

Project Update: August 2010

**The Johns Hopkins Center for a Livable Future Food System Mapping Project:
“Exploring Maryland’s Agriculture, Food, and Public Health Landscape”**

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Project Information Webpage: http://www.jhsph.edu/clf/programs/eating/proj_foodsystem.html

Project Description:

The Johns Hopkins Center for a Livable Future (CLF) continues to develop a mapping resource tool to analyze Maryland’s food system utilizing Geographic Information Systems (GIS) technology for storage, retrieval, mapping, and analysis of geographic data. The project involves the collection and compilation of new and existing data about relevant aspects of the state’s food system, including: local food production; processing and distribution; retail food stores and outlets; nutrition and agricultural institutions; and other pertinent food system and public health information. The primary purpose is to establish a resource that collects information from disparate sources and maps it to strengthen our understanding of the local food systems and how they work. Beyond understanding the local systems, this project will be integral in understanding Maryland’s role in the greater regional food system, and can serve in future regional collaborative projects.

The food system mapping resource tool currently includes in-depth information on Baltimore City and statewide data where available. CLF is interested in expanding to other counties and welcomes inquiries from interested parties.

Goal:

To create an interactive resource tool for public health, nutrition and agriculture communities who are developing research and program activities to strengthen the local food systems through improving farm viability, increasing access to healthy food, and addressing health disparities and inequities.

Intended Map Users:

Agriculture community: Farmers, state and local departments of agriculture, cooperative extension

Social service and advocacy organizations: Hunger advocacy groups, emergency food providers, Maryland-based foundations, public institutions, and non-profit organizations

Policy making community: City, county, and state governments; regional economic development agencies; planning departments; Chesapeake Bay and other regional organizations

Research community: Public health, nutrition and environmental health students and researchers

Phase One:

The project began with the creation of a snapshot of the current landscape of the food system and its infrastructure throughout Maryland. Initial data including specific information about farms, stores, schools, etc. for which we could obtain the actual addresses was collected. This location specific data was then combined with aggregated information from key sources such as the USDA and Census Bureau.

This first phase of the mapping resource tool was completed in May 2009, using the GIS programs, ArcMap and ArcInfo (by Esri), static maps were created, which were used in presentations and for specific research projects. The maps were saved in PDF format and shared with interested parties upon request. A select few issues briefs, with accompanying maps, about the food environment in Baltimore were created and loaded onto CLF's website.

In addition to sharing maps, data sets were also shared. These were shared in either Excel spreadsheet format or as an ArcMap shapefile, with geographic information embedded in the data. The most requested data was food store and farmers market and community garden locations in Baltimore city.

CLF has fielded multiple requests for maps which has reinforced our belief that there is great need for food environment and food system data.

Location specific data currently included:

• **MARYLAND DATA:**

- Maryland farms producing food for human consumption that sell within regional markets (identifying information will include location, primary goods produced, marketing methods, and production practices like Certified Organic)
- Farmers Markets
- Slaughter and processing facility locations
- Non-animal processing facilities
- Emergency food outlets and government nutrition program locations: food bank locations, stores that accept food stamps and WIC vouchers
- Institutions: public schools, colleges and universities, hospitals, including schools that offer free& reduced lunch, and those participate in the Summer Food Service Program

• **BALTIMORE:**

- Retail food outlets:
 - Supermarkets, small grocery stores (including corner stores), convenience and other small food outlets
 - Farmers markets (outdoor) and indoor / “covered” markets
 - Restaurants – full service, carry out and fast food,
- Food-producing community gardens and urban farms within Baltimore city limits
- Emergency food outlets and government nutrition program locations: soup kitchens, food bank produce drops, stores that accept food stamps and WIC vouchers
- Slaughter and processing facility locations
- Non-animal processing facilities
- Institutions: public schools, colleges and universities, hospitals and religious institutions
- Public facilities that serve community functions, such as city recreation centers

Regional data currently included:

- Zoning, easements and other land use designations
- Economic, Agricultural and Labor Census data
- Nutritional health data such as rates of diabetes and obesity (in both Baltimore and statewide)

Presentations:

This project is dynamic – data, narrative information and other feedback from stakeholders is continually incorporated through the development of the map database. Presentations and other communication efforts about this “snapshot” have been provided to allow the people and groups identified in the map and other stakeholders a chance to understand this project, the goals and possible applications. These talks also provided opportunities to gather feedback.

Seventeen formal presentations were created and conducted in various forums, ranging from national conferences such as the Community Food Security Coalition conference to informal community association meetings such as the Wintergreen Festival in the Reservoir Hill community in Baltimore.

Twelve of these presentations were with local organizations or as part of classes in local schools and universities. These smaller venue presentations were crucial to the development of the map database and display, as they offered local stakeholders a forum to participate in the project.

In addition to these presentations, CLF was asked, due to the mapping project, to participate in numerous meetings to provide technical assistance and/or participate in collaborative projects studying different aspects of the local food system.

Potential Uses:

- Producer coalitions could identify new markets – for example, farmers could locate nearby farmers markets, or schools interested in farm-to-school programs.
- Baltimore City may possibly identify new transportation routes that would connect low-income areas with farmers markets or other outlets for fresh produce.
- Agribusiness and community investors could help small-scale sustainable producers by identifying ideal locations for new processing facilities.
- The Maryland Food Bank may use the tool to determine if their current food drop-off sites are reaching communities in need.
- Planning departments could examine zoning regulations to identify barriers or opportunities to support local agriculture and local food processing, distribution and sales.
- Researchers and non-profits may use the data to conduct food system analyses that examine geographic risk and protective factors for health outcomes, and make policy recommendations.
- Farmers and distributors working together could identify distribution routes that are underutilized, and potential new drop-off and pick-up locations for wholesale distribution.
- Generally, the tool may be used to monitor changes in the food system.

Phase Two:

Now that a critical mass of information has been collected, an interactive web site is being developed. This site will allow users to interact with the data to create their own map views. In addition, specific data sets will be available for download, in both Excel and ArcMap shapefiles.

Sensitive and non-essential information will be protected. This web version of the map will be available to the public, but users will have to obtain a username and password from CLF in order to access the website.

Additional issue briefs will also be created to cover common areas of interest. These PDF issue briefs will be available for download from the current CLF web page and the new website.

Updates to the current data sets will be completed annually, as the food environment and agricultural production continually change with the economy and cultural shifts over time. New data will also be collected, including:

- Retail Food Outlets and Restaurant locations throughout Maryland
- Community Gardens in urban locales, beyond Baltimore
- Transportation Routes
- Distributors and their delivery routes within Maryland

Anticipated Timelines:

Website Live in Spring 2011

Data collection and updates – ongoing and annually