

TOGETHER
**NORTH
JERSEY.**



TNJ Guidebook for Assessing Access to Food Resources.

Connecting People, Places, and Potential

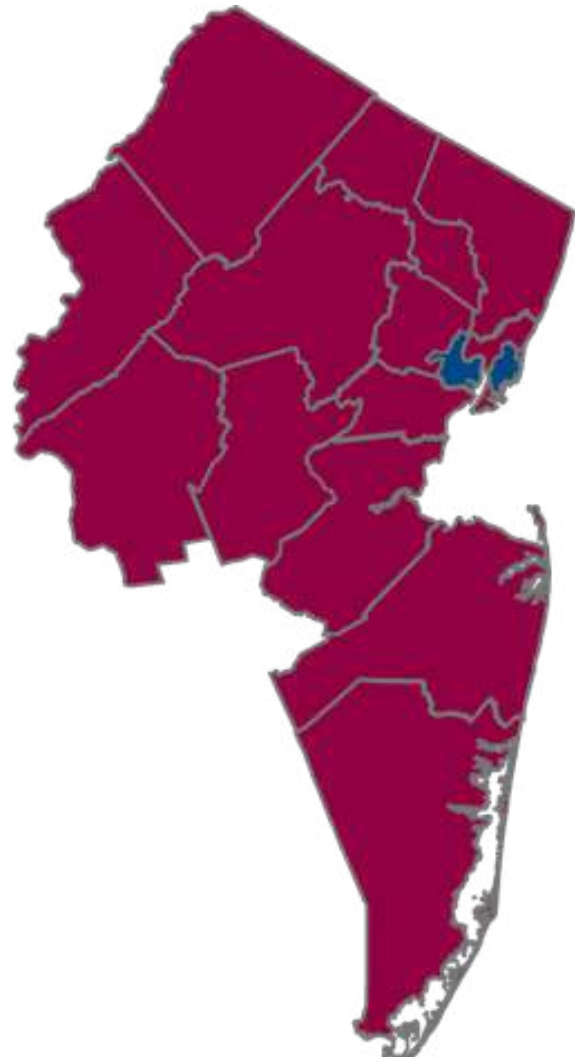
Together North Jersey

Together North Jersey (TNJ) was created in 2011 to develop the first comprehensive plan for sustainable development for North Jersey. Funded by a \$5 million federal Sustainable Communities grant and nearly \$5 million in leveraged funds from members, the TNJ planning effort brought together a coalition of nearly 100 diverse partners – counties, municipalities, educational institutions, nonprofits, businesses and other stakeholders – to develop the TNJ regional plan.

The TNJ planning process identified a shared vision for a sustainable future for North Jersey consisting of four themes: Competitive, Efficient, Livable, and Resilient.

The Plan was issued in November 2015. Since then, TNJ partners have reconvened to advance implementation of the Plan. The North Jersey Transportation Planning Authority (NJTPA) and the Alan M. Voorhees Transportation Center at Rutgers University (VTC) currently coordinate the TNJ 2.0 Forum and Task Forces, with each of the four Task Forces dedicated to furthering one of the Plan's four themes.

The TNJ planning region consists of the 13 counties in the NJTPA planning area: Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren.



TNJ Livable Taskforce

Four Task Forces—Competitive, Efficient, Livable and Resilient—lead the TNJ implementation effort. The Task Forces convene to strategize, plan and evaluate implementation of the TNJ Plan Focus Area that falls under their purview. The Task Forces recommend projects and studies—to be carried out with assistance from NJTPA and the VTC—that further recommendations of the TNJ plan and enhance the knowledge of local communities. The Livable Task Force works to realize the vision of creating healthy, safe, inclusive and vibrant places to live, work, and play.

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ABOUT THE GUIDE

Purpose of this Guidebook

This guidebook demonstrates to local stakeholders, such as municipal and county officials, non-profit organizations and advocacy groups, how to assess the level of access to food resources in their communities. While there are many aspects to food access, this guidebook focuses on evaluating access through the transportation network, specifically by walking and public transit.

In 2002, the United States Department of Agriculture (USDA) issued a guide on assessing food security. The Community Food Security Assessment Toolkit outlines a stakeholder-driven process and methodology for assessing various aspects of community food security, including a method for assessing the level of accessibility to food resources in a community. Using the USDA Toolkit as a guide, the Together North Jersey project team adapted the approach to develop a process focused on identifying levels of access to food through walking and public transit.

To demonstrate the process, the TNJ project team worked with stakeholders in Dover, NJ to assess access to food, due to residents' relatively high risk for food insecurity. The USDA's Food Access Research Atlas identifies Dover as a food desert (low-income and low access to proximate food resources). In addition, United Way has identified a high concentration of ALICE (Asset Limited, Income Constrained, Employed) residents in Dover. These are households with incomes higher than the federal poverty level but that often struggle to afford basic household necessities, such as fresh, healthy food.

The recommended assessment process identifies geographic gaps in access for people who rely on walking and public transit, identifies related challenges and results in recommendations to improve access. The guidebook outlines the process step-by-step and demonstrates its practical application with examples from the study conducted in Dover.

How to Use this Guidebook

This document first discusses the concept of food access and provides an overview of how other communities have pursued efforts to evaluate food access. It then presents and elaborates on the steps of the USDA Community Food Security Assessment Toolkit related to assessing access to food resources. The following six steps describe how to form a local project team, gather and analyze data, engage the public and stakeholders and develop recommendations for improving access.

- Create an Assessment Team
- Develop a Community Profile
- Conduct Community Outreach and Engagement
- Develop a Community Food Resource Profile
- Conduct Assessment of Accessibility to Food Resources
- Develop Recommendations

In each step, the reader will find “Dover Example” sidebars that present public engagement activities, analytical products, study findings and recommendations as implemented and developed for Dover.



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WHAT IS FOOD SECURITY AND INSECURITY?

Food access is the ability to get to a location where you can purchase or otherwise acquire various types of food items. The USDA Food Access Research Atlas, defines “low access to healthy food” as “being far from a supermarket, supercenter, or large grocery store.”¹ Food access involves three key considerations: travel to food shopping locations, availability of healthy food and food prices.²

Food access is part of the larger issue of food security. According to the USDA³:

- **Food security** for a household means access by all members at all times to enough food for an active, healthy life. Food security includes at a minimum:
 - o The ready availability of nutritionally adequate and safe foods
 - o Assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing, or other coping strategies)
- **Food insecurity** is the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

Residents with limited access to different modes of transportation and/or those who reside at a distance from food providers, are more at risk of suffering from food insecurity. USDA has documented the existence of “food deserts” in low-income places that are at a distance from food retail locations. Vulnerable segments of a population, such as low-income households, people with disabilities, older adults and carless households, often face significant challenges in accessing food. For these populations, lack of safe and convenient pedestrian pathways and inaccessibility to public transit service can further increase the challenge of acquiring enough food for an active, healthy lifestyle.

