

Delaware Food Systems and Food Insecurity Mapping Food Access Points for Consumers Briefing Paper

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Issue

Food insecurity impacts people from all walks of life — especially since the start of the pandemic. Mass school closures made food insecurity five times worse for children who previously relied on free school lunch programs. Black and Latino communities, disabled Americans and those without a college degree have been disproportionately impacted. And according to a recent survey of military families from the Military Family Advisory Network, one in five families reported experiencing food insecurity.

Access to safe and healthy food is essential to the population and an important part of Delaware’s regional heritage, economy, culture and health of the citizens. Interconnected activities create an integrated “food system” that produces, processes, distributes, sells Delaware produced foods and disposes food waste. How the food system functions, and the food it provides, influences not only food security and the well-being of Delaware individuals but the economic viability and resilience of the state’s diverse communities and economies.

Addressing food security requires understanding the parts of the Delaware and regional food system and the variety of “linked” systems that create it. For example, each of the following is their own system and yet together make up the larger food system within the state and region: farming enterprises and their respective commodities, food distribution, retail and commodity markets, agricultural environmental ecosystems including sub-systems such as land, water and oceans, and the broader economic, political, and cultural systems. Due to its interconnected nature, it is difficult to separate challenges to the food system that create food insecurity from other state and regional issues.

Understanding how the Delaware food system works also involves recognizing the integration of food system related policies, plans and programming at all levels of state governmental departments including health and human services, public health, labor, natural resources and environmental control, transportation and agricultural. It includes understanding the influence and impact these policies and programs have on private businesses and the general public, as well.

Departments within the state of Delaware have already been working on food insecurity. The issue was elevated during the 2020-2022 pandemic. Agency personnel have worked to identify the systems that can be improved to provide foods to Delaware citizens and support local food production systems. Key to the success is to address the linkages across the Delaware food system with respect to availability of food and access to foods and acquisition of foods.

Availability

A focus on the **supply** of food through production, distribution, and exchange and;

Access

That focusses on **affordability** and **allocation** of food. Access depends on whether the household has enough income to purchase food at prevailing prices or has sufficient land and other resources to grow its own food. Access also includes location of food sources as well as transportation to these food sources.

Acquisition

Knowledge about availability and locations of food access by citizens is key to acquiring what is needed to support health and financial well-being.

Examples of these initiatives include the development of the Food and Farm Policy Council within the Delaware Department of Agriculture to bring together key organizational/departmental representatives to determine best strategies to improve food availability and access. These have included:

- Authorizing the continuation of the school lunch programs during the times when schools were actually closed
- Identifying food insecure communities and identifying resources to support food availability
- Promoting the SnapEd program and eligibility requirements especially for those who are newly qualifying
- Promoting farmers markets and community gardens
- Connecting food producers with the food bank locations, school lunch programs and community food pantries.

These activities have gone a long way in improving food accessibility and availability in Delaware. One area that could use improvement is the promotion of food access points in a consumer-friendly way.

Response and Findings - Mapping Delaware Food Availability and Access

During the April 2021 Forum *Could COVID-19 Disruption Happen Again? Working Collectively to Build Resilience across our Food and Farm Systems on the Eastern Shore and Delaware*, a small group discussed issues surrounding the food insecurity for citizens of the region. Sharing of current initiatives informed the project development process. A key discussion point was the issue of communicating with citizens the location and availability of food. It was determined that a searchable, interactive, geographic web-based tool could be created to help consumers find locations of a variety of food sources would be the goal of their project.

A review of local and national information found that there was no – one website, searchable or otherwise, in Delaware that helped individuals find food access locations. In Maryland, Johns Hopkins has developed the [Maryland Food System Map](#) that provides a searchable resource for citizens of Maryland by helping them locate resources to mitigate food insecurity. On a national level, in late 2021, a national food security effort by Google, Find Food Support, works with No Kid Hungry and the U.S. Department of Agriculture to capture locations with free food support across 50 states. The site features a Google Maps locator tool, <https://foodfinder.us> to identify local food banks, food pantries and school lunch program pickup sites.

In Delaware, work began during the summer of 2021 to cull information from a variety of sources to identify the type of food distribution site, the types of resources provided, the location and the target audience that was supported. Data was organized in a spreadsheet and a searchable tool was developed using Batch GEO software. What has resulted are interactive maps that

include information about local food banks, food pantries, soup kitchens, school provision programs, meals on wheels and other food security efforts. This tool will be provided on a Delaware Food Systems website scheduled to be launched in early 2022.

Efforts have been made to connect with the Google project to see if food sources in Delaware could enhance and expand their efforts. At this time, we have not been successful in making the connections.

