Food Systems and Food Security

Statement of Purpose

Along with clean air, clean water, and adequate housing, access to a sufficient and nutritional food supply ranks among the most fundamental requirements for the residents of a healthy society. Very often, issues involving the food cycle of production, distribution, and disposal get overlooked in the planning process, or are combined with economic, environmental, land use, or transportation concerns. Especially in the urban core, food systems may lack the resources to meet the minimum needs of its residents. A cooperative effort between local, regional, and state groups must ensure that the fundamental issues surrounding the food system equitably and completely serve the residents of the Capitol Region.
What is a Food System?
A food system refers to the chain of activities connecting food production, processing, distribution, consumption, and waste management. This system also consists of all associated regulatory institutions and activities. Food systems link farms, processing plants, distribution centers, grocery stores, produce markets, restaurants, consumers, and transfer stations along a continuous cycle of input and output.

What is Food Security?
Food security, as defined by the United States Department of Agriculture (USDA), simply means that “All people at all times have access to enough food for an active healthy life.” This is vital for a population to be healthy and well nourished. Ensuring that the Capitol Region is considered food secure is a necessary goal as the region’s population continues to grow. For most residents of the Capitol Region, the question of how to acquire food is not a question at all. A drive to the supermarket or the restaurant is barely a conscious decision.

The Garden at Billings Forge
Fostering a deep commitment to sustainable agriculture and the local food movement, the Garden at Billings Forge consists of close to 50 garden beds that were built by volunteers using donated materials. These beds are now harvested and maintained by community volunteers and the families that live onsite. Following organic farming practices, the Garden produces over 500 pounds of produce annually. In addition to the food production value, the Garden at Billings Forge creates valuable learning opportunities in Earth Science and Math. It also provides job training skills while fostering the benefits of exercise and community engagement.

www.billingsforgeworks.org

Food security simply means that all people at all times have access to enough food for an active healthy life.
Why is Focusing on the Capitol Region’s Food System Important?

Food plays a central role in our health, customs, heritage, and culture. The importance of ensuring that all residents of the region have the same ease in obtaining adequate and nutritious food is such a fundamental planning responsibility that it, too, is often overlooked. Creating resiliency throughout the Capitol Region is vital in ensuring that the needs of the current and future populations are met. Also crucial is fostering effective and efficient food systems and the goals of food security across the region. A 2009 USDA study indicated that Connecticut experienced a 34 percent increase in the number of households with food insecurity over the three year study period. The Life Sciences Research Office (LSRO) of the USDA defines food insecurity as a condition that is present when the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain.24 This indicates that the region needs to strengthen its food system to better serve residents and establish increased food security.

Nurturing food systems and food security throughout the area is also a key way in which the Capitol Region can reap the benefits of a sufficient and nutritional food supply, and the ecosystem protection that is provided through urban agriculture and working farmlands. While providing food and jobs, these farms also deliver a number of services that have typically been unquantifiable. These include reduction to the urban heat island effect and improved stormwater management as farm plots are pervious surfaces that act as a natural filter for surface and subsurface water. Farmlands also serve to improve air quality, enable aquifer recharge, provide habitat for many species, a stronger sense of community, and in many cases, increased housing values and offer carbon sequestration which is the process of capturing and storing carbon dioxide (CO2) to help mitigate against global warming.

While aspects of food systems planning are crucial to housing, economic, zoning, land use, transportation, and environmental concerns, it is also helpful to address food system planning as a unique issue. There are several major concerns, in frequently overlapping areas, that together comprise the core of a plan for food systems and food security management in the Capitol Region, including:

- Agricultural land preservation
- Land use and zoning related to food access, especially the location of retail food outlets in low-income areas
- Identifying and mitigating food deserts, or locations of low or limited food access throughout the Capitol Region
- Integrating food issues into economic development activities
- Documenting and mitigating the environmental impacts of the food system
- Ensuring that the transportation system allows all residents to have access to food resources

Addressing these areas involves both dealing with each as it relates to the entire food system, as well as taking stock of how each is affected by the other, more familiar aspects of regional planning.