This guidebook only focuses on a community’s transportation related challenges; lack of financial means and the unaffordability of accessible food resources are also major challenges in accessing sufficient amounts of food. A transportation-focused assessment should consider how easily people with low incomes are able to access locations that provide lower-cost food options, such as discount grocery stores.

What Have Other Communities Learned?

Access to food has increasingly become a policy and planning focus across the U.S. and New Jersey. Growing awareness of how social factors impact health and rising concern over income inequality and the persistence of concentrated pockets of poverty have moved communities to identify barriers to food access and consider strategies for addressing those barriers. In recent years, a number of communities in New Jersey and the surrounding region have carried out assessments of food security, with several finding that accessibility is a common barrier to obtaining healthy food.

Chester County Food Bank (CCFB), which coordinates a network of partners addressing hunger in the county, employed methods recommended by the Community Food Security Assessment Toolkit to carry out the 2018 Community Food Security Assessment Chester County, Pennsylvania. The study maps income and households living in poverty in order to identify the locations of pockets of poverty and presents

estimates of the number of residents who are food insecure. The study also included a survey of food pantry users, stakeholder interviews, and focus groups with members of the community who were food insecure or at risk of food insecurity. While financial burdens, such as housing and medical bills, were the most commonly identified barriers to purchasing food, survey results and stakeholder interviews also indicated that lack of proximate food resources and lack of transportation are significant barriers.

In 2015, the Delaware Valley Regional Planning Commission (DVRPC), The Reinvestment Fund, and the Campbell Healthy Communities Program issued Cultivating Camden: The City's Food Economy Strategy. The study analyzes Camden's current food economy and food system. The study coalition mapped food security-related indicators, such as household income and carless households, as well as the location of public transit facilities. The study also maps food resource locations, including locations that accept payment through public nutritional assistance programs. The coalition also administered a pilot survey on food security at a local hospital. The study presents over thirty recommendations, among them: bringing healthy food to existing facilities and ensuring all neighborhoods have public transit access to low-cost grocery stores.

In 2015, a coalition funded by the American Planning Association's Plan4Health Initiative submitted a report for consideration as a Health and Food System Element of Trenton's Master Plan update. The proposed element explores food security issues facing city residents. The report displays several maps that highlight the difficulty of accessing supermarkets located near the city's edge without a car, the lack of farmers markets, and the location of many schools in proximity to bodegas with limited healthy food options. The report makes several recommendations for enhancing transportation to healthy food, including carrying out "safe routes to food audits", working with NJ TRANSIT to modify bus routes, and encouraging storeowners to offer free or low-cost shuttle services.

FOOD INSECURITY IN NEW JERSEY

According to Feeding America's 2016 Map of the Meal Gap, one in ten New Jersey residents were food insecure, meaning they did not have an adequate and consistent supply of food. Of those residents, an estimated one-third earned too much to qualify for nutrition assistance.

Source: Feeding America, (2017). "Food Insecurity in New Jersey". <https://map.feedingamerica.org/county/2017/overall/new-jersey>

Why Conduct a Food Access Study?

A transportation-focused food access study can reveal areas of a community where residents may struggle to walk or take public transit to obtain food. When combined with input from stakeholders, this analysis enables the community to develop effective strategies for addressing barriers to access particular to that community. Establishing an assessment team to carry out the study creates opportunities for the local stakeholders on the team to continue their collaboration post-study to implement the study's recommendations.

1. United State Department of Agriculture (USDA), (2017). "Documentation". Food Access Research Atlas. <https://www.ers.usda.gov/data-products/food-access-research-atlas/>
2. United State Department of Agriculture (USDA), (2017). "Food Access". Food Choices and Health. <https://www.ers.usda.gov/topics/food-choices-health/food-access/>
3. United State Department of Agriculture, Economic Research Services, (2018). "Measurement". <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx>

HOW CAN LOCAL COMMUNITIES IMPLEMENT A FOOD ACCESS STUDY?

A community-based food access study typically begins by several local organizations or residents coming together to affirm such a study is needed to ensure effective resource allocation and decision-making. The group should have general knowledge of the extent and degree of the problem and should be able to answer questions such as:

- What are the geographic boundaries of the community?
- Do members of the community use food assistance programs?
- What kind of food resources are present in the community?
- Are people struggling to get to the food resource points?

Having a general understanding of the food access problem provides an effective starting point.

Dover Example #1

IDENTIFYING THE NEED FOR A FOOD ACCESS STUDY IN DOVER

The North Jersey Health Collaborative (NJHC) is an entity of more than 100 organizations who focus on building healthy communities in Morris, Passaic, Sussex, Union and Warren counties of New Jersey. During the Food Access Summit of NJHC's Morris County Committee in February 2018, several community leaders reported that many residents of North Jersey do not have adequate access to and from the food resources around them. Participants agreed it was time to closely examine the problem and develop solutions. The attendees also pointed out that the problem is more prevalent in low-income communities and food desert areas of North Jersey. Summit participants later brought this challenge to the attention of the Together North Jersey Livable Task Force, which selected Dover as a site for implementing a recommended process for assessing food access.

Step 1. Create an Assessment Team

WHO SHOULD BE INCLUDED?

Generally, a group of eight to twelve people forms an assessment team that plans and implements the food access study. This number may vary according to the scope of the project. The team usually consists of government agency, nonprofit, or university planning professionals, government officials, local stakeholders, community leaders and residents. In addition to including people from different sectors of the community, it is beneficial to have people with different skillsets and knowledge, such as strong leadership qualities, knowledge of available local resources and good networking and communication skills. However, all members should in some way be involved in serving food-insecure populations and/or developing programs and policies related to food security. **Table 1** shows examples of potential assessment team members, including potential professional planning services available in North Jersey.

Typically, planning professionals lead and facilitate the food access study. The government officials, local stakeholders, community leaders

and residents provide local knowledge regarding community food resources and residents' ability to access them. They also help to acquire, process and analyze datasets and develop recommendations appropriate for the community.

It is important to identify a champion or champions in the team at the very beginning of the study. These champions will be advocates of the project, work to initiate the study process, and identify and engage stakeholders and residents while keeping the study process moving forward.

