



Access to Healthy Food: *A Guide for Delaware Local Governments*

By Allison Michalowski & Marcia Scott
Institute for Public Administration

Access to Healthy Food: A Guide for Delaware Local Governments

July 2019

Written by

Allison Michalowski

Public Administration Fellow, Institute for Public Administration

Marcia S. Scott

Policy Scientist, Institute for Public Administration

Published by

Institute for Public Administration

Biden School of Public Policy & Administration

College of Arts & Sciences

University of Delaware

www.ipa.udel.edu

Cover Photo Credits:

Complete Communities; West Side Grows

Preface

Why are some individuals healthier than others? Social determinants of health—conditions where people live, work, and play—affect a wide range of quality of life outcomes. Poorly designed physical environments, sedentary lifestyles, and inadequate nutrition can all impact a person's health.

Our communities need basic elements to support health equity for all people. These elements include access to nutritious food, a quality education, good jobs, affordable housing, equitable health care, parks and recreation, and dependable transportation.

Local governments (i.e., towns, cities, and counties) are recognizing the need to plan for, design, and implement policies to foster healthy and complete communities. Attention has focused on improving the built environment to foster walkable-, bikeable-, and transit-friendly communities; planning to address sprawling land use patterns; and advancing Complete Streets for people of all ages and abilities. Traditionally, food insecurity has been regarded as a public health issue. Recently, local governments have become more attentive to address and incorporate healthy food access as part of local public policy agendas.

As the director of the Institute for Public Administration (IPA) at the University of Delaware, I am pleased to provide *Access to Healthy Food: A Guide for Delaware Local Governments*. This guide recognizes the important role that Delaware local governments can play in improving access to healthy food. Comprehensive plans and community design, policies and regulatory tools, and local partnerships are key strategies that can be utilized by Delaware local governments. I hope that local officials will use this guide to build healthier and complete communities by forging sustainable connections between their residents and local sources of healthy food.

Jerome R. Lewis, Ph.D.

Director, Institute for Public Administration

Acknowledgements

The Institute for Public Administration (IPA) at the University of Delaware gratefully acknowledges its project partners and colleagues at the Delaware Department of Transportation (DelDOT) for their assistance and support of this publication. This publication is one of a series of guides designed to help Delaware local governments build livable and resilient communities while preserving the many characteristics that make each community unique, healthy, and prosperous.

IPA sincerely appreciates the commitment of time and concerted efforts of the following individuals who made this project and the production of this publication within the **Delaware Complete Communities Planning Toolbox** possible. Special thanks go to Allison (Ally) Michalowski, IPA public administration fellow. Ally's initial assignment was to draft a section on access to healthy foods within the "Healthy and Livable" tools section of the online Delaware Complete Communities Planning Toolbox. Her exhaustive research resulted in a lengthy draft that led to this publication. In addition, she crafted an **"Access to Healthy Foods in Delaware" Adobe Spark Page**, a **"Starting a Community Garden" video**, and a series of **infographics** that were incorporated into each product. We greatly appreciate Ally's systematic, methodical work to complete this project and valued input from Delaware Department of Agriculture's Nikko Brady.

Marcia S. Scott
Policy Scientist, Institute for Public Administration

Institute for Public Administration, University of Delaware

Authors and Research Team

- Allison Michalowski, Public Administration Fellow
- Marcia S. Scott, Policy Scientist
- Julia O'Hanlon, Policy Scientist

Document Design and Editorial Review

- Sarah Pragg, Assistant Policy Scientist
- Allison Michalowski, Public Administration Fellow

Delaware Department of Transportation

- Drew Boyce, Director of Planning
- Mike DuRoss, Assistant Director, Regional Systems Planning
- Sarah Coakley, Principal Planner, Regional Systems Planning

Delaware Department of Agriculture

- Nikko Brady, Deputy Principal Assistant, Policy Advisor

Photography Credits

Jason Aviles, Bright Spot Farms, Bruce Burk, Capitol City Farmers' Market, Food Bank of Delaware, Newark Co-Op Farmers' Market, Newark Natural Foods, James Pernol, Westside Grows

Table of Contents

Executive Summary	1	Promoting Nutrition	21
Introduction	2	Innovative Food Access Programs in Delaware	22
Understanding Food Availability	3	Wilmington Green Box.....	22
Food Deserts	3	Bright Spot Farms.....	23
Food Deserts in Delaware.....	4	Lewes Farmers’ Market Living Lab	24
Food Swamps	5	The Food Bank of Delaware	25
Improving Access in Delaware	6	Childhood Nutrition Program	25
Locally-Driven Assessment and Policies.....	6	SNAP and WIC Related Programs	25
Healthy Food Proximity	7	Mobile Pantry	26
Healthy Food Affordability	7	Food-Related Workforce Development Programs	27
Finding Solutions	8	Local Level Policy Initiatives	28
Transportation and Food Access	9	Improving Healthy Food Accessibility.....	29
Active Transportation	9	Improving Healthy Food Availability.....	33
Public Transit	11	Improving Food Affordability.....	38
Rural Transportation	12	Conclusion	42
Aging and Food Access	13	Suggested Resources	43
Mobility Barriers to Healthy Food Access Among Seniors.....	13	Glossary of Terms	49
Food Affordability for Seniors	14	References	52
Improving SNAP Enrollment Among Seniors.....	15		
Working with Local Farmers	16		
Farmers’ Markets and Farm Stands.....	16		
Community Supported Agriculture (CSA)	17		
Community and Urban Gardening	18		
Reducing Exposure to Unhealthy Food	20		
Unhealthy Mobile Vending.....	20		
Zoning to Limit Fast Food	20		
Methods to Address Sugar Sweetened Beverage Sales	20		



Executive Summary

When thinking about hunger, third-world impoverished countries—not America—come to mind. Yet, food insecurity is a nationwide problem. As defined by the U.S. Department of Agriculture (USDA), food insecurity is a lack of consistent access to safe, affordable, and nutritious food for an active, healthy life. One in seven Americans struggle to get enough healthy food to eat. Low- to- moderate income families may be forced to choose between buying food, paying for transportation to a job, or costs of an unexpected expense due to an illness. Families facing financial pressures, or lacking transportation to full-service grocery stores, may opt to purchase cheap, nutrition-lacking food at nearby convenience or “dollar” stores.

In Delaware, about 117,000 or 11 percent of its one-million residents experience food insecurity. Studies indicate that food insecurity is linked to income levels, race, and ethnicity. The issue impacts about one of every six Delaware children and 16 percent of Delaware seniors in Delaware—who often have mobility limitations, drive less, reduced incomes, and live alone. In addition, proximity to healthy food retailers also plays a key role in determining access to affordable, nutritious food. Across Delaware, 61 percent of the population lives in a census tract without a grocery store. Residents of low-income urban or rural neighborhoods—that lack nearby grocery stores, healthy food retailers, or reliable transportation options—may face greater challenges purchasing fresh food and produce.

This guide serves to advance the important role of Delaware local governments (i.e., towns, cities, and counties) in integrating health and equity considerations into local government plans, policies, and regulatory frameworks. This guide conveys how the community food environment can play a key role in determining access to healthy food. Local government leaders can help residents stay healthier by advancing policies and programs that encourage healthy eating.

Viable roles for local governments include fostering awareness of opportunities to “buy local,” addressing transportation and mobility barriers, forging partnerships with local farmers and nonprofits, implementing campaigns to promote nutrition, and addressing special-needs population challenges.

The guide describes local government policy tools (e.g., zoning, regulations, and incentives) that can attract healthy food retailers and foster activity-supportive built environments. These policy tools can enable farm stands, farmers’ markets, community gardens, and innovative food access programs to flourish. It also provides an overview of innovative programs working to improve access to healthy food in Delaware, a list of recommended resources, and a glossary of terms.



Introduction

Having access to healthy foods is essential for maintaining a healthy lifestyle. For decades, millions of Americans—especially those living in low-income communities—have suffered as grocery stores with fresh, affordable food have disappeared from their neighborhoods. Without access to healthy foods, a nutritious diet and good health are unattainable. And without grocery stores and other fresh-food retailers, communities are missing the commercial centers that help local economies thrive.

The increasingly alarming rates of obesity and related chronic diseases that may be linked to poor diets, such as diabetes and heart disease, have become a major public health concern in the United States and in Delaware. According to the **2018 State of Obesity Report** by the Robert Wood Johnson Foundation, Delaware’s adult obesity rate of 31.8 percent ranks as the twenty-third highest obesity rate across the country.¹ Delaware has the sixth highest obesity rate among children between the ages of 10 and 17. Health problems associated with obesity are also prevalent across Delaware. For example, Delaware has the fourteenth and eleventh highest rates of diabetes and hypertension respectively.¹

A community food environment that promotes cheap and easily accessible unhealthy food through high levels of unhealthy food retailers **increases the risk** for obesity and other health conditions associated with poor nutrition.² Likewise, lack of access to affordable, healthy food **increases the risk** for these conditions.³ Research also shows that access to affordable, healthy food promotes better nutrition and healthy eating habits.

Nutritious eating and physical activity can provide proper nutrition and energy, the maintenance of optimal weight, and a lower risk of disease—including high blood pressure, cancer, and type-2 diabetes.

Why Should Local Governments Care About Improving Access to Healthy Foods?

Improving Access to Healthy Food:

Diminishes instances and impact of chronic diseases



Reduces healthcare costs

Reduces inequity within communities



Strengthens productivity, safety, and economic development

Fosters a sense of community by supporting community programs



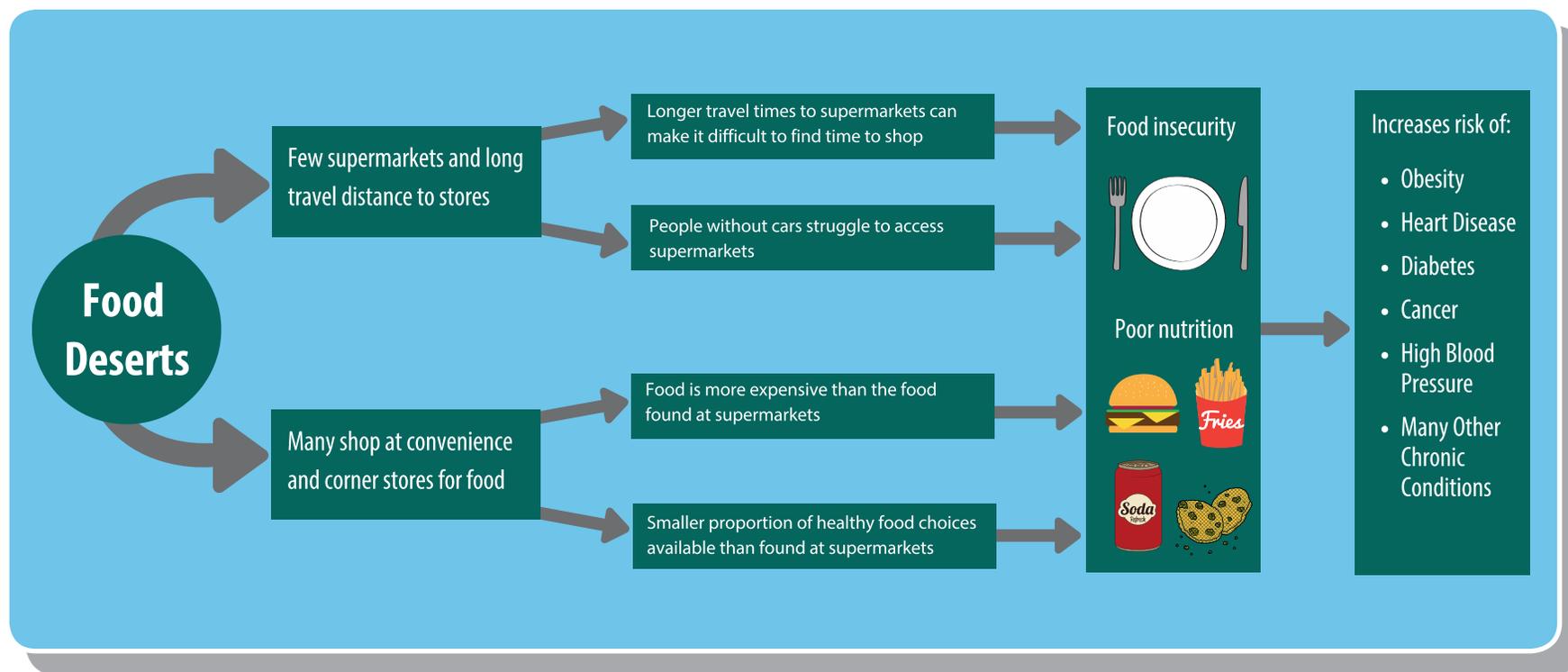


Understanding Food Availability

The community food environment plays a key role in determining access to healthy food. When evaluating a community food environment, many factors should be considered such as the amount of food retailers, types of food retailers, relative location of food retailers, and transportation options. Food deserts and food swamps are two terms used to describe the layout of food environments and the relationship between healthy and unhealthy food retailers in a community.

Food Deserts

According to the **USDA**, a “food desert” is a community, particularly lower-income neighborhood, where residents have low (or limited) access to affordable, quality, and nutritious food.⁴ Nutritious foods are defined as those that follow the **USDA’s Dietary Guidelines for Americans**,⁵ a tool that is designed to encourage the consumption of nutritious foods by balancing calorie intake and by choosing more natural, non-processed foods.



Using the USDA guidelines, the table below shows the relationship between distance from a supermarket and food access level in both rural and urban communities.

Low-income and predominantly minority communities are affected the most by food insecurity. One [nationwide study](#) found that

zip codes comprising low-income households have 25 percent fewer supermarkets than zip codes comprising middle-income households.⁶ Additionally, African-American populations have half as much access to chain supermarkets as Caucasian populations when controlling for other factors.