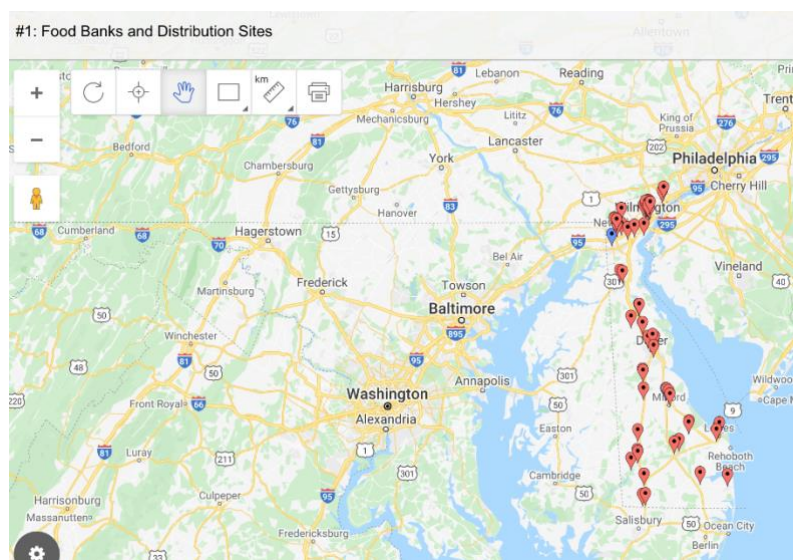
A key to making the searchable website consumer friendly was to differentiate the types of food resources that were available. Data was then organized based on these food resources. Below is a description and example maps of food resources based on the information gathered for Delaware.

Food banks

Food banks function as warehouses. Food banks accommodate large quantities of food purchased in bulk or at wholesale prices, as well as food that's been donated from local farms and processors, citizen volunteers, businesses, and grocery stores. As a centralized hunger relief organization, a food bank acts as a supply line, working through a network of food aid partners and programs to distribute groceries.

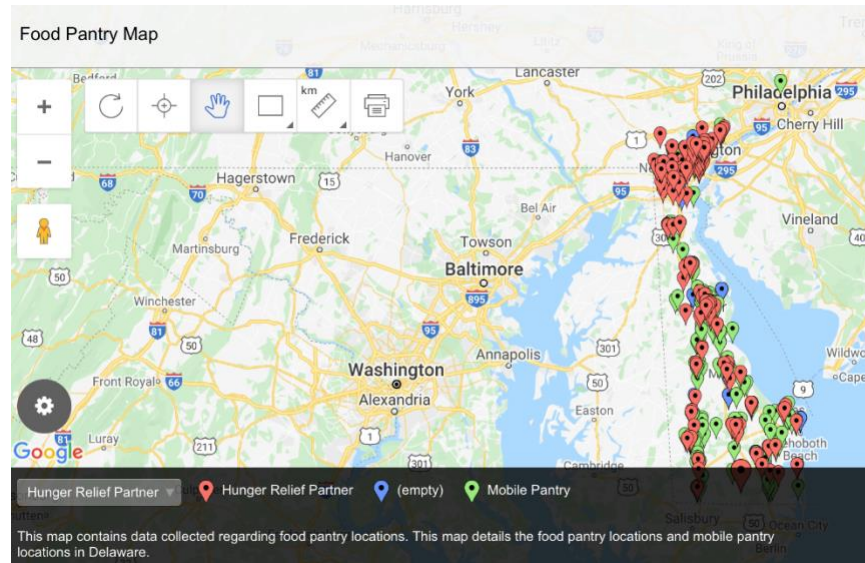
Food banks deliver and provide canned goods and when available perishable items. Food banks often purchase rarely donated meat, eggs, dairy and poultry in bulk at very low cost for redistribution to its member agencies.

Food banks engage in community outreach to offer educational initiatives, conduct gleaning programs by developing partnerships with local farms to garner local foods for distribution, and may provide additional resources to clients through federally funded programs such as the Commodity Supplemental Food Program (CSFP) or Supplemental Nutrition Education Program (SNAP). Based on the data collected as of January 2022, the following screen shot shows an example of two central Delaware Food Bank distribution sites and the Commodity Supplemental Food Program distribution sites.