INITIAL ASSESSMENT TEAM MEETING

The champions should formally launch the study by convening all members of the assessment team at a “kick-off” meeting. The meeting is an opportunity to:

- Establish the study goals and objectives
- Explain and refine the study methodology
- Gather knowledge about the food resource locations and access to them
- Gather information on other stakeholders to involve in the study
- Gather information about tentative public engagement dates and venues

Table 1 Examples of Potential Food Access Study Assessment Team Members

Local government officials	• Dept. of economic development • Dept. of health and senior services • Dept. of family services • Dept. of public assistance • Dept. of public works • Dept. of planning • Dept. of education	Non-profit organizations	• Food pantries and banks • Faith-based organizations • Community-based organizations • Social service providers • Community centers • Foundations
Community leaders	• Faith community leaders • Coaches • Teachers • Activists • Other community leaders	Elected government officials	• Mayor's office • Council members • Aldermen • Members of NJ State Legislature and U.S. Congress
Business community and food vendors	• Local supermarkets • Convenience stores • Farms • Special Improvement Districts • Farmers markets • Food co-ops • Local banks • Chambers of commerce	Transportation organizations	• NJ TRANSIT • County and municipal transportation departments • Transportation Management Associations (TMAs) • Taxi companies • Transportation Network Companies (TNCs)
Planning Professionals	• County governments • TMAs • The Alan M. Voorhees Transportation Center at Rutgers University • New Jersey Department of Community Affairs, Local Planning Services • American Planning Association New Jersey Chapter's Community Planning Assistance Program		

ORGANIZING THE DOVER ASSESSMENT TEAM

In October 2018, the TNJ project team met with Shaping Dover, a coalition of local social service providers and municipal officials, to formally launch the Dover food access study. The project team distributed a handout and explained that the objectives of the study are to identify geographic- and transportation-related barriers to accessing food in Dover and recommend strategies to address them. The stakeholders provided input on the locations of emergency food providers, convenience stores and supermarkets in the Dover area and identified appropriate venues, such as the Dover Free Farmer's Market, for carrying out public engagement activities. They also emphasized the importance of ensuring that the engagement activity materials accommodate the needs of Limited English Proficient community members. To ensure the study was inclusive of Limited English Proficient community members, bilingual assessment team members were present at all public outreach events. All written materials were distributed to the public in both Spanish and English.

The following organizations comprised the assessment team in the Dover food access assessment. These team members provided valuable community information and identified areas of concern as well as inaccuracies in open source data. The leadership of Shaping Dover were especially helpful in championing this study and supporting its efforts to completion.

- Morris County Parks Commission
- Morris County Farm Service Agency
- Town of Dover
- SPAN Parent Advocacy Network
- Interfaith Food Pantry
- Hunger Free New Jersey
- Foodshed Alliance
- Morris County Transportation
- Alan M. Voorhees Transportation Center at Rutgers University
- North Jersey Transportation Planning Authority



Step 2. Develop a Community Profile

FINDING AND USING DATA

After determining study goals and objectives, the next step is to develop a community profile. The profile presents information about the people living in the community, focusing on characteristics that are associated with food security. Understanding who lives in the community helps a project team better understand the risk of food insecurity, effectively target suitable public engagement activities, and develop suitable strategies for improving access.

Data used to inform the community profile may be quantitative or qualitative data.

- **Quantitative data:** Data expressed as a number, such as “How many households do not own a car?”
- **Qualitative data:** Provides a descriptive account of conditions. For example, “Residents in the Hilltop neighborhood often visit the local food pantry once or twice a month for fresh produce.”

Quantitative and qualitative data should be combined to develop a comprehensive picture of the community and the challenges it is facing.

Another dimension of data is whether it is existing or original data.

- **Existing data (secondary data):** Data that has already been collected, for example, U.S. Census data.
- **Original data (primary data):** Data gathered from new surveys, questionnaires and observations by the assessment team.

There are multiple federal, state and local agencies that collect and publish data suitable for a food access community profile. The U.S. Census Bureau’s American Community Survey is typically a key resource for developing a community profile.

Table 2 and **Figure 1** through **Figure 2** show a few of the variables that were collected to develop a community profile of Dover. Data should be summarized in tables, and when possible in graphs, charts, maps and other visual elements. Attractive infographics and figures allow readers to quickly absorb the information. For example, **Figure 1** displays a bar chart of race and ethnicity in Dover.

A more complete set of variables should be presented in table format. **Table B-1** through **Table B-4** in **Appendix B** display the complete set of variables that were collected for Dover and that should be collected for most food access studies. The general categories of information include:

- **Socio-demographic:** Data on population characteristics, such as race, ethnicity, age, sex and educational attainment
- **Food Security:** Indicators of the risk of food insecurity, such as poverty and disability
- **Public Assistance:** Data on participation in public assistance programs, such as households receiving nutrition assistance
- **Health:** Data on a population’s health status and behavior, such as rate of obesity (if available at the local level)
- **Transportation Behavior:** Data on how people get around, such as means of transportation