To see where these food deserts are located, visit the USDA's [Food Access Research Atlas](#) website, which maps out the locations of food deserts in areas you define from a single city or state to the entire country.⁷

Determining Level of Food Access

Walking Access



Level of Access	Distance from Supermarket
High	Within 1/2 Mile
Medium	Between 1/2 and 1 Mile
Low	More than 1 Mile

Driving Access



Level of Access	Distance from Supermarket
High	Within 10 Miles
Medium	Between 10 and 20 Miles
Low	More than 20 Miles

Food Deserts in Delaware

In 2015, the Institute for Public Administration published a policy brief, [Access to Healthy Foods in the Built Environment](#). It states,

Although the Delaware Department of Agriculture (DDA) reports that the state ranks first in the country in agricultural production value per farm and per acre, Delaware's communities reflect food access issues similar to the rest of the country. Of the 215 census tracts in Delaware, 142 census tracts (containing 61 percent of the population) lack a grocery store. An additional 56 census tracts (containing approximately 27 percent of the population) have only one grocery store.⁸

A Food Desert-Related GIS map was produced by IPA in June 2015 and provides a geographic overview of Delaware food desert locations by census tracts, based on [USDA Food Access Research Atlas](#) data. As noted in the policy brief, food access is not limited only to built environment nuances and geographic factors, as reflected in the USDA's use of neighborhood and individual factors in determining food access. Additional factors that play a role are

ability to pay for and the affordability of healthy foods; having the necessary skills and equipment to make healthy meals; and having the free time to shop for and prepare healthy meals. To increase healthy eating, it is not only necessary to increase and improve supply, but also to increase demand of healthy foods via promotion and education.⁸

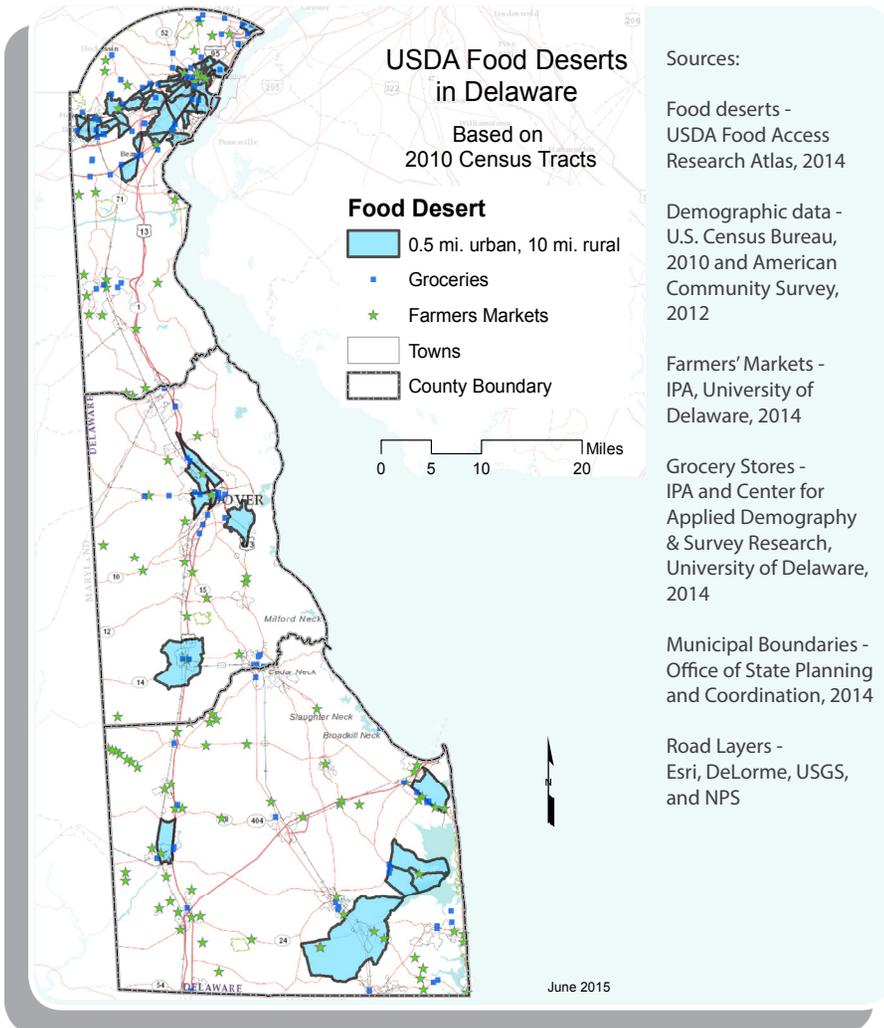
Food Swamps

According to [Johns Hopkins School of Public Health](#), “A food swamp is a place where unhealthy foods are more readily available than healthy foods.”⁹ Food swamps contain many unhealthy food options at fast food restaurants, corner stores, and food trucks. Each of these establishments sells food high in calories, fat, sugars, and other compounds that should be consumed in more moderate amounts.

While many food deserts contain food swamps due to the lack of healthy food options, food swamps are also present in areas that are not defined as food deserts. Some areas may have access to grocery stores and farmers’ markets, but if these healthy food outlets are significantly outnumbered by stores that sell predominantly unhealthy foods the area is still considered a food swamp. A [recent study](#) found that the correlation between food swamps and obesity is stronger than the relationship between food deserts and obesity.¹⁰

Access to healthy food and nutrition habits are more complicated than the presence or lack of a nearby grocery store. The ratio of healthy and unhealthy food available plays a major role in defining the food environment and shaping dietary behaviors. When unhealthy food retailers, like fast food restaurants and convenience stores that primarily sell unhealthy foods, are more prevalent than healthy retailers, unhealthy foods are more accessible to community members than healthy foods. Likewise, these retailers tend to sell these **unhealthy foods at lower prices** making them both convenient and affordable.¹¹

In summary, to build a food environment that supports good nutrition and equitable access to healthy food, policies and programs should work not only to establish a point of access to healthy food in a community, but also to shift the ratio of unhealthy and healthy food retailer toward a greater presence of healthy food retail. Communities should work to increase the presence of many types of healthy food retailers, promote affordable healthy food, and decrease the prevalence of and exposure to unhealthy food retail.



Map of food deserts in Delaware in 2014.

Credit: IPA, University of Delaware

For more information on food deserts in Delaware and how they affect the health and well-being of communities, read: Health Policy Issue Briefs [3](#) and [4](#) by the Institute for Public Administration.



Improving Access in Delaware

Affordability and travel distance are both primary factors of food access. In order to increase access to food for Delawareans, programs should be targeted at affordability and proximity of healthy foods within the context of the local community.

Locally-Driven Assessment and Policies

Building sustainable connections between residents and local sources of healthy food forms the foundation of successful food access programs. As such the best strategies to improve food access do not assess and target food access issues in isolation, but rather assess community dynamics, build on community strengths, and empower communities. Maintaining a strong emphasis on the community-context throughout the implementation of policies and programs creates an impetus for residents to redefine their sense of community to include access to healthy food. This change in residents' expectations of their community creates the framework for sustainable access to healthy food because it demonstrates that the community is capable of providing access to healthy food and establishes access to healthy food as a long-term priority.

While the depth and breadth of local knowledge may vary by type of government, the locality, and the policies being considered, improving access to healthy food necessitates an understanding of local dynamics. For example, the key to finding a successful solution may originate in understanding how and why access to healthy food became problematic in the community. This may involve understanding the history of the community from development to population growth to business policies. To understand the best way to implement potential solutions, it is crucial to identify which organizations, such as nonprofits, community centers, and faith institutions, have strong ties to the community. Likewise, when

building connections between residents and local sources of healthy food, it is important to know what sources of healthy food are locally available. The figure below illustrates key local sources of healthy food that should be considered when assessing the status of healthy food access and when designing policies to improve access.



Healthy Food Proximity

Fast food restaurants and convenience stores are found in greater numbers in low-income communities than grocery stores with healthy food options. Without reliable transportation, residents are limited to local food retailers.

To address health food proximity, residents need to be connected with local sources of healthy food. In addition to traditional food sources like supermarkets, efforts should focus on connecting residents with resources like farmers' markets, healthy corner stores, and community gardens. Residents also need access to food pantries. A **report** by the USDA showed that 28 percent of food insecure households use food pantries.¹² For low-income individuals, these pantries provide essential services, so it is important to make sure those who need to use food pantries can access them. Thus, it is important to ensure that food pantries are both present in communities and located along connected transportation networks.

Additionally, rural communities often do not have the population density to sustain grocery stores within walking distance of all residents. Several strategies, including improved access to transportation for rural residents and rotating food markets among several locations across town, can help address these food access issues in rural communities.

Healthy Food Affordability

Healthy food choices are **more expensive** than unhealthy food. Large chain supermarkets offer lower prices than convenience stores.¹¹ When the price of a food, healthy or unhealthy, is decreased, **more people will buy that food**.¹³ If unhealthy foods are frequently being sold at much lower prices than healthy foods, studies have shown that people are more likely to buy the unhealthy foods.

SNAP and WIC Benefits

Another important aspect of affordability pertains to accepting **Supplemental Nutrition Assistance Program (SNAP)** and **Women, Infants, and Children (WIC)** benefits.¹⁴ Many low-income citizens rely on SNAP and WIC benefits to purchase their food. These forms of payment require special technology to process them. While chain supermarkets almost always accept SNAP and WIC benefits, there is greater variety in acceptance of these benefits among other food sources like corner stores, farmers' markets, and farm stands. Increasing the proportion of food retail locations that accept SNAP and WIC benefits is an important component of making healthy food more affordable.



SNAP and WIC logos used to show customers where SNAP and WIC are accepted.
Credit: Capitol City Farmers' Market

Finding Solutions

Across Delaware, many programs are addressing both the affordability and proximity of healthy foods. A major theme in several successful programs is the emphasis on buying and producing locally. In the following sections, several of these examples, including farmers' markets and community gardens, will be discussed.

The graphic below shows the many categories of local buying options Delaware has cataloged in its **Buy Local Guide** to help improve awareness for opportunities to buy locally grown produce in nearby communities.¹⁵





Transportation and Food Access

Accessing healthy food involves knowing there is a nearby location that offers healthy food, traveling to that location, and purchasing the healthy food. Transportation barriers break the connection between knowing that healthy food retailers exist and actually purchasing the food. Safe, accessible transportation plays a key role in linking people to healthy food.

Active Transportation

Over the course of several decades, transportation infrastructure in Delaware and across the country has emphasized automobile travel with little regard to other forms of transportation. For those without cars, forms of active transportation like walking and biking are essential forms of travel. To ensure access to healthy food for people of all ages, abilities, and incomes, communities need to establish accessible and connected pedestrian and bicycling networks that link to sources of healthy food. Communities can improve the viability of active transportation by focusing on two areas: healthy food proximity and activity-supportive built environments.



Family visiting a farmers' market within biking distance from their residence.
Credit: Complete Communities

Healthy Food Proximity

Cars allow people to quickly travel long distances with ease during all seasons, but without access to a vehicle, it is difficult to regularly travel long distances. In cities and other densely populated areas, many residents do not have regular access to a car. The USDA considers healthy food retailers inaccessible in urban areas if they are more than half a mile or a mile away from people's homes. When healthy food retailers are located beyond this distance, the amount of time required to travel to and from the store can be challenging for people who are often managing busy jobs, families, and more. Additionally, it is difficult to carry any significant amount of groceries over a long distance, so people would have to travel the lengthy, time consuming distance to the grocery outlet more often than if it were located nearby.

Communities can address these problems by:

- Creating ordinances and zoning regulations that permit local food sources like farmers' markets, community gardens, and Community Supported Agriculture (CSA) in more areas.
- Incentivizing corner stores and mobile food vendors to sell healthy food by offering reduced permit and licensing fees to retailers who chose to sell predominantly healthy food.
- Providing density bonuses and reduced fees to developers who incorporate a community garden into new development.
- Working with partner organizations to establish local food banks for nearby residents.

Activity-Supportive Built Environments

Active transportation is any human-powered mode of transportation such as walking or bicycling. Activity-supportive built environments not only increase physical activity, but also promote transportation equity for people who do not drive or own cars. Planning for activity-supportive infrastructure goes beyond the simple existence of sidewalks and bike lanes. For activity transportation to be a viable option, activity-supportive infrastructure must be designed with key origins and destinations in mind. To provide more equitable access to healthy food, these features form continuous, safe linkages from where people live to sources of healthy food.

Communities can foster active transportation by:

- Creating and maintaining a continuous network of sidewalks and trails.
- Providing bicycle infrastructure, bike lanes, and bike racks.
- Ensuring sidewalks and intersections are compliant with Americans with Disabilities Act (ADA) standards for accessible design.
- Planning and implementing complete streets policies to provide safe mobility options for people of all ages and abilities.
- Providing streetscaping amenities like lighting and benches.
- Implementing traffic-calming measures to reduce pedestrian-vehicle conflicts.

For more information on planning for activity-friendly environments, see the [Walkability](#), [Bikeability](#), and [Complete Streets](#) sections of the [Delaware Complete Communities Planning Toolbox](#).

Public Transit

Supermarkets carry a wide variety of healthy food during Delaware's growing season and at other times of the year. During winter and early spring, farmers' markets, farm stands, and community gardens are not able to provide as much healthy food, but supermarkets continue to offer a variety of healthy food options because their size enables them to afford to purchase foods from other areas of the country. Public transit can connect people living in densely populated areas with large-scale supermarkets, which are often located outside of urban areas. However, the **Federal Highway Administration** estimates that people are only willing to walk one-quarter to one-half mile to get to mass transit, so if stops are beyond this point, residents are unlikely to view mass transit as a practical form of transportation.¹⁶ With careful planning and modification, public transit can provide practical and accessible connections to healthy food retailers.

Communities can improve access to healthy food via public transit by:

- Considering food access and distribution while working with the local transit agency (i.e., DART First State) to plan, expand, and improve the public transit system.
- Planning for the development of new healthy food retailers along existing transit lines.
- Identifying and addressing first- and last-mile transit connectivity (i.e., walking, biking, or rolling to or from a transit hub or location).

For more information, view the **"First- and Last- Mile Transit Connectivity"** video, which is also available on the Complete Communities YouTube Channel (www.youtube.com/user/CompleteCommunities).



The "First- and Last- Mile Transit Connectivity" video encourages the viewer to consider whether they have access to transit options.

Credit: Complete Communities

Rural Transportation

According to rural residents, “**lack of transportation infrastructure**” is regarded as the biggest obstacle to accessing healthy food.¹⁷ While vehicle ownership rates are higher among rural residents than urban residents, there are many residents who lack regular access to a vehicle. Additionally, for multi-member households with only one car, it can be difficult to make long trips to the grocery store when other household members may need the car to travel to work, child-care locations, or any other number of competing uses. Since supermarkets are farther away in rural areas than they are in urban or suburban areas, supermarket trips require more travel time than elsewhere.

Communities can improve access to transportation to healthy food retailers in rural areas by:

- Encouraging farm stands to sell produce directly from farm properties.
- Offering mobile food markets run by supermarkets or nonprofits.
- Providing public transportation by means of community vans, which offer a cheaper alternative to buses in areas with lower populations.
- Partnering with nonprofit organizations that offer transportation (e.g., senior centers or community centers) to sponsor trips to full-service grocery stores or host on-site mobile markets.

Did you know...

About 40 percent of land in Delaware is dedicated to agricultural use. This means agriculture is the number one land use in the state. For more on the history of agriculture in Delaware, visit the [Delaware Department of Agriculture website](#).¹⁸



Distance and a lack of sidewalks, bike lanes, crosswalks, and other important active transportation infrastructure can pose challenges to reaching food stores without a vehicle.

Credit: James Pernol



Aging and Food Access

While 12 percent of the population faces food insecurity, **16 percent of seniors are food insecure**.¹⁹ With a higher proportion of adults over 65 than the national average, Delaware needs to ensure that its seniors have access to healthy, nutritious food. In addition to facing the same challenges all community members face when accessing healthy food, seniors tend to face additional obstacles due to limited mobility and reduced income.

Mobility Barriers to Healthy Food Access Among Seniors

As is the case for the population as a whole, the ability to travel to healthy food retailers plays a key role in access to healthy food among seniors. In addition to the transportation barriers faced by all members of the community, seniors tend to encounter many mobility barriers at higher rates than the rest of the population. These challenges include:

- **Mobility Disabilities and Health Problems:** As people age, they are more likely to develop disabilities and health problems that limit mobility by making movements such as walking and biking more difficult or impossible. These mobility limitations can make it difficult for seniors to travel to and navigate within healthy food retailers. Similarly, weakness and reduced motor control make carrying groceries and cooking food more difficult.
- **Less Personal Vehicle Access:** Senior households are less likely to own cars than other households. Additionally, many people lose the ability to drive safely as they age. Together, these factors make it difficult for seniors to drive themselves to food retailers to obtain healthy food.
- **Living Alone:** Seniors who live alone are **more likely to experience food insecurity** than those who live with others. Whereas seniors in single member households must rely on themselves for daily tasks, in multi-member households, each member can use their abilities to help each other. For example, some household members may be able to assist with transportation to food retailers, provide additional income to purchase healthy food, and help cook food.