24 Definition was taken from a USDA Action Plan, Solutions to Hunger, US Action Plan on Food Security
Current Conditions

Several of the issues and aspects of the current conditions related to the food system and food security goals have been addressed in other sections of this Plan. The strategies outlined in other sections do not, however, specifically deal with problems and considerations about or created by the components of the food system itself. It is therefore necessary to take a look at how these components are currently functioning within the Capitol Region, an activity that will inevitably reiterate some important goals and strategies found elsewhere in this Plan.

Food Production

Before transportation advances of the 20th Century, food production was a traditionally local endeavor. Grains, meats, produce, dairy, and other foods were taken from local farms to local markets, where local residents would purchase them. The rise of cities and interstate commerce allowed different areas of the country to specialize in specific goods that could be shipped coast to coast quickly. In Connecticut, this changing economy has led to the gradual reduction in the number and size of local farms. Additionally, much prime agricultural land has been left to return to forest. “Because the agricultural industry purchases goods and services from other industries and hires local labor, its economic impact cascades throughout the state’s economy.”25

25 University of Connecticut; College of Agriculture and Natural Resources, September 2010, Economic Impacts of Connecticut’s Agricultural Industry.
Grow Hartford CSA

Community supported agriculture is a partnership of commitment between a farm and a community of supporters. Programs like the Grow Hartford CSA provide direct links between the production and consumption of food because members purchase a “share” of the yearly harvest grown on the farm. This mutually supportive relationship helps to create an economically stable farm operation while also developing a regional food supply, maintaining a sense of community, and encouraging land stewardship. The Grow Hartford farm staff grows more than 35 varieties of vegetables, flowers and herbs. Members pick up their produce at the Grow Hartford Laurel Street site.

Photo is from www.growhartford.org

Table 7.1 Capitol Region Farmers Markets and Community Support Agriculture

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<tr>
<th>CAPITOL REGION FARMERS MARKETS</th>
<th>CAPITOL REGION COMMUNITY SUPPORTED AGRICULTURE</th>
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<td>Bloomfield Farmers’ Market</td>
<td>Rocky Hill - Fair Weather Acres</td>
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<td>East Granby Farmers’ Market</td>
<td>Simsbury - George Hall Farm</td>
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<td>East Hartford Farmers’ Market</td>
<td>Stafford - Down to Earth CSA</td>
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<td>Ellington Farmers’ Market</td>
<td>Suffield - Cupola Hollow Farm</td>
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<td>Enfield Farmers’ Market</td>
<td>Suffield - Oxen Hill Farms CSA</td>
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<td>Farmington Farmers’ Market</td>
<td>West Granby - Holcomb Farm CSA</td>
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<td>Glastonbury Farmers’ Market</td>
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<td>Granby Farmers’ Market</td>
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<td>Hartford - Capitol Ave Farmers’ Market</td>
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<td>Hartford - Homestead Farmers’ Market</td>
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<td>Hartford - Billings Forge Farmers’ Market</td>
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<td>Hebron Farmers’ Market</td>
<td>Stafford Springs Farmers’ Market</td>
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<td>Manchester Community College Farmers’ Market</td>
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<td>Manchester Farmers’ Market</td>
<td>Tolland Farmers’ Market</td>
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<td>New Britain Farmers’ Market</td>
<td>West Hartford - Whole Foods Farms’ Market</td>
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<td>Newington Farmers’ Market</td>
<td>West Suffield Farmers’ Market</td>
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<td>Simsbury Community Farm Farmers’ Market</td>
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<td>Rocky Hill - Fair Weather Acres</td>
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<td>Enfield - Easy Pickin’s Orchard</td>
<td>Simsbury - George Hall Farm</td>
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<td>Glastonbury - Beckett Farms, LLC</td>
<td>Stafford - Down to Earth CSA</td>
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<td>Glastonbury - Deercrest Farm</td>
<td>Suffield - Cupola Hollow Farm</td>
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<td>Granby - Windham Gardens</td>
<td>Suffield - Oxen Hill Farms CSA</td>
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<td>Hartford - Grow Hartford CSA</td>
<td>West Granby - Holcomb Farm CSA</td>
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<td>Marlborough - Highland Art Farm</td>
<td>West Granby - The Garlic Farm</td>
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<td>Source: <a href="http://www.ctnofa.org">www.ctnofa.org</a> and Connecticut Department of Agriculture</td>
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Community Based Initiatives

Many of the towns in the Capitol Region are acknowledging the benefits provided by community gardens and the emphasis on local food production. An increase in farmers markets throughout the region as well as urban agriculture initiatives like the Garden at Billings Forge and Fresh Place, both in Hartford, are strengthening the Capitol Region’s food security while also fostering community self-reliance. These community gardens and farmers markets provide residents access to healthy local produce that has been grown onsite or instate rather than across the country.