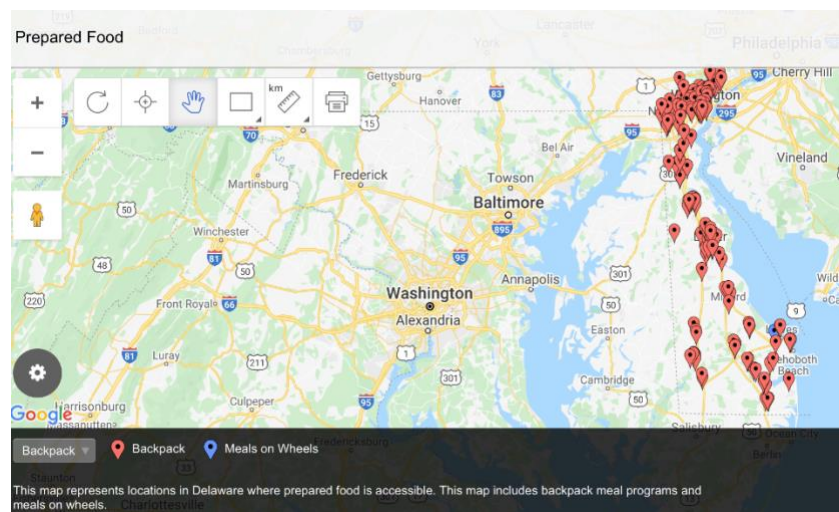
Food pantries

Food pantries are charities that deliver food and grocery products directly to the community. In an effort to remove the barriers that prevent access to underserved areas, food pantries are increasingly going mobile. Mobile food pantries enable quick, flexible delivery of rescued perishable food products, including baked goods, meat, and fresh produce. This screen shot shows sample mobile and non-mobile food pantry locations.



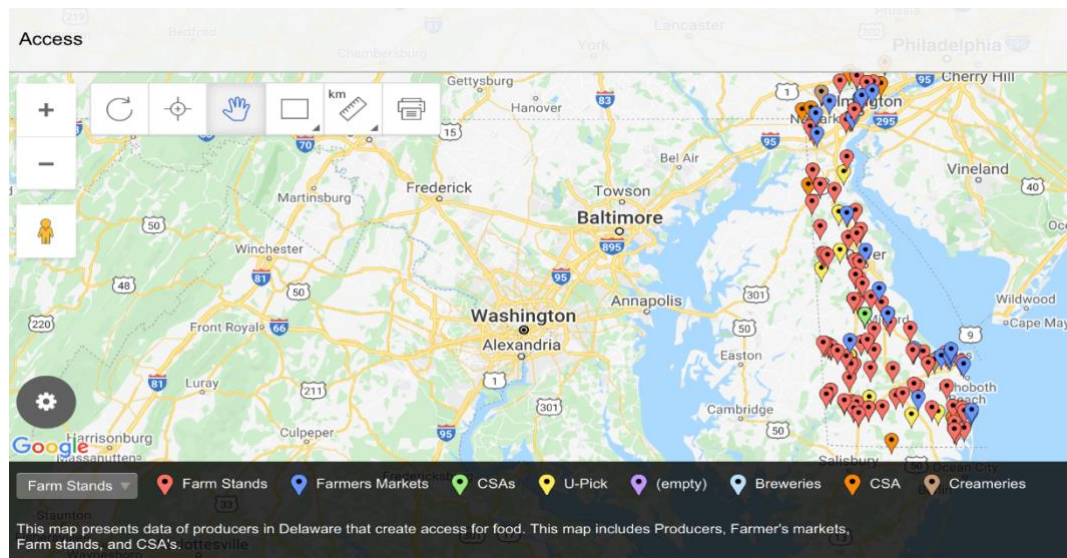
Prepared Meals

Prepared meals include soup kitchens, school-based lunches, food backpack programs, Meals on Wheels and other locations that offer hot or cold, prepared meals. [Sample](#) prepared food locations.



Direct Access to Locally Produced Food Retail Operations

Throughout the state of Delaware there are many direct retail operations that support acquisition of locally grown and produced foods. This screen shot shows sample locations of Farm Stands, Farmers Markets, Community Supported Agriculture (CSAs), Breweries, Creameries and Community Gardens. Direct Access.



Additional Food System Resources and Information

Delaware State Resources

- **Delaware Council on Farm and Food Policy (Del Dept. of Ag)**
<https://farm-and-food-delaware.hub.arcgis.com>
- **Delaware First Map**
<https://firstmap.delaware.gov/>
- **The Food Bank of Delaware**
The Food Bank of Delaware contributes to feeding programs while using food service education and hunger advocacy to promote long-term solutions.
- **Delaware Food Bank Resource Locator**
<https://www.dhss.delaware.gov/dhss/foodbank/resourcelocator.html>
 - **Food Closets**
<https://www.dhss.delaware.gov/dhss/dssc/comfdnut.html>
- **Delaware Farm Bureau**
<https://defb.org>
- **Delaware Food Distribution Handbook**
<https://gss.omb.delaware.gov/food/documents/handbook.pdf>
- **Delaware Future Farmers of America Association**
High school youth learn about agriculture through classroom education and hands-on experience
- **The Fruit and Vegetable Growers Association of Delaware**

The Fruit and Vegetable Growers Association of Delaware encourages improvement in the production and marketing of fruits and vegetables throughout the state of Delaware.