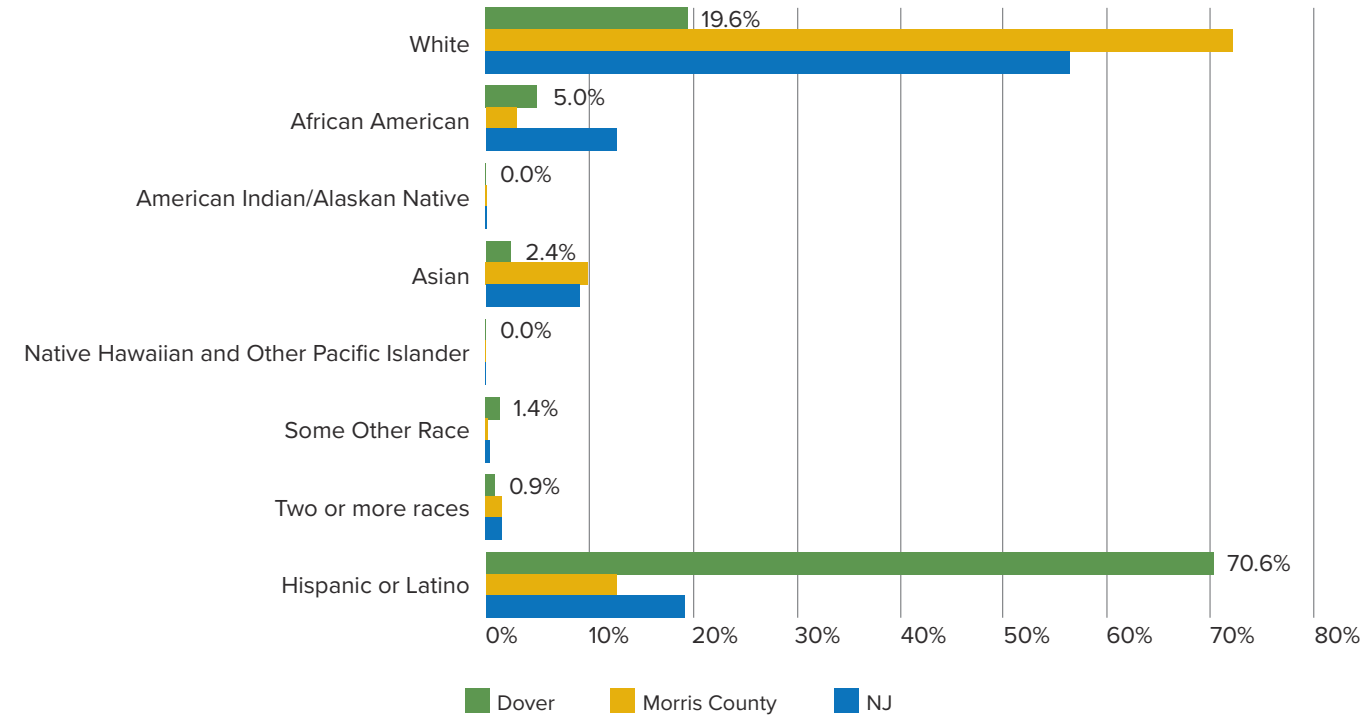
Notice that the tables and the bar chart include information for Morris County and New Jersey in addition to Dover. Comparisons with larger geographies can help identify disproportionate concentrations of certain sections of the population that are more prone to food insecurity than others. For example, if the percent of carless households is significantly greater than the percent in New Jersey as a whole, this may indicate that the local community faces comparative mobility challenges in accessing food.

Table 2 Food Security Indicators, Dover, NJ

Indicator	Dover Number	Dover Percent	Morris County	New Jersey
Economic Indicators				
Median household income	\$64,310	---	\$102,798	\$73,702
Households in poverty	545	10.2%	4.8%	10.6%
People in poverty	1,525	8.5%	4.6%	10.9%
Socio-demographic Indicators				
Limited English Proficiency (LEP)	6,080	34.9%	8.8%	12.2%
Female head of household with child	333	6.2%	3.8%	6.7%
Person with a disability	1,389	7.7%	8.1%	10.4%
Youth (under 18 years)	3,919	21.4%	22.3%	22.5%
Older adults (65 years and older)	1,851	10.1%	15.4%	14.7%
Carless households	877	16.3%	4.7%	11.6%

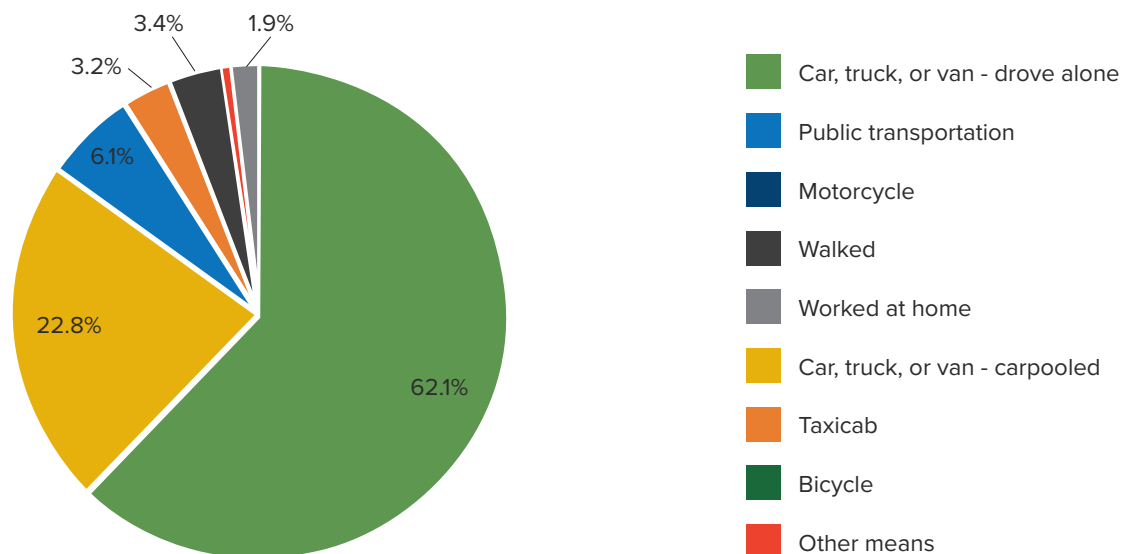
Source: U.S. Census Bureau ACS 5-Year Estimates, 2012-2016

Figure 1 Race and Ethnicity, Dover, NJ



Source: U.S. Census Bureau ACS 5-Year Estimates, 2012-2016

Figure 2 Means of Transportation to Work, Dover, NJ



Source: U.S. Census Bureau ACS 5-Year Estimates, 2012-2016

Maps are another effective means of analyzing and communicating information on where different populations reside within a municipality. The maps presented in **Figure 3** and **Figure 4** show the location of low-income households and carless households by block group (one of the levels of geography for which the U.S. Census Bureau provides data). Understanding where different populations live is important to understanding their access to food resources. Maps can also be used to highlight transportation facilities, such as Dover's street network and train station, and physical barriers to walking, such as railroad tracks, bodies of water or major highways.

DOVER COMMUNITY PROFILE

Dover is the historic seat of Morris County. It is home to a population of about 18,317 people, 70 percent of whom identify as being ethnically Hispanic or Latino. The percent of foreign-born residents (46 percent) is more than twice that of Morris County (18 percent) and more than a third of the population has limited English proficiency. About 12.6 percent of residents have a bachelor's degree, compared to 23.1 percent countywide. Morris County as a whole is more affluent than Dover, with median income in Dover at \$64,310 compared to \$102,798 in Morris County, while the poverty rate in Dover (10.2 percent) is more than twice that of the county (4.8 percent). More than a quarter of the Dover population (27.8 percent) has incomes that are 185 percent or less of the federal poverty level, meaning they qualify for the Supplemental Nutrition Assistance Program (SNAP). However, only 14.7 percent receives SNAP.

Of the 5,366 households in Dover, 16.3 percent do not have a car; unsurprisingly, Dover commuters are much more likely to carpool to work (22.8 percent), while 3.4 percent walk, compared to 2.1 percent in Morris County. Dover residents are more likely to take public transit to work (6.1 percent) than residents of Morris County, but transit use is substantially less than in New Jersey as a whole (11.2 percent). While these estimates pertain only to work-related trips, we can surmise that residents of Dover are more likely to walk and use transit than other parts of the county for various trip purposes.