Responding to the issue of economic sustainability, many of the farmers markets throughout the Capitol Region are now accepting alternative forms of payment such as the Supplemental Nutritional Assistance Program (SNAP) EBT card and Women, Infants, and Children (WIC) cards. This is important as approximately 30 percent of Hartford households are enrolled for SNAP benefits.26 “By accepting these alternative forms of payment, farmers markets can help to make fresh, healthy, and local food more accessible to low-income families while increasing the revenue of farmers.” 27

The presence of community supported agriculture operations (CSAs), community gardens, and farmers markets have been increasing in the region over the last decade. A CSA is a partnership of mutual commitment between a farm and a community of supporters which provides a direct link between the production and consumption of food. Supporters cover a farm’s yearly operating budget by purchasing a share of the season.28 See Table 7.1 for a list of active farmers markets, and CSAs in the Capitol Region.

Community gardens and community supported agriculture is also a key way in which the Capitol Region can strengthen food security throughout the area. These projects invite community participation as a means to produce and distribute foods in the local region. Projects such as the Community Farm of Simsbury, Deercrest Farm in Glastonbury, and the Grow Hartford CSA are prosperous examples of agricultural endeavors that have proven to be successful and sustainable in the Capitol Region. Of the over 30 farmers markets in the region, at least seven are located in downtown Hartford.

Other initiatives to promote access and healthy eating choices include community kitchens. These programs, like the North Hartford Community Kitchen provide participants with hands-on cooking skills and experience to supplement the healthy eating messages that these classes provide. In neighborhoods with a limited selection of fresh foods and produce, these community kitchens can increase nutritional

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26 Hartford Food System, http://bit.ly/1q4SF0H
knowledge and cooking skills throughout socio-economically challenged neighborhoods. They also emphasize the cultural backgrounds of neighborhoods while fostering a sense of community because recipes and cultural traditions can be shared and appreciated by all.

**Food Distribution**

The distribution of food includes restaurants, food services and grocery stores. Aside from feeding patrons, restaurants can serve as an indicator of a municipality’s or a region’s economic health. Further, successful, non-fast food restaurants can act as local or regional attractions, bringing outside visitors to the area. The restaurant and retail food industry in the Capitol Region is growing at a moderate rate. According to the Connecticut Department of Economic and Community Development (DECD), the number of jobs in food and beverage preparation and service in the region was expected to grow 4.9 percent between 2008 to 2018. This statistic has dropped significantly since the previous Plan where it was estimated to grow 15.5 percent between 1995 to 2005. This statistic not only reflects the extent to which people dine out, but also the overall economic growth and its link to the availability of jobs in this sector.

More pressing than the issue of restaurants is that of grocery stores and the availability of retail food in the Capitol Region. In most of the suburban or rural areas, retail food distribution is centered on large, chain supermarkets that are accessible by automobile. Car trips to these supermarkets and surrounding retail areas account for a significant percentage of total daily miles driven in the Capitol Region.

With guidance from the Hartford Food System, an organization which works to increase access to nutritional food, many neighborhood retail stores have been increasing their produce sections while also reorganizing displays to better showcase their available inventory. A recent study from The University of Connecticut’s Center for Public Health and Health Policy reports that for a sample of 372 customers shopping across nineteen corner stores in Hartford, more produce purchases were made when there was a wide assortment of fruits and vegetables. “For each additional type of fruit or vegetable available in the store, the estimated odds of a customer purchasing fruits increased by 12 percent and the odds for purchasing vegetables increased by 15 percent.”

As the push for a stronger integration of local food production interacts with the chain of economic development, it becomes evident that smaller scale, local initiatives like the Grow Hartford CSA and regional farmers markets are an appropriate and sustainable choice for our region. Analyzing the economic development matrix below, linkages between production and distribution can be connected in a fluid and congruent way. Regional farmers markets like The Hartford Regional Market near Brainard Airport in southeast Hartford, which is opened on the weekends, and acts as a regional distribution center, as well as over a dozen more throughout the region provide opportunities for local farmers and growers to sell and distribute their produce to residents of the region. This input and output cycle is productive in ensuring that the region maintains viable food security.