Communities can address mobility challenges among older adults by:

- Planning for **aging-friendly communities** where **Universal Design** is used in housing construction or remodeling projects to enable older adults to age in place.²⁰
- Providing citizens with information about supportive, human-services transportation offered by nonprofit organizations (i.e., Delaware senior centers and/or **village-model** communities).
- Planning and zoning for healthy food retailers such as supermarkets, farmers' markets, farm stands, and community gardens near areas with large senior populations.
- Supporting in-home and community-based nutrition programs such as **Meals on Wheels** and these Delaware programs: **City Fare**, **Modern Maturity Center**, **CHEER**, and **Meals on Wheels Lewes-Rehoboth**.

Food Affordability for Seniors



Seniors visit a farmers' market to buy affordable, fresh produce.

Credit: Complete Communities

Affording healthy food can be challenging for seniors who often have a reduced income. Communities can make locally grown healthy food more affordable for seniors by offering incentives for farmers' markets and farm stands. Similar to incentives for those who receive SNAP or WIC, a senior farmers' market incentive program typically provides seniors with an extra amount of money to spend (typically ranging from \$0.50 to \$2.00) for every dollar they spend on produce at a farmers' market. Some communities choose to offer "senior days" at farmers' market where incentives or other discounts are provided to seniors on a less frequent basis such as monthly or bimonthly.

In addition to working with local food programs, communities can make healthy food more affordable for seniors by connecting seniors with and supporting existing programs on the state and federal level that provide nutrition assistance to seniors. These programs include:

- **The Commodity Supplemental Food Program (CSFP):** This program, provided by the USDA, is administered by local food banks and pantries. People above the age of 60 who qualify as low-income are eligible for this program, which provides several staple food items such as fruits, vegetables, and proteins each month.²¹
- **Food Bank of Delaware Mobile Pantry:** The mobile pantry provides low-income individuals of all ages with healthy food statewide. The pantry asks for community partners to contact the food bank if they are interested in hosting the pantry. Local organizations and governments can work to host the mobile pantry near areas with large populations of seniors.²²
- **Senior Farmers' Market Nutrition Program (SFMNP):** As of 2018, SFMNP provides seniors with \$20 coupons that can be used for healthy foods at farmers' markets. While in 2018, only four markets offered SFMNP, many more farmers' markets intend to support the SFMNP program in 2019 and the future.²³ Visit the **Delaware Department of Agriculture** website to learn more about which farmers' markets participate in SFMNP and find out how the market in your town can become a part of this program.

Improving SNAP Enrollment Among Seniors

Though many seniors qualify for SNAP benefits, **only 42 percent of eligible seniors** sign up for and receive these benefits.²⁴ Considering that 83 percent of eligible residents of all ages participate in SNAP, the participation rate among seniors is unusually low. Many **national groups**, states, and community organizations have researched the reasons behind low senior enrollment in SNAP, and they have identified several barriers including stigma, misinformation, lack of awareness, lack of transportation to required interview, and the lengthy, detail-intensive nature of the application.²⁵

To address some of the challenges seniors face with SNAP enrollment, the federal government has partnered with several states to implement and test the **Elderly Simplified Application Process (ESAP)**.²⁶ With ESAP, states work with the federal government to put in place procedures that make it easier for seniors to enroll in and stay enrolled in SNAP. Some examples of ESAP procedures include shorter applications, reduced re-enrollment requirements, and permission for telephone interviews rather than in-person interviews. In Pennsylvania's first year of ESAP implementation, they received **52.2 percent more senior applications** from SNAP.²⁷

At this time, Delaware does not have an ESAP program in place, but communities and organizations can help address challenges associated with SNAP applications by directly assisting their seniors. The Food Bank of Delaware provides **application assistance** to any interested parties, so communities can connect seniors with the Food Bank.

Additionally, communities can engage in SNAP outreach that works to increase awareness of SNAP and lessen the stigma about SNAP. Improving awareness of SNAP among seniors is especially important because the SNAP program was known as food stamps for the majority of the lives of seniors who qualify for SNAP. For those who did not qualify for SNAP before retirement, there may be confusion regarding the relationship between SNAP and food stamps. Through these efforts, communities can improve SNAP enrollment and reduce food insecurity among local seniors.

Barriers to Senior SNAP Enrollment

Stigma

Seniors may feel that others may think differently of them if they enroll in SNAP. In reality, SNAP is a confidential program ensuring all people have access to the healthy food they need.



Misinformation

Incorrect information about benefit amounts and qualifications can result in decreased senior applications because they fear they will not qualify or they will not receive enough.

Lack of Transportation

For seniors without access to a car, attending in person interviews for SNAP can be daunting. Providing transportation assistance and connecting seniors with paratransit can help address this obstacle.



Lack of Awareness

Throughout the lives of many seniors, the SNAP program was referred to as food stamps. It is important to make sure they are aware that SNAP provides the same assistance that food stamps once did.

Lengthy, Detail Intensive Application

Given the length and detail of the application, finding the required documents and properly filling out the application can be difficult. Providing application assistance can help streamline this process.





Working with Local Farmers

Farmers' Markets and Farm Stands

Farmers' markets and farm stands both increase local access to food and support local food production. Farmers' markets consist of multiple local farmers selling their food together at one location based on a schedule that varies anywhere from once a month to a few times a week. On the other hand, farm stands operate more consistently throughout the week and usually have only one vendor, though the produce may have been obtained from any number of farmers.

As of July 2019, the Delaware Department of Agriculture's **Buy Local Guide** for Delaware stated that there are 19 farmers' market locations and 100 farm stand locations across Delaware.

Many farmers' markets and farm stands in Delaware now accept SNAP and WIC benefits, and the Buy Local Guide specifies whether or not these locations accept such benefits. For communities where local farmers' markets and farm stands don't accept SNAP and WIC, helping these markets become qualified to accept the benefits will help improve access to healthy food for families living in poverty.

Farmers' markets and farm stands primarily sell healthy foods, and they are often located within walking distance of populated urban areas. Communities can use local ordinances to help promote farmers' markets and farm stands by changing zoning to be more permissive for such events and by incentivizing programs through tax breaks or administrative assistance. For example, local governments can amend zoning codes to define farmers' markets as a type of use and classify farmers' markets as conditional uses in residential areas rather than limiting them to commercial areas.



A. Buying apples at the Newark Co-op Farmers' Market.

Credit: Complete Communities

B. A cooking lesson at the Historic Lewes Farmers' Market.

Credit: Complete Communities

C. Wilmington residents line up to buy fresh, produce-based dishes at the Wilmington Greenbox.

Credit: Jason Aviles, Wilmington Placemakers

In addition to increasing access to food, farmers' markets and farm stands benefit local farmers and the community by increasing spending on locally produced food. Supermarkets tend to rely on fruits and vegetables imported from across the country; whereas farmers' markets and farm stands bring food from farmers directly to nearby communities. Several farm stands like **Wilmington Green Box**, **Urban Acres**, and **Bright Spot Farms** also focus on employing and training local youth.

Community Supported Agriculture (CSA)

CSAs are programs that create a relationship between local farmers and residents by allowing community members to buy shares of produce at the beginning of the season in return for regularly supplied boxes of mixed produce from the local farm. Some CSAs also allow consumers to help farmers in other ways (e.g., maintaining a website or helping out on the farm) in exchange for a share of the produce. By bringing community members and local farmers together, CSA programs benefit farmers and consumers alike.

The results of a **recent study** provide evidence for the theory that joining a CSA improves "food lifestyle behaviors and health outcomes."²⁸ According to its findings, CSA enrollment benefitted those who reported being in poor health before joining the CSA, suggesting that CSAs could be especially helpful for improving the health of those already struggling with health problems associated with food insecurity. In contrast to visiting shops and markets, once a person buys into a CSA they are guaranteed a certain number of produce boxes throughout the growing season.

Benefits of Community Supported Agriculture

CSAs Benefit Communities by...

- Supplying fresh food regularly
- Providing a variety of produce
- Introducing novel cooking methods
- Fostering relationships with local farmers
- Returning spending to the local economy



CSAs Benefit Farmers by...

- Creating a steady source of income because purchases are made in advance
- Fostering relationships with community members
- Developing purchase loyalty among customers
- Spreading awareness of the importance of local agriculture



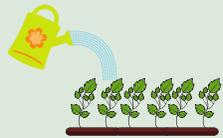
Connect with CSAs...

Visit www.localharvest.org/csa to explore CSA initiatives happening in your community.

Community and Urban Gardening

There are many **benefits** to promoting and providing residents with greener places to live.²⁹ Research suggests that green enhancements mean fewer health problems, higher property values, and more social and economic activity in the surrounding areas. Endeavors such as community and urban gardens also promote the local production of healthy food. Given findings such as these, even areas with minimal open space are beginning to find creative ways to implement gardens.

Benefits of Community Gardening



Increased Local Food Production

Community gardens allow residents to grow healthy foods locally instead of relying on imports from large farms halfway across the country.

Walkable Food Access

Most people rely on driving to a grocery store to access fruits and vegetables, but with community gardens, fruits and vegetables are just a short walk down the street.



Sense of Community

Community gardens encourage residents to spend more time outside and collaborate with their neighbors, which fosters a sense of community.

Environmental Benefits

Both on the ground and on rooftops, community gardens have a variety of environmental benefits including reduced stormwater runoff, natural building insulation, and reduced building cooling needs.



Common Forms of Urban Agriculture

Backyard Gardens

Backyard gardens are personal food growing gardens created by residents on their own personal property. Ordinances that permit visible outdoor gardening promote this form of gardening.



Community Gardens

Community gardens are created by individuals or organizations in available open space or vacant lots. Community members work together to tend to the garden.

Urban Farms

Urban farms can be owned by an individual or community group and grow food to be sold locally through a farmers' market or neighborhood farm stand.



Rooftop Gardens

Rooftop gardens function as individually or community owned farms and gardens. However, they are located on rooftops, which may require specific zoning language and different safety regulation.

How to Garden in a City

Although many may associate gardening and food harvesting with more rural locations such as country farms, growing food locally in urban and suburban areas has environmental, aesthetic, and health benefits for the whole community. In areas with larger populations, urban gardens can be created in open spaces and in vacant lots. Incorporating gardens into what might otherwise be a concrete jungle

or blighted lot enhances the community aesthetic, creates a “sense of place” or identity, and helps to absorb water runoff. Rooftop gardens—another popular urban gardening technique—can help insulate buildings to reduce heating and cooling costs.

To help make gardening possible in local communities, cities need to create zoning rules and city ordinances that allow for the creation of community gardens in areas that may currently have strict land use rules.

Community Gardening in Delaware

Community gardens of all shapes and sizes are sprouting up across Delaware thanks to **grants** awarded by the **Delaware Department of Agriculture (DDA)** in 2016 and 2017.³⁰ In 2017 alone, DDA provided local organizations with almost \$18,000 in community gardening grants. For New Castle County organizations, these grants were supplemented by an additional \$10,000 from the **New Castle County Conservation District**.

The Delaware Center for Horticulture has supported the creation of urban agriculture sites in New Castle County. Together with the **University of Delaware Cooperative Extension Office** and several other organizations, the Delaware Center for Horticulture successfully launched the **Delaware Urban Farm & Food Coalition**. Visit the **Delaware Center for Horticulture’s website** for the list of its affiliated urban gardens.

While the coalition’s hands-on efforts are focused on its constituents in Northern Delaware, the group offers **resources** to guide communities across Delaware through the process of creating and maintaining urban gardens. These resources include information about current gardens, appropriate planting and design guidelines, checklists for garden creation, and training for new gardeners.

While more attention has been focused on community gardens in New Castle County, organizations like the University of Delaware Cooperative Extension and the Boys and Girls Clubs of Delaware have worked to bring community gardens to both Kent and Sussex Counties as well. Additionally, the **Healthy Food For Healthy Kids** group has led efforts to create school gardens across the state. The American Planning Association worked with Kent County through the **Plan4Health** initiative and identified the need to create more urban agriculture as an important strategy for improving the health of Kent County residents.

For more information about how to start a community garden in your community, watch the **“Starting a Community Garden” video** pictured below, which is also available on the Complete Communities YouTube channel.



The “Starting a Community Garden” video introduces viewers to the types of community gardens and offers helpful tips to get them started.
Credit: Complete Communities



Reducing Exposure to Unhealthy Food

Food environments that contain more unhealthy food retail options than healthy food retail options are referred to as food swamps. Policies that increase the availability of local retail certainly help address food swamps by increasing the number of healthy food retail options in comparison to unhealthy food retailers. However, policies that reduce the prevalence of unhealthy food retailers are also key players in the effort to shift the ratio of food retail options toward healthy food retailers.

Unhealthy Mobile Vending

Since unhealthy food trucks tend to sell fatty, fried foods, the [American Heart Association](#) recommends considering the following local ordinances:³¹

- Ban food trucks from operating near schools.
- Limit the locations at which food trucks are allowed to vend using zoning codes.
- Limit the times during which food trucks are approved to vend.

Without certain considerations, these efforts could negatively impact healthy mobile food vendor initiatives. One way to address the problem is by creating [separate mobile licenses](#) for those vending produce and those vending an assortment of other foods.³² Then each license type could be managed separately under local laws.

Zoning to Limit Fast Food

According to [an evaluation](#) of local zoning laws around the country, there are several ways to use zoning to reduce the proliferation of fast food restaurants.³³ Cities can ban the future development of fast food within specific zones entirely. Another option involves limiting the overall number of fast food outlets allowed. According to this ordinance, once that number of fast food restaurants are established anywhere in the city no more fast food development will be allowed. Communities can also work to reduce the density of fast food outlets by requiring a certain distance between each fast food outlet. Working with the Robert Wood Johnson Foundation, ChangeLab Solutions created a [model ordinance](#) to help communities legislate a healthy food zone.³⁴

Methods to Address Sugar Sweetened Beverage Sales

Recent efforts to decrease unhealthy food consumption have targeted sugar sweetened beverages (SSBs). According to the [American Heart Association](#), these drinks are one of the biggest contributors to unhealthy diets.³⁵ As such, some municipalities are using SSB taxes, often referred to as soda taxes, to decrease consumption of these sugary drinks. Beyond taxation, there are other options to influence the sale and distribution of these drinks. [Zoning and licensing regulations](#) can be used in a similar manner to fast food restaurant regulations in order to decrease the amount of locations that can sell SSBs in designated areas.³⁶ Other efforts focus more on regulating the display of beverages, so that retailers must [design their environments](#) in ways that promote the healthy beverages they offer over those that are classified as SSBs.³⁷



Promoting Nutrition

In communities where access to healthy food has historically been low, it is helpful to couple food access policies with a public health campaign for nutrition. Nutrition campaigning reinforces a demand for fruits and vegetables in the community. Not only will this make retailers more confident about their ability to sell produce, but it will also help encourage awareness about new healthy food options.