General Food System Links

- **History of Google Project**
 - Project Delta---Moving to Google
<https://blog.x.company/a-new-home-for-project-delta-a39f8286b6d7>
 - **Food for Good**
<https://blog.google/outreach-initiatives/public-policy/connecting-people-to-food-support/>
 - **Food Systems Dashboard** (an EXCELLENT basic resource that outlines the key elements of a food system. Could be added to the “White Paper” section of the website).
https://foodsystemsdashboard.org/assets/FSD%20About%20Pages_May2020.pdf
 - **Food Systems Practitioner and Education Resource Database**
<https://foodsystemsdb.extension.iastate.edu>
 - **Food Planet- Links to Food System Resources**
<https://foodandplanet.org/resources/>
 - **Community Wealth-Local Food Systems**
<https://community-wealth.org/strategies/panel/urban-ag/index.html>
 - **Community, Local and Regional Food Systems**
<https://foodsystems.extension.org>
 - **Local Food Systems Response to COVID**
<https://lfscovid.localfoodeconomics.com>
 - **Food Tank- 22 Educational Programs Changing the Food System**
<https://foodtank.com/news/2015/09/twenty-two-educational-programs-changing-the-food-system/>
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- **Food Systems National Agricultural Law Center-Legal Website**
<https://nationalaglawcenter.org/research-by-topic/local-food-systems/>
 - **Food Systems Overview-Wikipedia**
https://en.wikipedia.org/wiki/Food_system
 - **Background (2008) to Food Systems-Annotated Bibliography**
<https://static1.squarespace.com/static/5877a359f5e231f7a6d2b622/t/590b46d620099ec8d17f4d53/1493911255137/annotated+bibliography+1-29-2009.pdf>

University Based Food System Work

- **University of Delaware-Sustainable Food Systems Major**
<https://www.udel.edu/academics/colleges/canr/departments/plant-and-soil-sciences/undergraduate-programs/sustainable-food-systems/>
- **Johns Hopkins University, Maryland, Center for a Livable Future**
<https://clf.jhsph.edu>
 - **FoodSpan**
High school curriculum of critical food system issues
 - **Food Policy Networks**
Project to support development of state and local food policy
 - **Food System Primer**
Short readings about food system topics and issues.
 - **Livable Future Blog**
Observations and insights into food system issues.

- **Maryland Food System Mapping**
Mapping of Maryland food system, public health and the environment.
- **University of California, Davis, Agricultural Sustainability Institute**
<https://asi.ucdavis.edu>
- **Michigan State University, Center for Regional Food Systems**
<https://www.canr.msu.edu/foodsystems/our-work/>
- **Virginia Technical University, Center for Food Systems and Community Transformation**
<https://foodsystems.centers.vt.edu>

International Food System Resources

- **International Food Policy Institute (IFPRI)**
<https://www.ifpri.org/topic/food-systems>
- **Food and Agriculture Organization (FAO/UN)**
<https://www.fao.org/food-systems/en/>
 - **Sustainable Food Systems Approach**
<https://www.fao.org/3/ca2079en/CA2079EN.pdf>

Selected Publications

Journals

- **Frontiers in Sustainable Food Systems**
<https://www.frontiersin.org/journals/sustainable-food-systems>
- **Journal of Agriculture, Food Systems, and Community Development (JAFSCD)**
<https://www.foodsystemsjournal.org/index.php/fsj/about>
- **Journal of the Agriculture, Food, and Human Values Society**
<https://www.springer.com/journal/10460>
/
- ***Journal of Hunger and Environment Nutrition***
<https://hendpg.org/journal-of-hunger-and-environmental-nutrition-jhen>

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- Annotated Bibliography on Structural Racism Present in the US Food System
<https://www.canr.msu.edu/foodsystems/uploads/files/Annotated-Bibliography-on-Structural-Racism-Present-in-the-US-Food-System-Eighth-Edition.pdf>
 - Innovations in the Food System: Exploring the Future of Food: Proceedings of a Workshop. Washington, DC: The National Academies Press. National Academies of Sciences, Engineering, and Medicine 2020. <https://doi.org/10.17226/25523>
 - Food System Planning Delaware County, Pennsylvania Food Systems Planning
https://www.delcopa.gov/planning/pubs/Portfolio-14_FoodSystems.pdf
 - SARE - Building Sustainable Food Systems <https://www.sare.org/resources/farm-to-table-building-local-and-regional-food-systems/>
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