The relatively high poverty rate and large presence of carless households are indicators that segments of the Dover population may struggle to reach affordable, healthy food resources

Figure 3 Percentage of Residents in Poverty, Dover, NJ

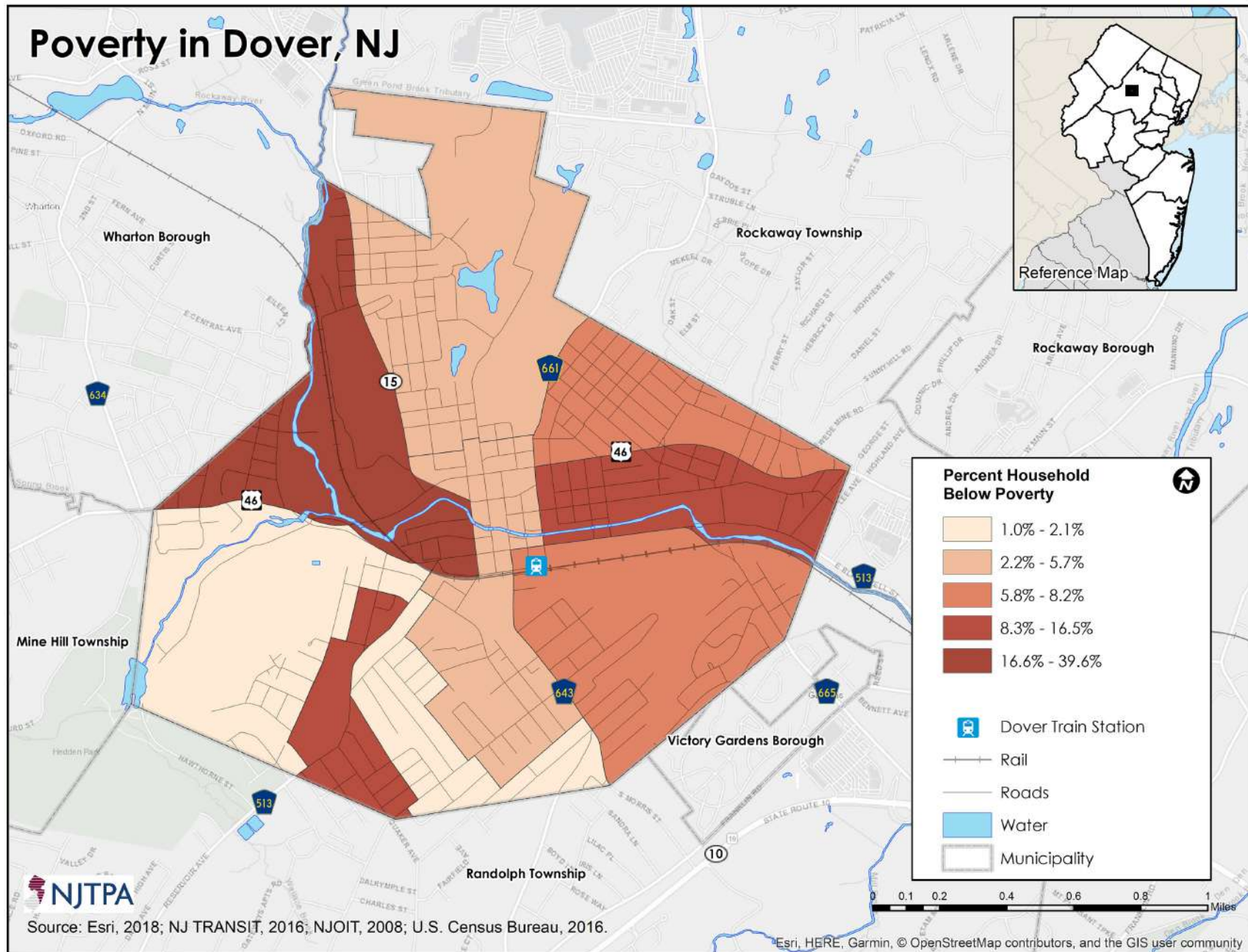
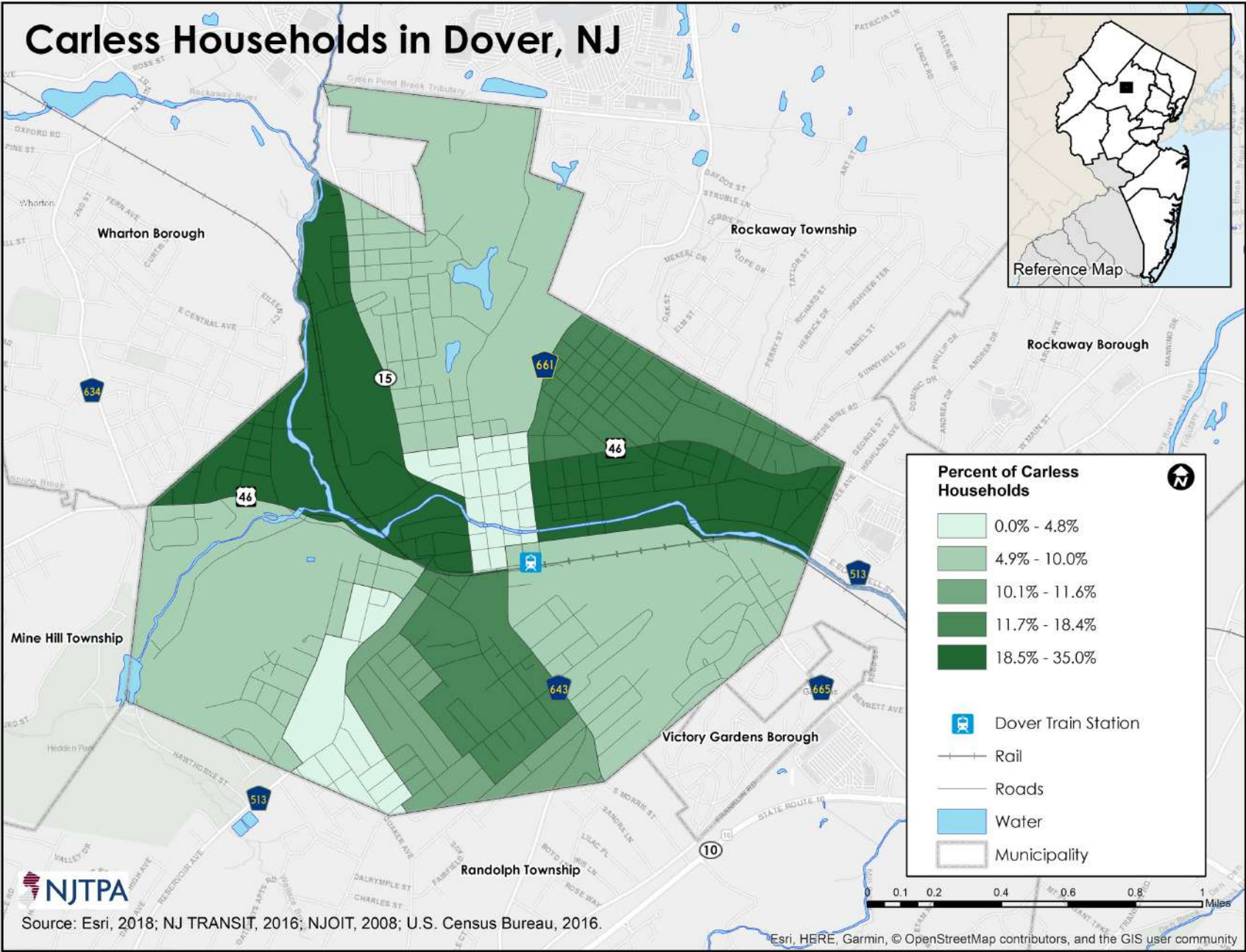