Advertising the locations and hours of farmers' markets, farm stands, healthy cornerstones, and CSAs is one way to promote healthy eating. Communities can campaign for healthier eating by providing comprehensive nutritional information. Social media and websites offer helpful platforms for distributing messages about healthy eating. Towns can share social media posts from the USDA, healthy recipe websites, and other sources of nutritional information.

Use these tips to promote nutrition at the community level:

- Partner with the food bank to bring its educational programs to the community.
- Work with schools to incorporate nutrition messages into events and after school programs.
- Use social media platforms to promote nutrition messages and healthy recipes.
- Feature the hours and locations of local healthy retailers (farmers' markets, farm stands, CSAs) on the town website.
- Incorporate MyPlate resources into nutrition messaging and events at which there will be food.
- Provide healthy food and recipes at community events.
- Invite local healthy food retailers to community events and meetings.
- Hold community events at or near community gardens and farmers' markets.

Holding workshops, community gardening days, and other events can also help spread the word about the importance of healthy eating. For guidance in carrying out a nutrition campaign, visit [nutrition.gov](https://www.nutrition.gov), which contains helpful resources like "Smart Nutrition 101," "MyPlate resources," "Printable Materials and Handouts," and more.

Spice up your social media...

Check out the [MyPlate](https://www.myplate.gov) website for a tip of the day! Make a balanced diet fun with facts and tips on cooking and eating from the experts.



The Wilmington Green Box has been so well received that it has been able to expand its reach each year since it opened. In addition to hiring more at-risk-youth, community support has helped the Green Box reach further into Wilmington through the addition of a mobile cart and online ordering. By 2017, the Wilmington Green Box “served more than 3,000 people—over 65 percent are African-Americans who live in the local Wilmington community.” For more information, view the **“Stories of Complete Communities: Wilmington Green Box”** video, which is also available on the Complete Communities YouTube channel.

Bright Spot Farms

The Westside of Wilmington is home to another creative program that works to empower the community and improve access to healthy food. **Bright Spot Farms** is a nonprofit venture created by the West End Neighborhood House. West End established the program in 2010 to address food access issues and train and employ foster care youth. Bright Spot Farms operates urban agriculture locations and manages their produce throughout the planting, growing, and selling phases. They sell their produce through three local farmers’ markets and their own mobile market that operates throughout the Westside of Wilmington. At each of these locations, they sell produce at half price to SNAP and WIC beneficiaries.⁴⁰



*Left: Bright Spot Farms participates in Ag Day at the University of Delaware.
Right: Bright Spot Farms sells its locally grown produce at local farmers’ markets.*
Credit: Bright Spot Farms



Participants in Bright Spot Farms’ GROW program.
Credit: Bright Spot Farms

Each year, the program works with 25 to 30 youth. In addition to available volunteer opportunities, Bright Spot offers two programs that train and employ youth: **GROW Employment Training** (ages 16–24) and the **Young Farmers Crew** (ages 14–18). Beyond farming and produce selling skills, the programs offer many relevant job skills including GED education, Microsoft Office training, and résumé assistance. Throughout each of these programs, Bright Spot emphasizes the importance of food justice and how community members, like these youth, can be a part of addressing food justice problems. Like the Wilmington Green Box, Bright Spot Farms has helped the community thrive by empowering and educating youth while also addressing food insecurity.

Lewes Farmers' Market Living Lab

The **Historical Lewes Farmers' Market (HLFM)** offers a novel approach to improving access to healthy food by developing methods for integrating farmers' markets into communities. Farmers' markets play a key role in improving access to healthy food by directly connecting local farmers with the community. However, the farmers' market and community in Lewes understood that establishing farmers' markets is only one part of improving access to healthy food. The HLFM sought to strengthen the farmers' market and improve access to healthy food in the community by establishing a "living lab" that developed and tested strategies for improving farmers' market access, sales, and attendance.⁴¹



A man purchases fresh vegetables at the Historical Lewes Farmers' Market.
Credit: Complete Communities

A "living lab" implements ideas in a farmers' market and collects related data to assess the efficacy of these strategies. The mission of the HLFM calls for the market to act in "socially responsible" ways that support the community, so the "living lab" focused particularly on strategies that increase sales and attendance among SNAP participants.

After operating as a "living lab" for several years, the Lewes Farmers' Market published **Creating a Farmers Market Living Lab: Lessons Learned in Growing a Farmers' Market**. This publication details the methods the HLFM used to determine effective strategies for improving and supporting farmers' markets. This publication is an asset to any community seeking to make its farmers' markets accessible, affordable, and economically viable.

The publication synthesizes the experiences of farmers and market attendees and breaks down key takeaways from their experimental endeavors to provide communities with the following guidance to grow sustainable and thriving farmers' markets:

- **"How to Make Your Market a Living Lab"**: Provides guidelines to develop and test strategies to improve access to and sales at farmers' markets within the context of a unique community.
- **"Lessons Learned of Interest to Farmers/Producers"**: Local farmers are the backbone of farmers' markets and local food access as a whole. These tips can provide local farmers with information that helps them form long-term, sustainable connections with the local community.
- **"Lessons Learned of Interest to Market Managers"**: While each stand may be run by independent producers, market-wide strategies can bring more people into the market and create a sense of community. The tips in this section help market managers to make farmers' markets economically viable fixtures of communities.



The Food Bank of Delaware

Statewide, the Food Bank of Delaware runs several programs that approach food access from different perspectives. Working with federal grants as well as state and local governments, the Food Bank of Delaware demonstrates how access to healthy food programs can work across all levels of government in order to help all Delaware residents access healthy food.

Childhood Nutrition Program



Kids show off their summer grab and go meals from the Summer Nutrition Program at Coverdale Crossroads in Bridgeville.

Credit: Food Bank of Delaware

The Food Bank runs several programs to address children's nutrition year round. Throughout the school year, services are primarily delivered through the **After-School Nutrition Program**.⁴² For students in low-income areas, this program provides meals and snacks alongside educational activities after school. Knowing that children need access to healthy food during times when they are not in school such as weekends and holidays, the Food Bank established the **Backpack Program**. This program fills backpacks with healthy foods including both meal and snack items. During the 2017–18 school year, almost 6,000 Delaware children received these nutritiously stocked backpacks during each weekend and holiday.⁴³

To address food nutrition and security during the summer months, the Food Bank administers the **Summer Nutrition Program**, which works with community sites to provide free, healthy meals to children throughout the summer.⁴⁴ **Additional mobile meals programs**, especially within participating school districts, were launched in the summer of 2018 and aim to reach more rural children.⁴⁵ Families can call "2-1-1" or text "food" or "comida" to 877-877 to find summer meal sites in Delaware.

SNAP and WIC Related Programs

The Food Bank of Delaware provides additional assistance specifically for those who qualify for SNAP and WIC supplements. For those who may qualify for SNAP assistance, the Food Bank offers **application assistance** during which trained professionals help people fill out the application correctly and provide guidance through the process even after the application has been submitted.⁴⁶ Additionally, the Food Bank provides WIC recipients with **WIC food packages** worth \$60–\$135 each month.⁴⁷ These packages are prepared with nutritious foods including fresh produce, whole grain bread, and milk.

The Food Bank designs and provides educational programs that specifically address healthy eating as a SNAP or WIC participant. Both SNAP and WIC **educational outreach** programs emphasize making healthy food choices with a limited budget and learning to prepare meals with healthy foods.⁴⁸ These programs are administered at a variety of locations beyond the food bank itself including community centers, farmers' markets, senior centers, and other locations that wish to help residents make healthy food choices. While educational programming at these locations use recipe cards, food demonstrations, and food samples to help directly educate beneficiaries, the Food Bank also provides **online cooking videos** to make sure that those who cannot attend educational events still have access to information about cooking healthy food on a budget. WIC-focused outreach events demonstrate cooking methods and provide recipes for each of the foods in the WIC food package to help ensure that these foods are used in nutritious and filling ways.

Mobile Pantry

While the Food Bank operates in many locations throughout the state, they are aware of the many transportation barriers their clients may face. To ensure that Delawareans have access to healthy food assistance regardless of their transportation status, the Food Bank runs the **Kraft Mobile Pantry**.²² From New Castle to Sussex, the mobile program provides a variety of nutritious foods including fresh produce to those in need. In addition to helping as many as 50 households access healthy food each day, the pantry provides education on "topics including nutrition, financial literacy, healthcare, and more." The mobile pantry is always looking for sites to act as temporary distribution points, so if your community has a need, reach out to the food bank to find out how you can help.



Food Bank WIC Education Specialist Chong Yi conducts a healthy eating demonstration for participants in the WIC program.

Credit: Food Bank of Delaware



During the Food Bank's mobile outreach, Community Nutrition Educator Gina Maresca uses a Veggie Meter to measure the amount of carotenoids in a client's skin. Carotenoids are present in fruits and vegetables.

Credit: Food Bank of Delaware

Food-Related Workforce Development Programs

Like several other programs in Delaware, the Food Bank combines workforce development with access to healthy food. Economic security plays an essential role in food security, so these programs can help improve participants' access to healthy food in the long term. ⁴⁹The Food Bank runs five programs that fall into three different categories:

- **Food Service:** Including the **Culinary School**, **Manage First Program**, and **ServSafe Certification**, initiatives in this category provide participants with skills and experience that prepare them for jobs in the food service industry. The food bank provides financial assistance to those who need it, so that these programs are affordable for those who are working to become more economically secure.
- **Warehousing:** The **L.O.G.I.C. program** provides participants with training that helps them secure jobs in the warehouse industry by training them to use equipment and understand warehouse operation logistics. The program even offers two certifications: OSHA-10 General Industry Certificate and the Forklift Certificate.
- **Agriculture:** The newest of the Food Bank's workforce development programs, **F.A.S.T.** consists of a 14-week training period during which participants engage in hands on work experience and receive training in a variety of agricultural topics like crop management, food safety, and farm business. Additionally, participants receive an hour of life skills training daily.



David, a graduate of The Culinary School at the Food Bank of Delaware, works at Lupo Italian Kitchen in Rehoboth Beach.

Credit: Food Bank of Delaware



Local Level Policy Initiatives

According to the United States Department of Agriculture (**USDA**), 40 million U.S. citizens lived in food insecure households in 2016.⁵⁰ Across Delaware, **61 percent** of the population lives in a census tract without a grocery store.⁵¹ More importantly, people struggle to access healthy food more than other food. Many barriers found in public policies, the built environment, and sprawling land use patterns make it difficult for people to access healthy food. When healthy food is unaffordable, inaccessible, or unavailable, people rely on unhealthy food choices.

Food access may be a problem nationwide and statewide, but many of the most effective initiatives to improve food access occur on the local level. Locally grown food not only helps address food insecurity, but it also improves local economies and helps the environment.

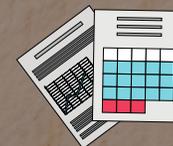
Delaware by the numbers...

While Delaware is a state of under a million people, Feeding America's most recent food insecurity estimates show that about 117,000 Delawareans experienced food insecurity in 2017. More specifically, they estimate that one out of every six Delaware children experience food insecurity.⁵²

Local Government's Role in Addressing Access to Healthy Food

Planning

Since community design and the built environment impact food access, communities should use comprehensive plans to assess food access needs and plan for more sustainable food access in the future.



Ordinances and Policies

Elected officials should establish policies that enable food production, improve access to transportation, support land uses that increase food access, and help make healthy food more affordable.



Local Partnerships

Governments can facilitate partnerships with many local organizations to bring several organizations together, increase resources for healthy food initiatives, and provide administrative assistance for local initiatives.



Beyond encouraging locally grown food, Delaware local governments can support access to healthy food through comprehensive plans and community design, policies and regulatory tools, and local partnerships.

Improving Healthy Food Accessibility

Studies by **Policy Link and The Food Trust** indicate that food insecurity issues predominantly impact low-income communities, urban communities of color, and rural communities in remote areas not served by transit.³ Evidence also suggests that the lack of healthy food access is associated with health issues such as obesity, diabetes, cancer, cardiovascular disease, and social and health inequity. An **interagency coalition in Massachusetts** notes that access “can be defined to include not only proximity to a full-line grocery store, but also convenient transportation options for people of all ages and abilities, and consideration of economic and cultural factors that drive food purchasing choices.”⁵³

The link between healthy food access and transportation is also well documented. Lack of transportation to full-line food retailers pose significant challenges to underserved communities. If safe, affordable transportation options are unavailable, the purchase of food may be limited to unhealthy corner/convenience stores. Even in areas where public health interventions have improved healthy food in corner/convenience stores, people will not be able to purchase affordable, high-quality food if they cannot safely walk, drive, or take public transportation to those stores.

Local Government Policy Tools to Address Healthy Food Access

Zoning

- Expand the number of zones that allow for healthy food retail and growth
- Create overlay zones for urban agriculture
- Limit the number of fast food restaurants allowed in a zone



Regulation

- Require food retailers to carry a selection of staple healthy foods
- License mobile produce vendors separately from all mobile vendors



Financial Incentives

- Provide density bonus for urban gardens
- Waive fees for healthy food retailer licenses and permits
- Reduce parking requirements for healthy food retailers



Planning Initiatives

In Delaware, local governments are required to develop and regularly update **comprehensive (land use) plans**, which serve as a blueprint for growth and development. Comprehensive plans provide a foundation to plan for complete and healthy communities that promote healthy lifestyles, economic growth, and sustainability through an integrated approach to transportation, land use, and community design.

Delaware Plan4Health, an **American Planning Association** project, created a model to connect health and community planning processes in Kent County, Delaware, through policies, partnerships, and place-based programs. Jurisdictions statewide can adapt and incorporate these guidelines into their planning processes to combat two determinants of chronic disease—lack of physical activity and lack of access to nutritious foods. Developed by synthesizing the recommendations in the **Delaware Plan4Health** model and other innovative planning strategies around the country, the following planning strategies can help communities create environments with more equitable access to healthy food.



Public participation invites community members to engage in the planning process.
Credit: Complete Communities



Include Food Access in the Planning Process

For local governments in Delaware, planning plays an integral role in establishing a community's goals and implementing practical strategies to achieve these goals through land use planning, community design, and the public policy framework. As such, if a community envisions a future with more equitable access to healthy food, incorporating food access into planning practices is a crucial step toward building this vision. Through Plan4Health, the **City of Dover** and the **Kent County** government integrated health and equity concepts into comprehensive plan updates, which serve as excellent models of food access planning.⁵⁴ To incorporate food access into the planning process, communities can:

- Integrate healthy food access into **comprehensive plan** updates, including goals related to transportation and land development.
- Adopt a “**health in all policies**” approach to planning which, according to the **American Public Health Association and Public Health Institute**, emphasizes “A collaborative approach to improving the health of all people by incorporating health considerations into decision making across sectors and policy areas.”⁵⁵
- View the USDA’s **Food Access Research Atlas** to determine locations of food deserts—areas where residents have limited options for purchasing fresh foods—as a basis for land use plans.
- Regularly assess and map factors related to healthy food access such as transportation routes to food sources and the number, type, and location of full-line or healthy food retailers.
- To combat food swamps, areas where unhealthy food is available at higher rates than healthy food, create a **healthy food zone** that limits the proliferation of unhealthy food retailers near schools and other specified areas.



