. C.C. Hinrichs and T.A. Lyson. University of Nebraska Press. Lincoln, Nebraska.

Clapp, J. 2009. *Food in the Public Interest: How New York City's Food Policy Holds the Key to Hunger, Health, Jobs and the Environment*. Office of Manhattan Borough President Scott M. Stringer. New York, NY.

Coleman-Jensen, A., M. Nord, M. Andrews and S. Carlson. 2012. *Household Food Security in the United States in 2011*. Economic Research Report Number ERR-141. USDA Economic Research Service.

<http://www.ers.usda.gov/publications/err-economic-research-report/err141.aspx>

Commonwealth of Massachusetts. 1974. Final Report of the Governor's Commission on Food in Search of a Food Policy. <http://www.mass.gov/eea/docs/agr/boards-commissions/governor-commission-on-food.pdf>

Congressional Budget Office. 2012. The Supplemental Nutrition Assistance Program.

<http://www.cbo.gov/publication/43173>

Connecticut Department of Agriculture. Community Investment Act 2005.

<http://www.ct.gov/doag/cwp/view.asp?a=1366&q=320938> [Retrieved Sep. 2012]

Cornell University Division of Nutritional Sciences. n.d. A Primer on Community Food Systems:

Linking Food, Nutrition, and Agriculture. <http://www.discoverfoodsys.cornell.edu/pdfs/Primer.pdf>

Delaware Valley Regional Planning Commission (DVRPC). 2010. Food System Planning: Municipal Implementation Tool #18. April. http://www.ruaf.org/ruaf_bieb/upload/3304.pdf

Delaware Valley Regional Planning Commission (DVRPC). 2011. *Eating Here: Greater Philadelphia's Food System Plan*. <http://www.dvrpc.org/reports/10063.pdf>

Dillon, C. 2007. Counties and Local Food Systems: Ensuring Healthy Foods, Nurturing Healthy Children. National Association of Counties.

http://www.farmtoschool.org/files/publications_133.pdf

Drake, L. 2007. Connecticut Food Policy Council Chair. Personal Communication, October 25.

Drake University Agricultural Law Center. 2005. *State and Local Food Policy Councils: Building a Better Food System – Strengthening Food Democracy*.

<http://www.statefoodpolicy.org/?pageID=qanda#WhatIsAFoodPolicyCouncil>

Farmland Information Center. 2010. Food in the Path of Development. American Farmland Trust.

Food and Agriculture Organization of the United Nations. 2003. Food security concepts and measurement. Chapter 2 of *Trade Reforms and Food Security: Conceptualizing the linkages*. Rome, Italy: Food and Agriculture Organization of the United Nations.

<http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>

Fox, C. 2010. Food Policy Councils: Innovations in Democratic Governance for a Sustainable and Equitable Food System. Los Angeles Food Policy and Task Force. UCLA Planning Department.

http://goodfoodlosangeles.files.wordpress.com/2011/01/fpc_final_dist-5-indd.pdf

Freedgood, J., M. Pierce-Quinoñez and K. Meter. 2011. Emerging assessment tools to inform food system planning. *Journal of Agriculture, Food Systems, and Community Development*. ISSN: 2152-0801.

<http://www.agdevjournal.com/component/content/article/87-food-system-planning-papers/224-emerging-assessment-tools.html>

Hamilton, N. 2002. Putting a Face on Our Food: How State and Local Food Policies Can Promote the New Agriculture. *Drake Journal of Agricultural Law*, 7(2). Des Moines: Iowa.

Harper, A., A. Shattuck, E. Holt-Gimenez, A. Alkon, and F. Lambrick. 2009 Food Policy Councils: Lessons Learned. *Food First: Institute for Food and Development Policy*.

<http://www.foodfirst.org/sites/www.foodfirst.org/files/pdf/Food%20Policy%20Councils%20Report%20small.pdf>

Heimlich, R., and W. Anderson. 2001. Development at the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land. Agriculture Economic Report Number AER-803. USDA Economic Research Service.

<http://www.ers.usda.gov/publications/aer-agricultural-economic-report/aer803.aspx>

Hoppe, R., J. M. MacDonald and P. Korb. 2010. Small Farms in the United States: Persistence Under Pressure. Economic Information Bulletin Number EIB-63. USDA Economic Research Service.