Figure 4 Percentage of Carless Households, Dover, NJ



Step 3. Conduct Community Outreach and Engagement

Developing tables, charts, and maps only tells part of a community’s story. The assessment team should also engage members of the public as well as local stakeholders that are not part of the assessment team to gather original quantitative and qualitative data. Public outreach and engagement techniques keep the community informed, educate the public on food access issues and solicit input and feedback, especially from disadvantaged populations at higher risk of food insecurity.

Effective public engagement will help uncover issues facing the community, “ground-truth” the findings of technical analyses and provide feedback on the appropriateness of recommendations. Engaging stakeholders and the public also fosters public buy-in, which makes implementation of the recommendations more likely. The champion or initial project partners can also assign roles to stakeholders, depending on the skillsets and knowledge they possess.

This section provides guidance on conducting public outreach and engagement activities that are useful for food access studies, including interviews, surveys and focus group meeting.

STAKEHOLDER INTERVIEWS

Stakeholder interviews are a useful means for gathering more in-depth and nuanced information on the community and food access issues. Interviews are appropriate when a local stakeholder other than those serving on the assessment team can provide additional insight. Interview subjects should include individuals with knowledge of local public health and transportation issues, as well as individuals with extensive local knowledge of the local community, such as municipal officials, community-based organizations, and religious and community leaders. When conducting interviews, it is important to first identify questions to ask stakeholders in order to keep the data consistent and comparable. However, the interview can also deviate from the script to address topics as they arise.

SURVEYS AND OBSERVATIONS

Surveys are an effective tool for gathering consistent data from many people. A survey is a predetermined set of questions or indicators that are collected through verbal or written responses from the participants.

Surveys can be “probability sample” surveys or convenience surveys. The former attempts to capture a large and representative sample of the overall population allowing for an estimate of the same information for the entire population. Convenience sample surveys are administered to a smaller number of people, based on their availability, to get a general idea of issues that exist in the community.

Surveys can be administered by different methods and in different formats. Intercept surveys are administered to people who happen to be in the area (e.g., at a community event or on a bus). Surveys can also be disseminated through mail or online. Questions should be direct and concise and designed to provide useful responses. They could be closed-ended, such as multiple choice, or open-ended, such as short answer, depending on the nature of the information being collected. No matter the type of survey, it is always important to reach different segments of the local population, including populations traditionally underrepresented in

Table 3 Example Survey Participants and Questions

Who to Survey	Example Questions
• Residents • Food bank/pantry users • Senior citizens	• Where do you get your food? • What food do you get there? • How do you get there? • Is it difficult to get to this location? If so, why?



planning processes and those at higher risk of food insecurity. Local stakeholders can support efforts to disseminate the survey.

Surveys can also take the form of observation. Rather than asking questions, assessment team members can discretely observe the community in order to record data such as what population groups use food banks or soup kitchens. Observation activities should be conducted using a guide or instrument that ensures data is collected in a standard format.

The project team should collect, tally and analyze survey responses and observations and present the results in tables, charts, and qualitative descriptions.

FOCUS GROUPS

Focus groups are a method of exploring ideas in a group setting. The facilitator presents ideas for the participants to consider while interacting with each other. The facilitator asks questions to the participants to draw out their attitudes, feelings, reactions, beliefs and experiences. A typical size for a focus group is about eight to twelve people and focus group meetings are typically conducted at the beginning of the study timeline to uncover issues that may help narrow the focus of the study.

Focus group participants should all have one key characteristic in common (such as all living in the study area) but should be diverse within the group (such as different ages, genders, occupations, etc.) To help select participants, the project team can first administer a “screener”, which is a short questionnaire that captures information you can use to categorize potential participants.

Potential food access focus group participants might include:

- Groups at higher risk of food insecurity
- Racial, ethnic, and cultural minority groups
- Food pantry/bank users
- Local food retailers
- Advocates
- Municipal officials
- Non-profits, charitable food providers and social service providers
- Transit providers

Before holding a focus group, create a facilitator guide that lays out specific topics to discuss and questions to ask. This will help keep conversations on topic and manage time. However, tangential conversations sometimes lead to revelations that would not have otherwise emerged, so a certain amount of flexibility can be valuable. A focus group was not conducted for the Dover case study.

DOVER FOOD ACCESS SURVEY

In November 2018, the TNJ project team administered a food access survey at the Dover Free Farmer's Market – a monthly market held at the Dover Community Center that provides free, fresh produce to low-income Dover residents. The survey was available in Spanish and English. The project team also administered the survey in December 2018 at the Dover Public Library. At both events, the survey asked respondents where they get their food, how they get to the identified locations to purchase food and if they face any difficulty or challenges while doing so. The project team also provided a handout explaining the purpose of the study and set up a large map showing the location of food resources in Dover for survey participants' reference.

Survey findings indicate that Dover residents often access food by carpooling, using a ride-hailing service, or taking a taxi. Findings also show that Dover residents go to particular stores to buy certain food items. The most commonly indicated food resource destination was ShopRite, followed by Bravo Supermarket and Walmart. About half of the survey respondents drive to get to food locations, while a third rely on taxis and rideshares or get a ride from a friend or family member. Another third indicated they walk or bike and a quarter reported taking the bus. Among challenges to getting to food locations, distance was the most commonly identified problem, followed by limited hours, cost, and lack of public transportation.