Local governments can form partnerships with stakeholders to develop interventions for underserved communities and improve employment opportunities while expanding healthy food retail. These strategies can support economic development by boosting opportunities for local, non-chain retail businesses, encouraging residents to “buy local,” and establishing venues that reflect each community’s unique sense of place. As a result, it becomes more economically viable for small-scale healthy food retailers, like mobile food trucks/units and farm stands, to establish business opportunities in locations where people work, live, and play. To foster economic development, local governments can:

- Encourage greater collaboration among local entities in understanding the possibilities of innovative food retail models to serve as economic development strategies.
- Target investments in a food hub to connect local growers with local retailers like supermarkets, corner/convenience stores, and restaurants.
- Allow community-based food sources, such as community gardens, farmers’ markets, mobile food trucks/units, and produce carts in more areas through a supportive regulatory environment and zoning practices like **mixed-use zoning**, **temporary use permits**, and **overlay zoning**.



A recent **Plan4Health article** notes that, “equitable transportation solutions such as community design allowing for safe walkability/ bikeability and public transit allow opportunities to increase accessibility.”⁵⁶ Sources of healthy food such as community gardens and local healthy food retailers are essential destinations for people everywhere, so promoting connectivity to these locations is crucial. To address transportation and food access, local governments can develop plans, policies, regulations, and design guidelines to:

- Leverage **participatory planning** strategies, like **charrettes**, focus groups, community workshops, and surveys, to engage stakeholders and better understand transportation-related food access issues.⁵⁷
- Support the expansion and improvement of public transportation services, particularly to/from underserved communities and full-line food retailers.
- Identify and address **first- and last-mile transit connectivity** gaps and barriers walking, biking, and rolling to/from bus stops and hubs.
- Plan for walkable/bikeable, mixed-use, and **transit-oriented development** through land use planning.

Active Transportation Initiatives

Active (non-motorized) transportation is a healthy and affordable option for getting to grocery stores. Community design influences how feasible it is to walk and bike to places. To improve active transportation options, consult with the **Delaware Department of Transportation (DelDOT)** and metropolitan planning organizations (i.e., **WILMAPCO** and **Dover/Kent County MPO**) and consider implementing the strategies below.



Making farmers' markets and other local food sources walkable improves health by encouraging physical activity and making healthy food accessible for those without vehicles.

Credit: Complete Communities



Walking plays an essential role in transportation, especially for those without vehicles. However, the built environment can create barriers to access important destinations like food retailers. Establishing safe, well-maintained, and connected pedestrian infrastructure can improve access to healthy food by making it possible for more people to travel to healthy food retailers. To improve walkability, communities can:

- Adopt **complete streets policies** that support transportation system plans and networks that provide multi-modal transportation options for people of all ages and abilities.⁵⁸
- Use traffic-calming measures like **road diets** to make thoroughfares safer for pedestrians and bicyclists.
- Leverage investments in **streetscaping** and **placemaking** practices to make walkways more attractive and vibrant.
- Use the **Healthy and Complete Communities in Delaware: The Walkability Assessment Tool** to evaluate community walkability and consider strategies to improve local pedestrian networks.
- Use regulatory tools to enable **infill development** and **mixed-use development**, to foster walkability and bikeability to places where people live, work, shop, and recreate.



For non-drivers and individuals who do not own vehicles, bicycling provides a mode of transportation by which they can travel faster and farther than by walking. From the need for safe, connected bike routes to the importance of bicycle facilities like bike racks, a community's infrastructure plays a major role in supporting biking as a viable form of transportation to destinations like food retailers. Low-stress bikeability ensures that there are ways in which cyclists can easily access areas throughout a community, without being an extremely confident rider. To promote bikeability, local governments can:

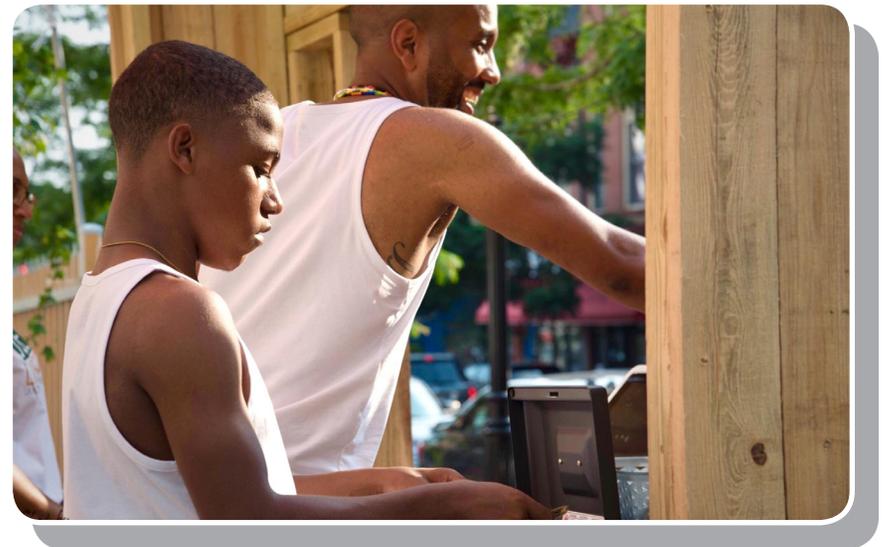
- Reference the **Blueprint for a Bicycle-Friendly Delaware**, which provides a series of innovative strategies for planning, designing, coordinating, and communicating to make safer and more well-connected bicycle networks.⁵⁹
- Establish and maintain bike infrastructure and shared use paths.
- Conduct **bicycle-network planning** to ensure that local bike routes and shared-use paths are well connected and low-stress for the average bicyclist.
- Install bike racks at supermarkets and other food retail locations to encourage the use of biking for grocery shopping.
- Use **Planning for Complete Communities in Delaware: The Low-Stress Bikeability Assessment Tool** as a guide to improve the low-stress bikeability for areas within a community.

Improving Healthy Food Availability

Where can people buy healthy food? While supermarkets offer larger quantities and varieties of fruits and vegetables, many other types of food retail may be more accessible for residents who live far from grocery stores. Local governments can use policies to support local, small-scale vendors in their efforts to offer healthy food.

Local Food Retail Initiatives

Communities adopt policies to help incentivize local-food retailers to sell more healthy foods. Some policies can help encourage the development of local businesses that are focused exclusively on the sale of healthy food. In addition to the initiatives listed below, each of the following retailers also benefits from the affordability initiatives contained in a later section.



Employees at the Wilmington Green Box sell healthy, locally-sourced produce, smoothies, and dishes to neighborhood residents.

Credit: Jason Aviles



Corner stores, often referred to as convenience stores, are small, local stores that traditionally sell food (mostly unhealthy) alongside other amenities. In recent years, there has also been a proliferation of discount dollar stores that lack fresh produce. However, a variety of initiatives can encourage corner and discount dollar stores to make more fresh fruits and vegetables available. To promote healthy corner stores, local governments can:

- Make it **easier for small food retailers to do business** by minimizing regulatory and administrative burdens, simplifying the permitting and licensing process, and offering tax abatements for property improvements in designated districts or census tract areas.⁶⁰
- Offer incentives to small shop owners such as technical assistance, community outreach, and access to façade improvement and loan programs.
- Direct store owners who have not previously sold fresh produce to resources and small grants to help finance infrastructure and property improvements.
- Require corner and discount dollar stores to carry certain healthy food items through business licensing laws. For an example, see the **Staple Food Ordinance of Minneapolis**.⁶¹
- Use land use regulations to limit the number of discount dollar stores from locating in close proximity to one another.



Farm stands have played an important role in Delaware’s food system for generations. They allow consumers to buy fresh fruits, vegetables, and other locally grown or made products directly from farmers who dedicate their lives to the growing season. To promote local farm stands, local governments can:

- Consider offering free or reduced cost business licenses, specifically for farm-stand vendors (if the jurisdiction requires a business license in addition to a Delaware business license).
- Expand the **number of zoning districts** that allow farm stands.
- Provide information and application documents to **“Become a Market Vendor”** at a local farmers’ market via a local government’s website.
- Provide website links to and promote the **Delaware Department of Agriculture’s (DDA) Buy Local Delaware: Farmstands Guide** and **Delaware Grown** website to learn where to buy and how to prepare locally grown produce.



Support Healthy Mobile Food Retail

Healthy mobile food retail includes the sale of produce, in either carts or vehicles, which are permitted to move around a jurisdiction. These vendors can reach residents who live in “food deserts” that lack access to affordable foods that make up a full and healthy diet, and/or neighborhoods without permanent grocery stores. To support mobile food retail, local governments can:

- Use a combination of incentives and restrictions to get mobile-food carts in areas with the least access to fresh fruits and vegetables.
- **Waive or exempt** local permit or business fees, if required by a local jurisdiction, for mobile-food retailers that primarily sell produce.⁶²
- Adopt ordinances to allow local produce vending and create an appropriate **permit program**, if local regulations prohibit mobile food vending.⁶³
- Consider the adoption of ordinances or zoning code amendments that promote healthy food vendors and mobile produce vendors in low-income and geographically isolated neighborhoods.
- Create policies, like this **model ordinance** by ChangeLab Solutions. It classifies produce carts as a separate type of business from other mobile food vendors, such that these carts can be licensed, supported, and regulated separately from other mobile vendors.⁶⁴

Community Market Initiatives

Though many community market initiatives are only offered on a weekly or biweekly basis, they have the potential to bring together larger groups of vendors than are present at individual local retail stores. Furthermore, community markets can focus exclusively on healthy foods and build relationships between local farmers and the community.



Many community members visit the Newark Co-op Farmers' Market, which is held at a convenient time and located in an accessible part of the city.

Credit: Complete Communities



Support Farmers' Markets

The **Farmers' Market Coalition** defines farmers' markets as "a public and recurring assembly of farmers or their representatives selling the food that they produced directly to consumers."⁶⁵ To promote farmers' markets, local governments can:

- Provide information and application documents to "**Become a Market Vendor**" via the local government's website.
- Include information about local farmers' market locations and hours on the local government's website.
- Use land use policies to promote, expand, and protect potential sites for farmers' markets such as vacant city-owned land or unused parking lots.
- Partner with schools, parks, libraries, and public and private property owners to host farmers' markets in local neighborhoods.
- Consider offering **free or reduced cost business licenses**, specifically for farmers' markets (if the jurisdiction requires a business license in addition to a Delaware business license).⁶⁶
- Provide links to and promote **DDA's Buy Local Delaware: Farmers' Markets Guide** and **Delaware Grown** on the local government's website.



Promote Community Supported Agriculture

According to the **USDA**, in Community Supported Agriculture (CSA) "members or 'share-holders' of the farm or garden pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season." CSAs offer a regular food supply, which helps ensure that families consistently have access to fruits and vegetables. To encourage CSAs, local governments can:

- Amend **zoning codes** to allow for CSA pick-ups in more accessible areas within a jurisdiction. Often, CSA pick-ups are considered commercial usage even though payment may happen ahead of time.⁶⁷
- Build partnerships with farms and assist with the permit process if there are no CSA programs locally. For more information, learn from **King County, Washington's experience**.⁶⁸
- Partner with farms and the community to establish CSA pick-ups on public property.
- Offer to provide **small reimbursements** for city employees who participate in CSAs.⁶⁹
- Partner with the local farms and food banks to establish programs that facilitate donation of unclaimed CSA boxes.
- Partner with businesses to encourage work-site based CSA pick-ups, which offer a practical location that doesn't require additional travel for workers.
- Include information about local CSA programs on the local government's website.
- Provide links to and promote **DDA's Buy Local Delaware: CSA Programs** and **Delaware Grown** on local government's website.

Urban Food Production Initiatives

Growing produce in urban areas removes the need to transport food to vendors over long distances. Alongside bringing food closer to residents, urban food production fosters a sense of place and community pride. Fruit and vegetable plots of all shapes, sizes, and types are found in many communities across the nation. The policies contained in this section help local governments support the forms of urban food production that fit best in their communities.



Residents fill garden beds during the Delamore Community Garden Rebuild Day in Wilmington.

Credit: Westside Grows



Urban agriculture, also known as urban farming, consists of plots of land in cities or towns that are specifically used for growing fruits and vegetables with the intent to sell the produce. Often, organizations and community groups that operate urban farms sell the produce through their own farm stand, a local farm stand, or a farmers' market. Many community organizations have used urban farms to employ community youth who learn skills ranging from farming methods to retail management to entrepreneurship. To promote urban agriculture, local governments can:

- Define urban agriculture in the municipal code and **modify the zoning code** to permit the use of land for urban agriculture in suitable areas spread throughout the city.⁷⁰ For strategies and sample language, read **model ordinances**.
- Consider creating an **urban agriculture overlay district** allowing for urban agriculture to be a permitted use in appropriate areas that may encompass several different zones.
- Modify zoning codes to permit the sale of produce (a specific type of commercial use) on the urban farm.
- Lease suitable public land at an affordable price to parties interested in starting an urban agriculture program.⁷¹
- Provide information on start-up grants.



Often on a smaller scale than urban agriculture, community gardens are communally shared plots of land used to grow vegetables that are traditionally either freely available to community members or donated to a local charitable organization like a food bank. To support community gardens, local governments can:

- Increase the **number of zones** that permit community gardens as a land use. It is important to permit community gardens in residential zones because this makes food more accessible for those who do not have cars.⁷²
- Establish a program through which people can apply to create a community garden on suitable public land.
- Partner with local nonprofits and food banks to establish a community garden that donates produce to the food bank.
- Establish ordinances that **allow for rooftop gardening**.

Watch and Learn...

Check out our “Starting a Community Garden” video on the Complete Communities YouTube channel to learn how to initiate community gardens and find the type that fits best for you.



Improving Food Affordability

Improving food access hinges on making food more affordable. Research has long shown that when food is sold less expensively, people tend to purchase that food more. In 2002, a **study** found that people bought significantly more healthy foods when the price of those foods was decreased even though overall sales at the store did not change during that time.⁷³ Local governments can make healthy food more affordable by assisting local retailers in using best practices for procurement and distribution as well as increasing the number of locations that accept food benefits like the federal **Supplemental Nutrition Assistance Program (SNAP)**, Special **Supplemental Nutrition Program for Women, Infants, and Children (WIC)**, and the **Seniors Farmers’ Market Nutrition Program (SFMNP)**. These USDA programs offer nutrition assistance to millions of eligible, low-income individuals and families and provide economic benefits to communities.

Groceries or Medicine...



Access to affordable, healthy food is so vital to health that some medical organizations have partnered with farmers’ markets and other organizations to prescribe produce, so that their patients can afford to eat nutritious food and afford to take care of their health all at once.

Local Food Retail Initiatives

Becoming a healthier local retailer can be costly, especially for those that may not have previously sold healthy food. Retailers may have to purchase new equipment, train new employees, and import produce from distant locations. Furthermore, if local retailers make mistakes in proper storage of produce, they risk losing significant amounts of money. Local governments can forge partnerships to help local retailers ensure they are selling produce safely and efficiently.



The connections between local food retailers and local farms play an important role in how the local food economy develops.