<http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib63.aspx>

Huang, S. and K. Huang. 2007. Increased U.S. Imports of Fresh Fruit and Vegetables. USDA ERS, ERS-FTS-328-01. http://www.ers.usda.gov/media/187841/fts32801_1_.pdf

Iowa Corridor Food & Agriculture Coalition. 2010. A Healthy Seasonal Local Food System Plan. http://www.farmlandinfo.org/documents/39000/Healthy_Seasonal_Local_Food_System_Plan.pdf

Irwin, E. G., and N. E. Bockstael. 2007. The Evolution of Urban Sprawl: Evidence of Spatial Heterogeneity and Increasing Land Fragmentation. *Proc. Natl. Acad. Sci. U.S.A.*, 104, 20, 672-20, 677, doi: 10.1073/pnas.0705527105

Koliba, C., E. Campbell, and H. Davis. 2011. Regional Food Systems Planning: A Case Study from Vermont's Northeast Kingdom. *Food System Research Collaborative, Opportunities for Agriculture Working Series*, 2(2). <http://www.uvm.edu/foodsystems/documents/workingpapers/vol2/02WorkingPaperKoliba.pdf>

Low, S. A., and S. Vogel. 2011. Direct and Intermediated Marketing of Local Foods in the United States. Economic Research Report Number ERR-128, USDA Economic Research Service. <http://www.ers.usda.gov/publications/err-economic-research-report/err128.aspx>

Martinez, S., M. Hand, M. Da Pra, S. Pollack, K. Ralston, T. Smith, S. Vogel, S. Clark, etc. 2010. *Local Food Systems: Concepts, Impacts and Issues*. Economic Research Report Number ERR 97. USDA Economic Research Service. <http://www.ers.usda.gov/publications/err-economic-research-report/err97.aspx>

Mid-Ohio Regional Planning Commission. 2010. Central Ohio Local Food Assessment and Plan. The Columbus Foundation. <http://www.morpc.org/pdf/CentralOhioLocalFoodAssessmentAndPlan2010.pdf>

Multnomah County Office of Sustainability. 2010. Multnomah Food Action Plan: Grow and Thrive 2025. http://www.multnomahfood.org/Action_Plan_and_Reports/Multnomah_Food_Action_Plan

National Farm to School Network. <http://www.farmtoschool.org/>

Neuner, K., S. Kelly and S. Raja. 2011. Planning to Eat: Innovative Local Governments Plans and Policies to Build Healthy Food Systems in the United States. SUNY Buffalo. http://www.farmlandinfo.org/documents/39040/Planning_to_eat_SUNYBuffalo.pdf

Oakland Food Policy Council. www.oaklandfood.org/home/about_us [retrieved August 2012]

Pothukuchi, K. and J. Kaufman. 2000. The Food System: A Stranger to the Planning Field. *Journal of the American Planning Association*, Vol. 66, No. 2. Chicago, Illinois.

Raja, S., B. Born and J. Kozlowski Russell. 2008. A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating. Planning Advisory Services (PAS) series, Number 554. American Planning Association.

Sallis, J .F. and K. Glanz. 2006. The Role of the Built Environment in Physical Activity, Eating, and Obesity in Childhood. *The Future of Children*, 16(1), 89-108.

Sarasota Food Policy Council. Sarasota.ifas.edu/AG/agpolicy.shtml

Scherb, A., A. Palmer, S. Frattaroli, and K. Pollack. 2012. Exploring food system policy: A survey of food policy councils in the United States. *Journal of Agriculture, Food Systems, and Community Development*. Advance online publication. <http://dx.doi.org/10.5304/jafscd.2012.024.007>

State of Connecticut General Assembly. 1997. Connecticut Food Policy Council—Membership; duties. Connecticut General Statute § Section 22, Chapter 456.

U.S. Department of Agriculture (USDA). 2009. Summary Report: 2007 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa.

http://www.nrcs.usda.gov/technical/NRI/2007/2007_NRI_Summary.pdf

USDA Agricultural Marketing Service (AMS). 2011. Farmers Markets and Local Food Marketing. <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateS&navID=WholesaleandFarmersMarkets&leftNav=WholesaleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers%20Market%20Growth&acct=fmrdirmt>

USDA, Economic Research Service (ERS). 2013. *Food Security in the U.S.*

<http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx>

USDA-ERS. 2013. Vegetable and Pulses trade. <http://www.ers.usda.gov/topics/crops/vegetables-pulses/trade.aspx>

Vermont Sustainable Jobs Fund. 2011. Farm to Plate Strategic Plan: A 10-Year Strategic Plan for Vermont's Food System.

http://www.vsif.org/assets/files/Agriculture/Strat_Plan/F2P%20Executive%20Summary_6.27.11_Small%20File.pdf

APPENDIX A

Food Policy Council and Food System Plans Interviewed

Connecticut Food Policy Council

Linda Drake

Food Policy Council Chair

Dane County Food Council

Martin Bailkey

Vice Chair of the Dane County Food Council

Delaware Valley Regional Planning Commission (DVRPC)

Alison Hastings

Manager of Office of Strategic Partnerships

Vermont Sustainable Jobs Fund

Erica Campbell

Farm to Plate Program Director

MORPC—Central Ohio Local Food Assessment Plan

Brian Williams

MORPC Agriculture Specialist

Mutnomah Food System Plan

Katie Lynd

Food Policy Coordinator in the Office of Sustainability