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Food Deserts

The Healthy Food Financing Initiative (HFFI) Working Group defines a food desert to be “A low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store.” Low access to a healthy food retail outlet is considered more than one mile from a supermarket or large grocery store in urban areas or more than ten miles from a supermarket or large grocery store in rural areas. In the Capitol Region, based on data from the USDA, relatively few areas have been defined as potential food deserts.

Although an analysis of USDA data indicates there are key food deserts throughout the Capitol Region, it is important to remember that the definition responds to conditions involving large grocery stores. Often, especially in urban neighborhoods typical to the Hartford Metro area, there are many medium sized corner stores and bodegas that enhance the food security of the region. These stores are frequent throughout the urban core and have been significantly increasing their efforts to supply a wide variety of fruits and vegetables as well as foods that are representative to the cultural groups residing in the local area or neighborhood.

Although some census tracts may be considered food deserts due to accessibility issues, it is also important to analyze the presence of public transit options throughout the region. A comparison of CTTransit bus routes to locations which are considered to be food deserts by the USDA are generally well accessed by public transit. These connections and routes provide riders access to grocery stores while also enhancing the food security of the Capitol Region. The data regarding grocery store locations was generated from USDA data for the year 2010. Land use policy, transportation policy, economic development policy, and regional cooperation must all work together to identify ways in which this food security can be maintained and improved upon.

31 U.S. Department of Health and Human Services, Administration for Children & Families, Office of Community Services, http://1.usa.gov/1ioP0mV
Consumption

Food consumption details in the Capitol Region are hard to quantify. Food intake relates closely to concerns about proper nutrition and obesity, which then leads to consideration of the overall health of the region’s population. The Connecticut Department of Public Health (DPH) conducted a report for the entire State of Connecticut in 2010 about health, nutrition, and behavioral risk factors. In general, the Capitol Region residents have somewhat unhealthy eating habits. In 2009, three out of five Connecticut adults (59 percent) were overweight or obese. These obesity levels raise long-term concerns about diseases like hypertension and diabetes, and the concerns associated with their treatment. This is a concern as four of the six causes of death in the United States, heart disease, stroke, diabetes, and some cancers, are diet-related chronic diseases. In 2008 in Connecticut, an estimated $735 million in direct medical costs were attributed to obesity, and costs are projected to increase to $2.9 billion in 2018.32

These studies point out that Connecticut residents are eating too much of the wrong foods and not enough healthy ones such as fruits and vegetables. Promoting farmers markets and grocery stores across the region that supply a diversity of produce is one method in which the Capitol Region can support furthered healthy eating habits of its residents. The issue of public health and proper food consumption is not directly linked to land-use policy, but the root causes of these food consumption issues may be tied to food system planning and inadequate education on proper nutrition. Appropriate areas for regional policy support include improving access to a nutritious food supply, creation of recreational facilities that provide opportunities for exercise, and state and local efforts to educate residents on the importance of good nutrition.

Manchester Community College Farmers’ Market

The purpose of the farmers’ market is to reconnect the community to the local farmers who produce their food. The sustainability team at Manchester Community College is working to promote awareness of locally grown foods among students, staff, faculty, and community residents. Shoppers can expect to find locally grown fruits and vegetables, friendly and knowledgeable farmers and vendors, as well as live music.

www.mcc.commnet.edu

Waste Management

The disposal of food waste and other trash is managed at the municipal level, generally by the local public works department. In smaller towns, no public waste pickup is available, so individual residents are required to hire a private waste pickup contractor or bring trash to the local transfer station. Household trash ends up at the regional resource recovery facility or at a local or regional transfer station. Status and capacity for specific transfer stations vary from municipality to municipality, but in all cases the amount of food-related waste produced could be reduced significantly by relatively minor changes in household behavior. Many local, regional and state recycling efforts have encouraged the separation of cardboard, paper, plastic, and glass from general waste. Likewise, manufacturers could be encouraged to use higher proportions of post-consumer recycled materials in packaging. Finally, local efforts could be advanced to educate residents about the techniques and benefits of composting food wastes.