Credit: Bruce Burk



From who and how retailers obtain fruits and vegetables, to the price of the vegetables—procurement relationships are an important factor in the sale of fruits and vegetables. To support local retailers in produce procurement, local governments can:

- Establish or partner with a **food hub**, which would form a center point for collecting produce from local farms and redistributing the produce to local vendors.⁷⁴
- Provide technical assistance in establishing partnerships between local retailers and supermarkets. Local stores receive produce from supermarkets, and supermarkets benefit from the additional advertising they receive when the local stores sell their produce.
- Partner with local farms and local retailers to help them form business relationships.

A Focus on Food Hubs...

While there are over 200 food hubs nationwide, as of 2018, the CDC reported that Delaware had no food hubs. As such, building farm-to-market linkages through food hubs was one of their key recommendations in the CDC's 2018 Delaware Action Guide on Fruits and Vegetables.⁷⁵



Facilitate Healthy Purchases

Training facilitates the affordable sale of fruits and vegetables by teaching retailers storage techniques and the importance of seasonality of vegetables. In addition, local governments can ensure that retailers are effectively marketing produce to reinforce a demand for healthy food in the community. To make training more accessible to local food retailers, local governments can:

- Direct local retailers to financial assistance, grant, and loan opportunities for a variety of projects and activities at USDA's **Food and Nutrition Services** and **DDA**.
- Provide links to **resources** on creating healthy small food retailer certification programs that provide strategies with a mix of policies and programs to improve the food environment.⁷⁶
- Provide information on resources from cooperative extension programs at the **University of Delaware** and **Delaware State University**, which offer expertise and resources on family and health, food, agriculture and natural resources, programs for young people, and gardening.
- Support **marketing, displays, and advertisements** to promote healthy foods within the retail environment.⁷⁷
- Support public health, education, and social media campaigns to advance the importance of healthy eating.

USDA Nutrition Assistance Initiatives

Administered by the USDA, under the Food and Nutrition Service (FNS), **SNAP**, **WIC**, and **SFMNP** provide supplemental food-purchasing assistance for low-income people.⁷⁸ FNS works with state agencies, nutrition educators, and neighborhood and faith-based organizations to ensure that those eligible for nutrition assistance can make informed decisions about applying for the program and can access benefits.

SNAP-Ed is an evidence-based program that helps people lead healthier lives through good nutrition, informed consumerism, and physical activity. Local governments and community organizations can partner with SNAP-Ed to support social marketing campaigns, hold nutrition education classes, and improve their policies, systems, and the environment of the community.⁷⁹

Get more fresh, local produce when you use your SNAP/EBT benefits at the Coop Farmers Market

How it Works!

Bring your EBT Card or Vouchers

Check out the market, then come inside to Customer Care, where we process EBT payments, and exchange them for Tokens which you may use in the market!

Receive your Matched dollars

For every dollar you spend in EBT, we will match a dollar, up to \$10! Limit is \$10 per customer, per market date.

\$1 = \$1
you spend we match

Spend Tokens at your Favorite Vendor

Visit your favorite Vendor in-market, where you will be able to use your EBT tokens

An ad for a benefits matching program at the Newark Co-op Farmers' Market.
Credit: Newark Co-op Farmers' Market, Newark Natural Foods



Expand Benefit Acceptance

If a local food retailer does not accept SNAP, WIC, or SFMNP benefits, program recipients are less likely to shop there. The applications to become an approved vendor for these federal programs require a thorough understanding of the program regulations and a significant time commitment. To encourage more healthy food retailers to accept USDA nutrition assistance program benefits, local governments can:

- Direct food retailers to **USDA's online resources** to determine eligibility criteria to participate in the SNAP, WIC, or SFMNP programs.
- Refer farmers' market and farm stand vendors interested in becoming authorized to accept SNAP benefits to specific application information on **USDA's website**.
- Direct food retailers, farmers' markets, and farm stands to **Delaware's WIC Vendor Unit** to learn how to become an authorized WIC vendor in Delaware.
- Give farmers' markets and farm stand vendors information about participating in **WIC** and **SFMNP**.



Use Added Benefits to Promote Healthy Food

Some jurisdictions offer incentives to residents that use SNAP, WIC, and SFMNP benefits to buy fruits and vegetables, which may typically be more expensive. To create or incentivize healthy food programs, local governments can:

- Partner with local nonprofits to **match dollar amounts** spent on local produce for SNAP, WIC, and SFMNP recipients.⁸⁰ If this program is too costly, consider capping the match or using a smaller ratio than dollar-to-dollar. See the **analysis** performed by San Francisco for a comparison of these programs.⁸¹
- Seek funding support or partner with local businesses and nonprofits to subsidize CSA purchases for those with SNAP and WIC benefits because the up-front payments used in CSAs limit their ability to accept these benefits.



Conclusion

Access to healthy food is a vital part of a complete community. Ensuring residents have access to healthy, affordable foods can fend off countless health problems, including many of the most significant chronic health conditions like diabetes, cancer, and heart disease. Furthermore, many healthy food initiatives bring people together and strengthen community bonds. As a result, these policies can not only improve access to healthy food, but they can also encourage economic development, foster innovation at the local level, and build social capital.

However, there is not one simple solution because the problem itself is not simple. Barriers to food access occur as current policies and practices interact with many other social and environmental factors like transportation and economic development. When it comes to understanding this complex problem at the local level, context is key. Using this publication's analysis of determining factors for food access, local governments, citizen planners, and community organizations can identify factors creating barriers to food access in their communities.

Similarly, it is crucial to identify opportunities with a community context specific approach. Unique community character is part of what allows local level policy to address target problems alongside creating a sense of place and building social capital, but it also means there are no one size fits all solutions. There is no better way to find out which solutions would work best in a community than asking those to live there. Community engagement can help identify which policies will thrive and ensure that limited resources are spent effectively. Part of the overall Complete Communities Toolbox, this publication is a tool that can help local governments, citizen planners, and community organizations build their vision of a healthy and livable community. Visit the [Complete Communities Toolbox](#) for additional tips, tools, and tech to help make your community complete.





Suggested Resources

This section contains a list of recommended resources that can complement this guide's efforts to provide local governments with resources to improve access to healthy food. While some of these resources were linked to elsewhere in this guide, several of the resources are only provided here. To access a resource, click the resource title to link directly to the resource in a new tab. Shortened links are provided for those using this guide in a format that does not allow them to open links directly from the document.

Community and Urban Gardening

Beyond Food: Community Gardens as Places of Connection and Empowerment

This article highlights techniques for using community gardens to simultaneously improve access to healthy food and create a sense of place.

<https://bit.ly/2F6XzXW>

City of Wilmington Community Garden Start-Up Guide

This document walks readers through the steps to creating a new community garden in Wilmington. The resources within also provide helpful guidance for garden design, support, and planting, which is relevant for all local communities looking to start gardens.

<https://bit.ly/2J96d9y>

Community Gardening Policy Reference Guide

This publication provides thorough guidance in implementing policies to support community gardens within the context of existing local, state, and federal laws.

<https://bit.ly/2NeD3eh>

Delaware Center for Horticulture

This Delaware nonprofit is a key player in the development of many Delaware community gardens.

<https://bit.ly/2X1kw4Z>

Delaware Urban Farm & Food Coalition

This partnership in northern Delaware supports urban farming and agricultural efforts.

<https://bit.ly/2J3Ky2g>

Growing Urban Agriculture

This guide features many strategies for using urban agriculture to make food more accessible and foster overall community development and inclusion.

<https://bit.ly/2KOkVpR>

Healthy Food For Healthy Kids

Focusing on school gardens, this group offers resources to help communities plan, build, and take care of school gardens while also educating students about the importance of healthy food.

<https://bit.ly/2LBSAmM>

Seeding the City: Land Use Policies to Promote Urban Agriculture

Providing model ordinances and draft comprehensive plan language, this publication highlights practical elements of implementing community garden and urban agriculture policies.

<https://bit.ly/2Njkcih>

Community Supported Agriculture (CSA)

Local Harvest CSAs

In addition to describing how CSAs work, this website features CSAs in Delaware and across the country to help people join CSAs and allow local governments to partner with or support them.

<https://bit.ly/2p25fUp>

Food Bank of Delaware Community Supported Agriculture

Learn about the Food Bank of Delaware's very own CSA. As a key partner in promoting access to healthy food, the Food Bank is a great resource for those looking to see how CSAs can be accessible and affordable.

<https://bit.ly/2XeAnIm>

CSA Coalition

Learn about Partner Shares, a longstanding program that exemplifies how CSAs can be made more affordable and used as a tool to expand access to healthy food among low-income populations.

<https://bit.ly/2CVMcyZ>

USDA Community Supported Agriculture

Learn about CSAs from the U.S. authority on all things farming. The website provides several publications about studies that assess everything from the impact of CSAs to best practices.

<https://bit.ly/2GpoizR>

Farmers' Markets and Farm Stands

Buy Local Delaware: Farmers' Market Guide

Mentioned throughout this publication, the Buy Local Delaware guide provides a one stop shop for finding farmers' markets in Delaware with its easy to navigate list of markets accompanied by website links, hours, and SNAP benefit details.

<https://bit.ly/2ISDE0U>

Creating a Farmers' Market Living Lab

Based on the experiences of the Historical Lewes Farmers' Market, this guide provides helpful tips for establishing and maintaining farmers' markets. For those looking for more information about keeping farmers' markets economically viable, this is a great resource.

<https://bit.ly/2Xdd5N4>

Current Practices in Developing and Supporting Farmers' Markets

This publication provides the CDC's view on best practices for using farmers' markets to promote healthy communities.

<https://bit.ly/2J8VKej>

Farmers' Market Coalition

The Farmers' Market Coalition brings together resources and experiences from farmers' markets across the country. The website features recent news to keep farmers' markets up to date.

<https://bit.ly/2X9kRrb>

Farmers' Markets as a Strategy to Improve Access to Healthy Food for Low-Income Families and Communities

This publication, based on the work of several leading public health organizations, focuses on using farmers' markets to promote equity.

<https://bit.ly/2xqMv3L>

SNAP Guide for Farmers' Market

This publication provides a key resource for existing farmers' markets looking to work with SNAP benefits.

<https://bit.ly/2ITkwAf>

Health Impacts of Access to Healthy Food

Access to Healthy Food and Why It Matters: A Review of the Research

This comprehensive literature review of food access analyzes countless studies connecting food access with health to synthesize these findings into succinct conclusions.

<https://bit.ly/1Fhp3Qm>

CDC Health Effects of Limited Access to Healthy Food

The CDC provides resources to connect food access with many health outcomes.

<https://bit.ly/2NinzWS>

CDC Healthy Food Environments

The CDC clarifies what factors contribute to a food environment and what makes for a healthy food environment.

<https://bit.ly/2ksLRNP>

Healthy Eating Research

In addition to discussing access to healthy food, the Robert Wood Johnson Foundation's Healthy Eating Research program provides research findings and resources about many other views on healthy eating such as the food economy, the scientific basis of healthy eating, the role of food marketing, and more.

<https://bit.ly/2J3QKY4>

Mobile Markets

Civic Works Real Food Farm: A Guide to Mobile Farmers' Markets

One place doesn't always fit all. If that's the case, this guide provides an alternative to the usually static farmers' markets.

<https://bit.ly/2LoFRTO>

Healthy Mobile Vending Policies

From an evaluation of the use of mobile vending to model ordinances, this resource from Change Lab Solutions is a great starting point for communities looking to get involved with mobile markets as a source of healthy food.

<https://bit.ly/1plf3Zk>

Increasing Access to Health Foods: Grocery Stores and Mobile Markets

This short brief provides ideas for possible uses of mobile markets in areas lacking access to healthy food to help communities find the one that fits them best.

<https://bit.ly/2xieVge>

Mobile Market: Applying the Food Truck Model to Food Access

This resource is great for communities looking to start a mobile market program. It takes readers through the process of starting a market, from when it was just a thought through implementation, to help communities avoid potential obstacles.

<https://bit.ly/2XCvGRU>

Nutrition Benefits Programs

USDA Food and Nutrition Service

The Food and Nutrition Service operates SNAP, WIC, and SFMNP. This site is a one stop shop for learning about the programs.

<https://bit.ly/2nzmGf>

Double Up Food Bucks

Visit this link to find guidance for implementing a program to allow SNAP and WIC recipients to purchase more healthy food for the same price.

<https://bit.ly/2FD3hkF>

Elderly Simplified Application Project (ESAP)

This website explains the history of ESAP and provides resources for those looking to get involved in the future.

<https://bit.ly/2KKfdFI>

SNAP-Ed

This resource provides information about how to afford a healthy diet with limited funds and provides materials that can be used in healthy food education programs.

<https://bit.ly/2KEZibr>

Policy for Healthy Food Access

Delaware Plan4Health

Focusing on comprehensive planning, Delaware Plan4Health offers Delaware specific resources geared toward communities looking to incorporate active living, access to healthy food, and more into the planning process, so that these areas of focus can guide communities in future policy making. In particular, the analysis of the best ways to plan for health in Dover and Kent County are relevant for any communities going through the planning process.

<https://bit.ly/2xgMHCl>

Evaluating Healthy Food Access Interventions

This resource provides communities with the tools they need to measure the impact of healthy food policies to help communities invest their time and resources in strategies that make a difference.

<https://bit.ly/2KH8oEt>

Food Access and Policy Planning Guide

This collection of policies and case studies provides a clear picture of how ideas to improve food access are realized through tactful implementation of policies like those in this publication.

<https://bit.ly/2RCwvoo>

Healthier Food Retail: Beginning the Assessment Process in Your State or Community

This guide from the CDC helps communities understand their own food environments, so they can understand what types of policies will be most helpful in their context.

<https://bit.ly/2X5KX9J>

Healthy Food in Your Community: A Toolkit for Policy Change

Knowing the best policies for food access is the first step, but carrying them out requires resources and partnerships. This guide describes tactics for leveraging resources and partnerships to implement food access policies.

<https://bit.ly/2XCwZAI>

Healthy Food Policy Project

This website maintains a database featuring real examples of laws used to encourage consumption of healthy food including those focusing on improving access to healthy food.

<https://bit.ly/2LnpKpn>

Healthy Foods Here: Recommendations for Future Programming

Featuring case studies, this guide walks readers through the implementation of healthy food access strategies to identify what can be learned from past attempts to improve access to healthy food.

<https://bit.ly/2XeBWQv>

Increasing Access to Healthy Food: Linking Planning Goals & Implementation Actions

Updated in 2019, this publication helps local governments realize healthy food access goals from comprehensive plans by providing simple implementation strategies and recommendations for partnerships.

<https://bit.ly/31WoiQK>

Municipal Strategies to Increase Access to Healthy Food

This guide provides information on local strategies for improving access to healthy food based on experiences in Massachusetts, a state where much policy action takes place on the local level.

<https://bit.ly/2X5McFG>

Putting Local Food Policy to Work for Our Communities

This guide focuses on the ways in which local governments can use their powers to improve access to healthy food with a keen understanding of community needs.

<https://bit.ly/2IRBHBT>

The Minnesota Food Charter Food Access Planning Guide

Communities in Minnesota have pioneered several innovative healthy food access strategies like the Staple Foods Ordinance. This guide details how they recommend planning for food access.