The short length of the survey, and offering it in English and Spanish, helped ensure a large number of survey responses. Having a map indicating the locations of food resources in Dover (collected from the assessment team prior to the survey) also helped boost participation. Since some respondents may be hesitant to identify emergency food assistance as their source of food, one-on-one interviews or focus groups can be a more effective way to assess use of emergency food resources.

See **Appendix C** for a copy of the survey.



NJTPA staff administer a food access survey at the Dover Free Farmers Market and make clementine jack-o-lanterns.

Dover Example #5

DEVELOPING DOVER'S COMMUNITY FOOD RESOURCE PROFILE

The project team canvassed all identified food resources in Dover as well as food resources in the surrounding area that are frequently visited by Dover residents. The team used an abbreviated and simplified version of a food store survey instrument developed by Johns Hopkins University to assess the availability of healthy foods. The modified system scores food stores on a scale of 1 to 21. Appendix D displays the form used by the project team and the scoring system applied. The results of the evaluation are presented in Table 4 and Table 5. While supermarkets generally scored better (between 11.5 and 17) there are a number of smaller corner stores or bodegas, such as Latino American Supermarket and Dover Farmers Market that scored well. Most of the high-scoring supermarkets, with the exception of Bravo Supermarket, are located outside Dover, while the high-scoring corner stores are inside Dover.



Step 4. Develop a Community Food Resource Profile

Before analyzing residents' access to healthy food, determine what food resources are available in the community, where they are located and what food types they provide.

IDENTIFY FOOD RESOURCES

The project team should use existing directories, stakeholder and public input, and field visits to develop a comprehensive list of food resources. The list should include food providers located within the study area (e.g., neighborhood, municipality, etc.), as well as providers that are located outside the community but are frequently visited by the study area residents. The latter often includes larger supermarkets located in areas adjacent to the study area. In addition to the name of the businesses, the inventory should also include addresses.

Online databases can be a starting point to identify food locations or to verify information gathered through stakeholder and public input. Free data sources on businesses include:

- [Yellow Pages](#)
- Local business directories, such as [NJ.com local business listings](#)
- Online maps, such as [Google Maps](#)
- Paid business directories, such as [Claritas](#) or [InfoUSA](#)

Some food resources do not have a fixed geographic location. For example, the Meals on Wheels program delivers meals to individuals who are unable to purchase or prepare their own meals. These programs should be included in the inventory with a description of the services they provide.

CATEGORIZE FOOD RESOURCES

Using preliminary data, the assessment team should apply a categorization scheme to the food resources based on the type of service provided (e.g. retail versus charitable) and the type and variety of foods available. The Dover study applied the following categories, adapted from definitions provided in the USDA Toolkit:

- Supermarket: Offers a full range of foods, with \$2 million or more in annual gross sales (including non-food items).
- Convenience stores: Offer a limited range of foods, typically with a limited selection of fresh foods and generally aimed at supplementing larger stores and providing convenience in terms of proximity to shoppers and hours.
- Emergency food providers: Alternative sources of food for people who may need additional crisis support, including food pantries, soup kitchens, food banks, and other community-based food distribution programs.

SURVEY FOOD RESOURCES

Once food resources have been located, you should inventory the food that each one provides. The best way to accomplish this task is to visit each location. The survey can confirm the location of the resources, that they are still in operation and that they have been appropriately categorized. It is a good practice to evaluate the presence of healthy and fresh food in the inventory. The project team can also apply scoring criteria to each food resource to measure the availability of healthy and fresh food options. For the Dover study, the assessment team applied a simplified version of a methodology developed by Johns Hopkins University to retail locations. The method can also be applied to emergency food providers. The USDA Toolkit recommends a similar process for determining whether an adequate variety of food is available.

Table 4 Dover Healthy Food Accessibility Index Scores: Supermarkets

Measures	Milk	Juice	Fruit	Vegetables	Beef	Chicken	Seafood	Cereal	Frozen Food	Packaged Food	Canned Food	Bread	Total
Bravo Supermarket	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17
Dollar General	1	1						1	0.5	0.5	1	1	6
Rockaway Farmers Market	1		4	4			1			0.5		1	11.5
Dollar Tree		1						1	0.5	0.5	1	1	5
ShopRite (Rockaway)	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17
Aldi	1	1	4	4	1	1		1	0.5	0.5	1	1	16
Costco	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17
Walmart	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17
Target	1	1	2	2	1	1	1	1	0.5	0.5	1	1	13
ShopRite (Wharton)	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17

Table 5 Dover Healthy Food Accessibility Index Scores: Convenience Stores

Measures	Milk	Juice	Fruit	Vegetables	Beef	Chicken	Seafood	Cereal	Frozen Food	Packaged Food	Canned Food	Bread	Total
CVS	1	1						1	0.5	0.5	1		5
Los Paisas	1	1	4	4				1		0.5	1	1	13.5
Pema Meat Market	1	1	4	4	1	1		1	0.5	0.5	1	1	16
Dover Farmers Market	1	1	4	4	1	1		1	0.5	0.5	1	1	16
Krauszers (Dover)	1	1						1		0.5	1	1	5.5
Walgreens	1	1						1			1	1	5
Dover Plaza Market	1	1						1		0.5	1	1	5.5
Latino American Supermarket	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17
Krauszers (Randolph)	1	1	2					1		0.5	1	1	7.5
Medrano Grocery	1	1	4	4				1		0.5	1	1	13.5
Fruit-Mex Produce	1	1	4	4	1	1	1	1	0.5	0.5	1	1	17
Little Puebla	1									0.5	1		2.5
Valencia	1	1	2	2				1	0.5	0.5	1	1	10

Step 5: Conduct Assessment of Access to Food Resources

A critical part of a transportation food access study is to assess the ability of community members to reach food resources by walking or public transit. This aspect of food security is especially relevant for low-income residents who do not have limited access to private vehicles. Creating maps and spatially analyzing the food resource data sets collected in the previous steps of the recommended process is an effective method for completing this analysis.

The maps should include the following features:

- Transportation network
 - Street network
 - Public transit stops and routes
- Physical constraints to access
 - Topography (changes in elevation)
 - Bodies of water
 - Transportation infrastructure (e.g., highways and rail lines)
- Food resource locations
 - Supermarkets
 - Convenience stores
 - Emergency food providers

Once these features are mapped, the Network Analyst Tool provided in the ArcGIS software package can be used to identify areas that lie within a close distance (quarter and/or half mile) along the street network from each food resource. **Dover Example #7** explains how access was mapped for Dover.