A Comprehensive Approach to Food Systems and Food Security

Efforts to strengthen the Capitol Region’s food security will rely heavily on a holistic approach to food systems planning. This requires nurturing the various sectors of the food system that include production, distribution, and waste management. The Hartford Food System is a program in the Capitol Region that is fostering this comprehensive model of food systems and food security. One of the nation’s oldest organizations working to promote the concept of community food security, the Hartford Food System works to increase access for all residents to food outlets, particularly grocery stores and farmers markets. They also strive to deepen the connection between food consumers and the agricultural production process. Since 1978, Hartford Food System has developed dozens of projects and initiatives that deal with a wide range of food cost, access, and nutrition issues.33 They continue to be a leader in efforts to secure successful food systems and food security.

33 http://bit.ly/Iq4SF0H
A. Preserve and Look for Opportunities to Reclaim the Capitol Region’s Working Lands

The Capitol Region’s self-identity is strongly tied to its history and culture of farming. While many farms exist throughout the region, they are disappearing through development faster than they can be preserved. Additionally, many once open farm fields have reverted back to forest. Reclaiming some of this land for continued use as agricultural working lands can help increase the region’s food security. A variety of tools must be employed to ensure that these valuable properties are maintained as productive working lands.

Policy Recommendations
1. Support expansion of the Connecticut Farmland Preservation Program to allow for the purchase of development rights for multiple farms annually. Look for opportunities to reclaim re-forested agricultural lands.
2. Support community supported agriculture as well as local and regional farm cooperatives and farmers markets to promote healthy and sustainable locally grown products.
3. Encourage the inclusion of local farms in dedicated agricultural zones and town open space plans.

B. Improve Regional Residents’ Access to Food Resources

Hartford residents have limited access to the large supermarkets that are enjoyed by the automobile-dominated suburban areas of the Capitol Region. This large grocery store model does not seem to be suitable to urban areas as most of the stores are small corner shops and bodegas. The Capitol Region can provide quality food resources to the community by promoting healthy options throughout these stores. Although there are many transit routes and options that link residents to food supply, it is essential that these systems are fostered in a way that continues to provide access to the residents of the communities, especially in the urban neighborhoods of the Capitol Region. The economic and social health of Hartford is a key to the continued growth of the region. Ensuring convenient access of all residents to the highest quality food products is a major requirement of that health.

Policy Recommendations
1. Support redesigning and expanding bus routes to better serve transit-dependent shoppers.
2. Encourage innovative approaches to assisting transit-dependent shoppers, such as equipping buses with grocery racks and supporting transit-oriented development.
3. Support zoning changes and economic incentives that would allow grocery stores to locate and succeed in urban and lower-income areas.
GOALS & POLICY RECOMMENDATIONS

4. Encourage local, regional, and state planning and human service officials to consider access to food in economic, land use, transportation, and other development and functional plans.

5. Support training for planners designed to increase food system awareness and skills.

6. Support zoning and community support for the creation of urban gardens.

C. Improve the Health and Nutrition of the Region’s Population

As documented by the Connecticut Department of Public Health (DPH), residents of the Capitol Region, and of Connecticut as a whole, are not eating enough of the proper foods. Educating residents about proper nutrition and ensuring access to fresh produce and other healthy foods are key components to maintaining the health and wellness of the region.

Policy Recommendations

1. Actively promote local and regional farmers markets as ideal opportunities to support local agriculture and to find fresh fruits and vegetables.

2. Support state and local efforts to educate residents about proper nutrition and the health risks associated with obesity.

3. Integrate exercise-related education with recreational opportunities and the promotion of regional bicycle and recreation trails.

4. Promote community kitchens that integrate healthy nutrition lifestyles with the cultural character of the locations.

5. Promote the continued use of SNAP and WIC benefits at farmers markets and CSAs throughout the Capitol Region.

D. Reduce Environmental Impacts of the Food System

Assessing the entire food system allows for a holistic view of the specific impact that the production and consumption of food has on the environment. Sustainability of the food system and of a healthy environment warrants the adoption of several management practices.

Policy Recommendations

1. Work with local officials to encourage wider participation in recycling programs.

2. Support education and participation in composting of food and other biodegradable wastes.

3. Work with state and federal officials to assist the region’s farmers, developers and homeowners in the implementation of best management practices for erosion, sedimentation, runoff, pesticide use and fertilizer use.