<https://bit.ly/2xhxG3g>

Promoting Nutrition

Choose MyPlate

As the government's publicly targeted nutrition promotion, MyPlate provides nutrition resources ranging from scientific research to educational handouts.

<https://bit.ly/2brJBjQ>

Delaware Grown

Providing recipes and connecting viewers with sources of healthy food across Delaware, this DDA run website provides local governments with Delaware specific nutrition they can share with their residents.

<https://bit.ly/2FFcTLt>

Dietary Guidelines for Americans

This website is the official source of the US government dietary recommendations.

<https://bit.ly/2rD1Mgv>

Nutrition Strategies and Resources

This website showcases the CDC's suggestions for nutrition promotion.

<https://bit.ly/2kYPuZA>

Transportation and Healthy Food

Low-Stress Bikeability

The Low-Stress Bikeability section of the Complete Communities Toolbox provides many resources that can be used to help improve the availability of multi-modal transportation, such that people can reach healthy food without a vehicle. Relevant tools include: the Low-Stress Bikeability Assessment Tool, Blueprint for a Bicycle-Friendly Delaware Framework for Local Implementation Adobe Spark Page, and information on traffic calming techniques that create bicycle-friendly environments.

<https://bit.ly/2LnZgnG>

Mixed-Use Development

Describing how to build areas where people can live, work, and play, the Mixed-Use Development section of the Complete Communities Toolbox provides the planning and policy tools communities need to build areas where local sources of healthy food are within walking distance of where people live.

<https://bit.ly/2XGeeMg>

Safe Routes to Healthy Food

Known for their work on Safe Routes to School, the Safe Routes partnership has created a task force to develop and advocate for policies and strategies that allow people to safely and easily travel from where they live to local sources of healthy food.

<https://bit.ly/2RGF0yK>

Transit-Oriented Development (TOD)

Given that public transit routes in Delaware are managed by the State, these resources on TOD offer local governments a method of ensuring healthy food is accessible along public transportation lines by encouraging the use of local government land use powers to encourage new development along existing public transit routes.

<https://bit.ly/2X99N8k>

Walkable Communities

The Walkable Communities section of the Complete Communities Toolbox provides many tools to help communities create interconnected walking networks that make it possible for people to walk from their living spaces to local sources of healthy food.

<https://bit.ly/2ZSWIHx>

Working with Local Businesses

Convenience Store Distribution: Options for Fresh Produce

This short brief describes key players in food economies that convenience and corner stores can use to establish a viable and sustainable connection with sources of healthy food.

<https://bit.ly/2KJr1Ya>

Equitable Development Toolkit: Equitable Food Hubs

In addition to providing a more in-depth description of food hubs than found in this publication, this toolkit contextualizes food hub policies within overarching goals to achieve equity in food access.

<https://bit.ly/2xt4t5H>

Health on the Shelf: A Guide to Healthy Small Food Retailer Certification Programs

Building on the concept that people prefer businesses that have formal certifications, this guide explains how either creating or encouraging participation in Healthy Small Food Retailer Certification Programs can incentivize corner stores to carry more healthy foods by offering them an economic advantage in return.

<https://bit.ly/2X5Yf5P>

Healthier Corner Stores: Positive Impacts and Profitable Changes

This short brief describes partnerships that can be leveraged to produce healthier corner stores and provides many examples of healthy corner store programs for reference.

<https://bit.ly/1jCC7vn>

Healthy Food and Small Stores: Strategies to Close the Distribution Gap in Underserved Communities

Analyzing research and identifying relevant policies, this guide focuses on understanding the food supply chain for small stores and how rural and urban communities can strategically work with this supply chain to increase the stock of healthy food.

<https://bit.ly/3217R5u>

Healthy Food Retail Action Guide

From the CDC, this guide provides a comprehensive analysis of the food economy from distribution to procurement and identifies ways to strengthen the connections between healthy food production to healthy food retail.

<https://bit.ly/2kri4FH>

Regional Food Hub Resource Guide

This guide provides a comprehensive explanation of regional food hubs and identifies the role they play in healthy food retail.

<https://bit.ly/2ZPBFjC>

Economies of Local Food Systems Toolkit

A resource from the USDA, this toolkit provides an explanation of the food economy to provide communities with a better understanding of how food is produced, procured, sold, and consumed.

<https://bit.ly/320V1ED>



Glossary of Terms

Active Transportation: Non-motorized forms of transportation powered by human energy such as walking and biking.

Activity-Supportive Built Environments: Community design and infrastructure that allow residents to safely engage in physical activity and use non-motorized forms of transportation.

Backyard Garden: Gardens operated on one's own property for the purpose of growing food for personal consumption.

Charrette: A form of participatory planning in which relevant stakeholders, often including members of the public and interested organizations, work with government officials through an intense, collaborative planning and design workshop. The workshop includes a variety of interactive activities including mapping are used to come to a consensus about an aspect of planning.

Commodity Supplemental Food Program (CSFP): This USDA program provides low-income seniors with packages of nutritious food meant to supplement their diets.

Community Garden: Often on a smaller scale than urban agriculture, community gardens are communally shared plots of land used to grow vegetables that are traditionally either freely available to community members or donated to a local charitable organization like a food bank.

Community Supported Agriculture (CSA): A partnership between local farmers and community residents through which residents purchase shares of produce at the beginning of the growing season and receive a regular supply of produce from the local farmers as the season progresses.

Complete Streets: Streets planned, designed, built, and maintained to safely accommodate travelers of all ages and abilities.

Comprehensive Plan: A document that establishes a community's vision for the future, provides for future land use, and serves as the basis for zoning, subdivision, and land use codes.

Corner/Convenience Store: Small scale stores that sell a variety of goods including limited amounts of food retail. Traditionally, primarily unhealthy foods have been sold at these stores.

Delaware Department of Agriculture (DDA): According to **DDA**, they are a state agency that works to "sustain and promote the viability of food, fiber, and agricultural industries in Delaware through quality services that protect and enhance the environment, health, and welfare of the general public."

Density Bonus: A policy that allows developers to build more units in a designated area than allowed by the zoning code in exchange for the developer engaging in certain practices such as designating a certain number of affordable housing units, preserving open space, or creating a community garden.

Elderly Simplified Application Project (ESAP): According to the **USDA**, ESAP "is a demonstration project that seeks to increase participation among the elderly low-income population by streamlining the application and certification process."²⁷

Electronic Benefits Transfer (EBT): The form of payment used in the SNAP program. Benefits are generally housed on a card which can then be used to pay for qualified food items at locations that accept EBT as a form of payment.

Farm Stand: A direct market for farmers, farm stands, often operated by the farmers themselves or local nonprofits, sell locally grown produce and dishes made from such produce. They differ from farmers' markets in that they are operated as an independent business and tend to have more extensive business hours.

Farmers' Market: A partnership between multiple farmers who typically gather at a particular location once or twice per week to sell their produce to the public.

Fast Food Restaurant: In this publication, fast food restaurants include those that fall into the **USDA's definition** of limited service restaurants "where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to the customer's location." Most fast food restaurants sell unhealthy foods.⁸²

Food Desert: A geographic area in which there is limited or nonexistent access to supermarkets or other sources of affordable, nutritious food with respect to the given area's transportation options.

Food Environment: The food environment encompasses all factors in the community that impact when, how, and from where residents obtain food. Included in this definition is the types, locations, and prices of food retailers and the availability of programs that promote nutrition, food affordability, and local food production.

Food Hub: An organization that supports local farming by collecting produce from local farms and redistributing the produce to local retailers such as supermarkets, produce carts, restaurants, and convenience stores.

Food Swamp: A geographic area in which unhealthy retailers like fast food restaurants and unhealthy convenience stores are more accessible and numerous than healthy food retailers.

Full-Line\Full-Service Food Retailer: A food retailer that sells a complete range of typical food ingredients including meats, fruits, vegetables, grains, and dairy.

Green Space: Publicly accessible land containing vegetation. While the land may be altered by a community, it does not contain buildings.

Infill Development: The development of vacant parcels within previously built areas, already served by public infrastructure.

Living Lab: A method of assessing the efficacy of interventions in an already operating business or program by continuously collecting relevant data, implementing interventions in real time, and evaluating the effect of the interventions.

Mixed-Use Zoning: Zoning ordinances that allow for several types of land use (e.g. housing, offices, retail, entertainment, institutions, services, restaurants, grocers, farmers' markets). This type of zoning allows residents to access healthy food with forms of active transportation like walking and biking.

Model Ordinance: Sample language that provides a starting point for writing a policy and illustrates appropriate legal terminology for implementing a policy.

MyPlate: A USDA run **website** that serves as the authority on nutrition information, recipes, and dietary guidelines.

On-Farm Market: Similar to a farm stand in that it operates independently and for more hours than a typical farmers' market, on-farm markets are small businesses operated by farmers who sell their produce on the same plot of land they use to farm.

Ordinance: A codified law established at the local government level.

Placemaking: A multi-faceted approach to the planning, design, and management of public spaces capitalizing on a local community's assets, inspiration, and potential.

Rooftop Garden: A type of garden that can function as an individual or community garden and may require additional safety regulation in comparison to a traditional garden.

Senior Farmers' Market Nutrition Program (SFMNP): According to the **USDA**, the SFMNP is used to "provide low-income seniors with coupons that can be exchanged for eligible foods (fruits, vegetables, honey, and fresh-cut herbs) at farmers' markets, roadside stands, and community supported agriculture programs."⁸³

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): According to the **USDA**, WIC "provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk."¹⁵

Staple Food Ordinance: A law requiring that certain categories of retailers, such as convenience stores, carry a minimum amount of foods essential to nutrition (specified number of grain, dairy, fruit, and vegetable products) to be compliant with local business licensure rules.

Streetscaping: Refers to incorporating both the natural and built fabric of the street in the design, enhancing the visual quality and creating a welcoming public space for residents.

Supermarket\Grocery Store: A large retailer who primarily sells food and stocks a full line of grains, meats, dairy, and produce.

Supplemental Nutrition Assistance Program (SNAP): According to the **USDA**, "SNAP offers nutrition assistance to millions of eligible, low-income individuals and families and provides economic benefits to communities." People colloquially refer to this program as "food stamps," the name of a previous iteration of the program.¹⁴

Transit-Oriented Development (TOD): Design strategies with both residential and commercial uses to make public transit successful, enhance the convenience and safety of walking and bicycling, and provide for a vibrant, livable community.

United States Department of Agriculture (USDA): According to the **USDA**, they are a national department that provides "leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science, and effective management."⁸⁴

Universal Design: A design principle that emphasizes diversity and strives to make design services, buildings, businesses, and other places accessible to people of all ages and abilities.

Urban Agriculture: Plots of land in cities or towns that are specifically used to grow fruits and vegetables with the intent to sell the produce.

USDA Food Access Research Atlas: A tool on the USDA website that allows users to view and map food access data as measured by the USDA in up to as much detail as the census tract level.

Zoning: The practice of regulating local land use by dividing land into several zones and designating the permitted, conditional, and prohibited land uses within each zone.

Zoning Code: The codified list of zoning regulations that apply for a specific jurisdiction.



References

1. Robert Wood Johnson Foundation. (n.d.). The State of Obesity in Delaware. Retrieved June 28, 2019, from <https://www.stateofobesity.org/states/de/#policies>
2. Harvard T.H. Chan School of Public Health. (2016). Toxic Food Environment. Retrieved March, 2019, from <https://www.hsph.harvard.edu/obesity-prevention-source/obesity-causes/food-environment-and-obesity/>
3. Bell, J., Mora, G., Hagan, E., Rubin, V., & Karpyn, A. (2013). Access to Healthy Food and Why it Matters: A Review of the Research. Retrieved March, 2019, from http://thefoodtrust.org/uploads/media_items/access-to-healthy-food.original.pdf
4. United States Department of Agriculture (USDA). (2017). Documentation. Retrieved March, 2019, from <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/>
5. Health and Human Services (HHS). (n.d.). Food and Nutrition. Retrieved June 28, 2019, from <https://health.gov/dietaryguidelines/>
6. Powell, L. M., Slater, S., Mirtcheva, D., Bao, Y., & Chaloupka, F. J. (2007). Food store availability and neighborhood characteristics in the United States. *Preventive Medicine*, 44(3), 189-195. doi:10.1016/j.ypmed.2006.08.008
7. United States Department of Agriculture (USDA). (n.d.). Food Access Research Atlas. Retrieved February, 2019, from <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx>
8. Jacobson, E., Pragg, S., Homesy, A., Floros, E., Stump, J., & Clark, A. (2015). Access to Healthy Foods in the Built Environment. Retrieved from <http://udspace.udel.edu/bitstream/handle/19716/18490/HealthPolicyIssueBrief4.pdf>
9. Behrens, A., & Simons, J. (n.d.). Baltimore City Food Swamps. Retrieved March, 2019, from http://mdfoodsystemmap.org/wp-content/uploads/2013/01/Atlas_CLF-Food-Swamp_final.pdf
10. Cooksey-Stowers, K., Schwartz, M. B., & Brownell, K. D. (2017). Food Swamps Predict Obesity Rates Better Than Food Deserts in the United States. *International Journal of Environmental Research and Public Health*, 14(11). <https://doi.org/10.3390/ijerph14111366>
11. Walker, R. E., Keane, C. R., & Burke, J. G. (2010). Disparities and access to healthy food in the United States: A review of food deserts literature. *Health & Place*, 16, 876–884. <https://doi.org/10.1016/j.healthplace.2010.04.013>
12. Coleman-Jensen, A. (2018). USDA ERS - Food Pantries Provide Emergency Food to More Than One-Quarter of Food-Insecure Households. Retrieved March, 2019, from <https://www.ers.usda.gov/amber-waves/2018/november/food-pantries-provide-emergency-food-to-more-than-one-quarter-of-food-insecure-households/>
13. French, S. A. (2003). Pricing Effects on Food Choices. *The Journal of Nutrition*, 133(3), 841S–843S. <https://doi.org/10.1093/jn/133.3.841S>
14. USDA Food and Nutrition Service. (n.d.). Supplemental Nutrition Assistance Program (SNAP) | USDA-FNS. Retrieved July 1, 2019, from <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>

USDA Food and Nutrition Service. (n.d.). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) | USDA-FNS. Retrieved July 1, 2019, from <https://www.fns.usda.gov/wic>
15. Delaware Department of Agriculture (DDA). (n.d.). Buy Local Delaware Guide. Retrieved July 1, 2019, from <https://agriculture.delaware.gov/communications-marketing/buy-local-delaware-guide/>

16. Pedestrian Safety Guide for Transit Agencies Chapter 4. (n.d.). Retrieved from https://safety.fhwa.dot.gov/ped_bike/ped_transit/ped_transguide/ch4.cfm
17. Rural Health Information Hub. (n.d.). Food Access in Rural Communities. Retrieved July 1, 2019, from <https://www.ruralhealthinfo.org/toolkits/food-access/1/rural-specific-concerns>
18. Delaware Department of Agriculture. (n.d.). Delaware Agricultural History. Retrieved June, 2019 from <https://agriculture.delaware.gov/agricultural-history/>.
19. Aging In Place. (n.d.). The Facts Behind Senior Hunger. Retrieved June, 2019, from <https://www.aginginplace.org/the-facts-behind-senior-hunger/>
20. The Center for Universal Design. (1997). The Principles of Universal Design. Retrieved from <http://www.design.ncsu.edu/cud>
21. The Food Bank of Delaware. (n.d.). Senior Nutrition. Retrieved June, 2019, from <https://www.fbd.org/program/senior-nutrition/>
22. The Food Bank of Delaware. (n.d.). Mobile Pantry. Retrieved June, 2019, from <https://www.fbd.org/program/mobile-pantry/>
23. Delaware Department of Agriculture (DDA). (n.d.). Seniors Farmers' Market Nutrition Program. Retrieved June, 2019, from <https://agriculture.delaware.gov/communications-marketing/seniors-farmers-market-nutrition-program/>
24. USDA Food and Nutrition Service. (n.d.). Fact Sheet: USDA Support for Older Americans. Retrieved June, 2019, from <https://www.fns.usda.gov/pressrelease/2015/020215>
25. National Council on Aging (NCOA). (2015). Seniors & SNAP Best Practices Handbook. Retrieved from https://www.ncoa.org/wp-content/uploads/NCOA-SNAP-hdbk_0815.pdf
26. USDA Food and Nutrition Service. (n.d.). Elderly Simplified Application Project. Retrieved July, 2019, from <https://www.fns.usda.gov/snap/elderly-simplified-application-project>
27. McMenamin, L. (2017). A new SNAP form for Pennsylvania seniors got 50% more applications — but it's not enough - Generocity Philly. Retrieved July, 2019, from <https://generocity.org/philly/2017/12/06/coalition-against-hunger-snap-seniors-applications/>
28. Allen, J. E., Rossi, J., Woods, T. A., & Davis, A. F. (2017). Do Community Supported Agriculture programmes encourage change to food lifestyle behaviours and health outcomes? New evidence from shareholders. *International Journal of Agricultural Sustainability*, 15(1), 70–82. <https://doi.org/10.1080/14735903.2016.1177866>
29. Center for Disease Control and Prevention (CDC). (n.d.). Community Gardens. Retrieved June, 2019, from <https://www.cdc.gov/healthyplaces/healthtopics/healthyfood/community.htm>
30. State of Delaware News. (n.d.). Eighteen Delaware sites awarded grants for urban agriculture and community gardens. Retrieved June, 2019, from 2017 website: <https://news.delaware.gov/2017/03/15/eighteen-delaware-sites-awarded-grants-for-urban-agriculture-and-community-gardens/>
31. American Heart Association. (2012). Mobile Vending Near Schools Policy Statement Position and Rationale. Retrieved from https://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_446658.pdf
32. ChangeLab Solutions, & National Policy & Legal Analysis Network (nplan). (2010). Creating a Permit Program for Produce Cart Vendors. Retrieved from www.healthierus.gov/dietaryguidelines.
33. Mair, J. S., Pierce, M. W., & Teret, S. P. (2005). The Use of Zoning to Restrict Fast Food Outlets: A Potential Strategy to Combat Obesity. Retrieved from <https://www.jhsph.edu/research/centers-and-institutes/center-for-law-and-the-publics-health/research/ZoningFastFoodOutlets.pdf>
34. ChangeLab Solutions. (n.d.). Model Healthy Food Zone Ordinance. Retrieved March, 2019, from <https://www.changelabsolutions.org/product/model-healthy-food-zone-ordinance>

35. American Heart Association. (2016). Reducing Sugar-Sweetened Beverage Consumption A Focus on Sugar-Sweetened Beverage Taxes. Retrieved from https://www.heart.org/-/media/files/about-us/policy-research/prevention-nutrition/sugar-sweetened-beverage-taxation-ucm_490766.pdf?la=en&hash=78FF27BF18A0A7967526C4052FDA3DC267AA64DD
36. ChangeLab Solutions. (2013). Who Can Sell, and Where? Regulating Retail Sales of Sugar-Sweetened Beverages. Retrieved from www.changelabsolutions.org/
37. ChangeLab Solutions. (2013). Healthier Choices on the Shelf: Regulating Retail Sales of Sugar-Sweetened Beverages. Retrieved from http://changelabsolutions.org/sites/default/files/SSB_Notes-Choices_on_the_Shelf_FINAL_20130422_0.pdf
38. Leid, E. (2013). All (Food) Politics is Local: Increasing Food Access through Local Government Action. *Harvard Law & Policy Review*, 7(321). Retrieved from <http://nrs.harvard.edu/urn-3:HUL.InstRepos:11189975>
39. Wilmington Green Box. (n.d.). Wilmington Green Box: Healthy Goods in a Creative Way. Retrieved July, 2019, from <https://www.wilmingtongreenbox.org/>
40. West End Neighborhood House. (n.d.). Bright Spot Urban Farms. Retrieved July, 2019, from <https://www.brightspotfarms.org/>
41. Staisey, N., Beaumont, N., & Wallace, L. (2018). Creating a Farmers Market Living Lab: Lessons Learned in Growing a Farmers Market. Retrieved from <https://www.historiclewesfarmersmarket.org/wordpress/wp-content/uploads/HLFM-Report-spreads.pdf>
42. The Food Bank of Delaware. (n.d.). After-School Nutrition Program. Retrieved June, 2019, from <https://www.fbd.org/program/childrens-nutrition-program/after-school-nutrition-program/>
43. The Food Bank of Delaware. (n.d.). Backpack Program. Retrieved June, 2019, from <https://www.fbd.org/backpack-program/>
44. The Food Bank of Delaware. (n.d.). Summer Nutrition Program. Retrieved June, 2019, from <https://www.fbd.org/program/childrens-nutrition-program/sfsp/>
45. Delaware State News. (2018). Summer Food Service Program Meal Sites Available throughout Delaware. Retrieved June, 2019, from <https://delawarestatenews.net/schools/summer-food-service-program-meal-sites-available-throughout-delaware/>
46. The Food Bank of Delaware. (n.d.). SNAP Outreach. Retrieved June, 2019, from <https://www.fbd.org/snap-outreach/>
47. The Food Bank of Delaware. (n.d.). WIC Outreach. Retrieved June, 2019, from <https://www.fbd.org/program/wic-outreach/>
- The Food Bank of Delaware. (n.d.). SNAP Education. Retrieved June, 2019, from <https://www.fbd.org/program/nutrition-education/snap-education/>
48. The Food Bank of Delaware. (n.d.). SNAP Education. Retrieved June, 2019, from <https://www.fbd.org/program/nutrition-education/snap-education/>
49. Food Bank of Delaware. (n.d.). Delaware Food Works. Retrieved June, 2019, from <https://www.fbd.org/delawarefoodworks/>
50. USDA Economic Research Service. (2018). Key Statistics and Graphics. Retrieved June, 2019, from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx>
51. Jacobson, E., O'Hanlon, J., & Clark, A. (2011). Access to Healthy Foods in the Built Environment What is the Issue at Hand? Retrieved from www.ipa.udel.edu/healthyDEtoolkit/foods/maps.html
52. Feeding America. Hunger in Delaware. (n.d.). Retrieved July, 2019, from <https://www.feedingamerica.org/hunger-in-america/delaware>
53. Massachusetts Department of Public Health, Pioneer Valley Planning Commission, Metropolitan Area Planning Council, Massachusetts Association of Health Boards, & Massachusetts Municipal Association. (n.d.). Municipal Strategies to Increase Food Access. Retrieved from https://www.mma.org/wp-content/uploads/2018/07/food_access_160926_01_web.pdf

54. Delaware Plan4Health. (2017). Guidance for Incorporating Health into Kent County's Comprehensive Plan. Retrieved from <http://deplan4health.org/wordpress/wp-content/uploads/2017/11/FINAL-Kent-County-Guidance-Document-w-App.pdf>
- Delaware Plan4Health. (2017). Guidance for Incorporating Health into the City of Dover's Comprehensive Plan. Retrieved from http://deplan4health.org/wordpress/wp-content/uploads/2018/03/Final_DoverGuidanceDocument_wApp.pdf
55. Rudolph, L., & Caplan, J. (2013). Health in All Policies: A Guide for State and Local Government - Public Health Institute. Retrieved from <http://www.phi.org/resources/?resource=hiapguide>
56. Eichinger, M. (2016). The A's of Influencing Healthy Eating and Active Living. *Delaware Journal of Public Health*, 16–18. <https://doi.org/10.1155/2014/146502>
57. Delaware Complete Communities Toolbox. (n.d.). Public Engagement. Retrieved March, 2019, from <https://www.completecommunitiesde.org/planning/inclusive-and-active/intro-pe/>
58. Delaware Complete Communities Toolbox. (n.d.). Complete Streets. Retrieved March, 2019, from <https://www.completecommunitiesde.org/planning/complete-streets/>
59. Delaware Department of Transportation (DelDOT). (2018). Blueprint for a Bicycle-Friendly Delaware: A Statewide Policy Plan. Retrieved from <https://deldot.gov/Publications/plans/bikeandped/pdfs/DelDOTBikePlan043018FINAL.pdf>
60. Laurison, H., Hadwin, A., & Holaday, R. (2014). Incentives for Change: Rewarding Healthy Improvements to Small Food Stores. Retrieved from http://changelabsolutions.org/sites/default/files/Incentives-for-Change-Small-Food-Stores_FINAL_20140131_2.pdf
61. City of Minneapolis. (n.d.). Staple Foods Ordinance. Retrieved March, 2019, from <http://www.minneapolismn.gov/health/living/eating/staple-foods>
62. ChangeLab Solutions. (2009). Healthy Mobile Vending Policies: A Win-Win for Vendors and Childhood Obesity Prevention Advocates. Retrieved from http://www.changelabsolutions.org/sites/default/files/MobileVending_FactSht_FINAL_091008.pdf
63. ChangeLab Solutions. (2013). Creating a Permit Program for Produce Cart Vendors. Retrieved from <https://www.changelabsolutions.org/product/creating-permit-program-produce-cart-vendors>
64. ChangeLab Solutions. (2013). Model Produce Cart Ordinance. Retrieved from <https://www.changelabsolutions.org/product/model-produce-cart-ordinance>
65. Farmers Market Coalition. (n.d.). About Farmers Markets. Retrieved June, 2019, from <https://farmersmarketcoalition.org/education/qanda/>
66. Ringstrom, E., & Born, B. (2011). Food Access Policy and Planning Guide. Retrieved from http://www.nyc.gov/html/ddc/downloads/pdf/ActiveDesignWebinar/King_County_Food_Access_Guide.pdf#food_policy.indd%3AFarmers_Market
67. The Bureau of Planning and Sustainability, & Oregon Public Health Institute. (2012). Urban Food Zoning Code Update: Enhancing Portlanders' Connection to Their Food and Community. Retrieved from www.portlandonline.com/bps
68. King County Department of Natural Resources and Parks. (2017). Community Supported Agriculture: Lessons Learned from King County's Experience Starting a Worksite CSA Program. Retrieved from <https://aqua.kingcounty.gov/dnrm/local-food/documents/2017-CSA-LessonsLearned.pdf>
69. Baltimore Office of Sustainability. (n.d.). Food Policy. Retrieved March, 2019, from <http://www.baltimoresustainability.org/projects/baltimore-food-policy-initiative/food-policy/>
70. Chamberlin, J., Eskandari-Qajar, Y., & Orsi, J. (n.d.). Planning and Zoning. Retrieved March 1, 2019, from <http://www.urbanaglaw.org/planning-and-zoning/>

71. Wooten, H., & Ackerman, A. (2012). Seeding the City: Land Use Policies to Promote Urban Agriculture. Retrieved from http://changelabsolutions.org/sites/default/files/Urban_Ag_SeedingTheCity_FINAL_%28CLS_20120530%29_20111021_0.pdf
72. Public Health Law & Policy. (2009). Establishing Land Use Protections for Community Gardens. Retrieved from http://vnrc.org/wp-content/uploads/typo3/Publications/Establishing_Land_Use_Protections_for_Community_Gardens.pdf
73. Horgen, K. B., & Brownell, K. (2002). Comparison of price change and health message interventions in promoting healthy food choices. *Health Psychology*, 21(5), 505. <https://doi.org/10.1037/0278-6133.21.5.505>
74. USDA Agricultural Marketing Services. (n.d.). Food Value Chains and Food Hubs. Retrieved March, 2019, from <https://www.ams.usda.gov/services/local-regional/food-hubs>
75. Center for Disease Control and Prevention (CDC). (2018). Delaware Action Guide on Fruits and Vegetables. Retrieved from https://www.cdc.gov/nutrition/data-statistics/pdfs/Delaware_StateActionGuide_Sept2018_508.pdf
76. Fry, C., Levitt, Z., Ackerman, A., & Burton Laurison, H. (2013). Health on the Shelf: A Guide to Healthy Small Food Retailer Certification Programs 2 Health on the Shelf. Retrieved from https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/_pdf/projects/FPN/how_to_guide/laws_policies/Health_on_the_Shelf_A_Guide_to_Healthy_Small_Food_Retailer_Certification_Programs.pdf
77. Hinchy, M., Gordon, L., Arenberg, L., Goodwin, E., Becker, A. B., & Gonzalez, E. (2017). Healthy Corner Store Toolkit. Retrieved from <http://cookcountypublichealth.org/files/pdf/healthy-hotspot/corner-stores/corner-store-toolkit-body-6F.pdf>
78. United States Department of Agriculture. (n.d.). Food and Nutrition Service. Retrieved March, 2019, from <https://www.fns.usda.gov/>
79. USDA Food and Nutrition Service. (n.d.). Supplemental Nutrition Assistance Program Education (SNAP-Ed). Retrieved March 1, 2019, from <https://www.fns.usda.gov/snap/SNAP-Ed>
80. Fair Food Network. (2016). Double Up Food Bucks: A Five-Year Success Story. Retrieved from http://www.fairfoodnetwork.org/wp-content/image_archive/FFN_DoubleUpFoodBucks_5YearReport.pdf
81. Cattell, L., Danna, N., Fisher, M., & Rose, T. (2014). San Francisco Healthy Food Supplement Program A Report For The San Francisco Food Security Task Force. Retrieved from https://www.sfdph.org/dph/files/mtgsGrps/FoodSecTaskFrc/docs/SFHealthyFoodSupplementProgram_updated.pdf
82. USDA Economic Research Services. (n.d.). Documentation. Retrieved June, 2019, from <https://www.ers.usda.gov/data-products/food-environment-atlas/documentation/>
83. USDA Food and Nutrition Service. (n.d.). Senior Farmers' Market Nutrition Program. Retrieved June, 2019, from <https://www.fns.usda.gov/sfmnp/overview>
84. United States Department of Agriculture (USDA). (n.d.). About the U.S. Department of Agriculture. Retrieved June, 2019, from <https://www.usda.gov/our-agency/about-usda>



Institute for Public Administration

Biden School of Public Policy & Administration
College of Arts & Sciences
University of Delaware

180 Graham Hall University of Delaware Newark, DE 19716-7380

phone: 302-831-8971 e-mail: ipa@udel.edu fax: 302-831-3488

www.ipa.udel.edu

The University of Delaware's Institute for Public Administration (IPA) addresses the policy, planning, and management needs of its partners through the integration of applied research, professional development, and the education of tomorrow's leaders.

Please visit our Delaware Complete Communities Planning Toolbox at www.CompleteCommunitiesDE.org.