Creating access maps require personnel with specific technical skillsets, as well as access to a mapping software that can accomplish the work done in this project through the Network Analyst Tool of ArcGIS software. These resources may be available through county governments, Transportation Management Associations (TMAs), or universities.

The assessment team should examine the maps to identify gaps in access, as well as any physical barriers to access. It is important to pay attention to areas that lack food resources as well as areas that lack transit stops. The assessment team should invite other local stakeholders and/or members of the public to review the maps and provide feedback. Facilitated discussion items at this review should include:

- A progress update
- Review of map content by stakeholders
- Identification of barriers to accessing healthy food
- Strategies for addressing gaps in access and their barriers

DOVER STAKEHOLDER REVIEW OF ANALYTICAL FINDINGS

In February 2019, Dover stakeholders convened at the Dover Community Center to review findings of the food access study. Participants reviewed the food access maps and provided feedback on the location of food resources and on the accessibility buffers by annotating with pens and sticky notes on the maps. They also provided input on access issues not captured on the maps, such as streets that lack sidewalks, informal pedestrian walkways and hilly areas. Participants in the workshop included Morris County Park Commission, Morris County Transportation Department, Morris County Family Success Center, Town of Dover, The Foodshed Alliance, Hunger Free New Jersey and the Statewide Parent Advocacy Network (SPAN).



The Dover assessment team reviews Dover food access maps.

DOVER FOOD ACCESS MAPS

Figure 5 through **Figure 7** display the maps created for the Dover study. A map was created for each food resources category: supermarkets, convenience stores and emergency food resources. The highlighted areas are those within walking distance of food resources. The blue dots show the location of bus stops.

The highlighted areas (or buffers) correspond to an estimate of how far people typically walk to access the food resources. For example, both quarter- and half-mile buffers were applied to supermarkets, since most people would not walk with grocery bags for farther than half-a-mile. People with more limited physical abilities may not be able to walk farther than a quarter-mile. The emergency food providers map included a one-mile buffer, as well as a quarter- and half-mile. People are likely to travel farther by foot to access these resources because they often offer prepared food.

Outside of downtown Dover, where Bravo Supermarket is located, there is limited access to supermarkets by walking. Other parts of town have access to supermarkets through the bus network. Most areas of Dover have good access to corner stores through a 5- to 10-minute (quarter- to half-mile) walk. Central Dover residents enjoy good access to emergency food resources through a 5- to 10-minute walk, but residents of most of the outlying areas of the municipality can only reach them through a 10- to 20-minute walk (half-mile up to one mile).

Figure 5 Access to Supermarkets, Dover, NJ

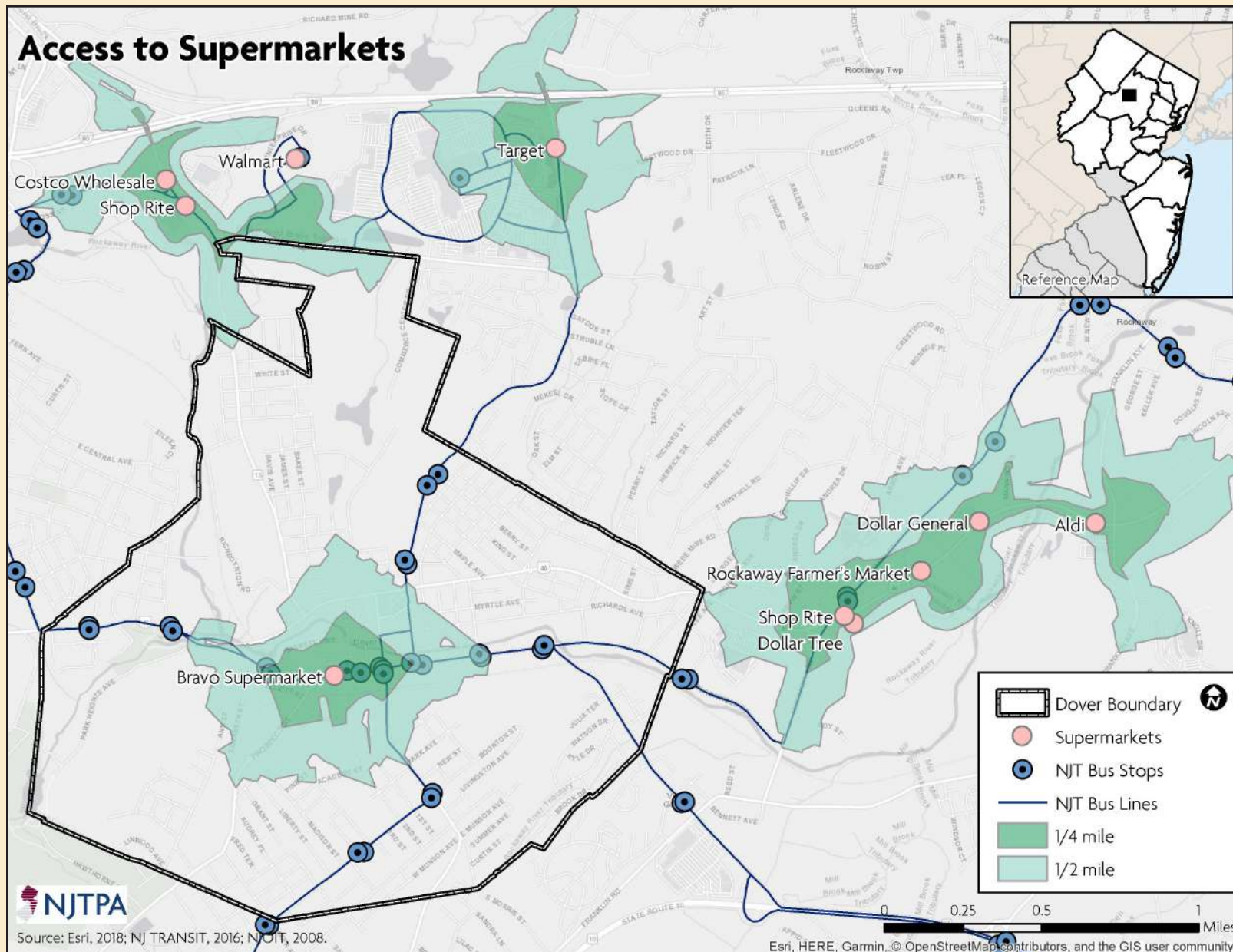


Figure 6 Access to Convenience Stores, Dover, NJ

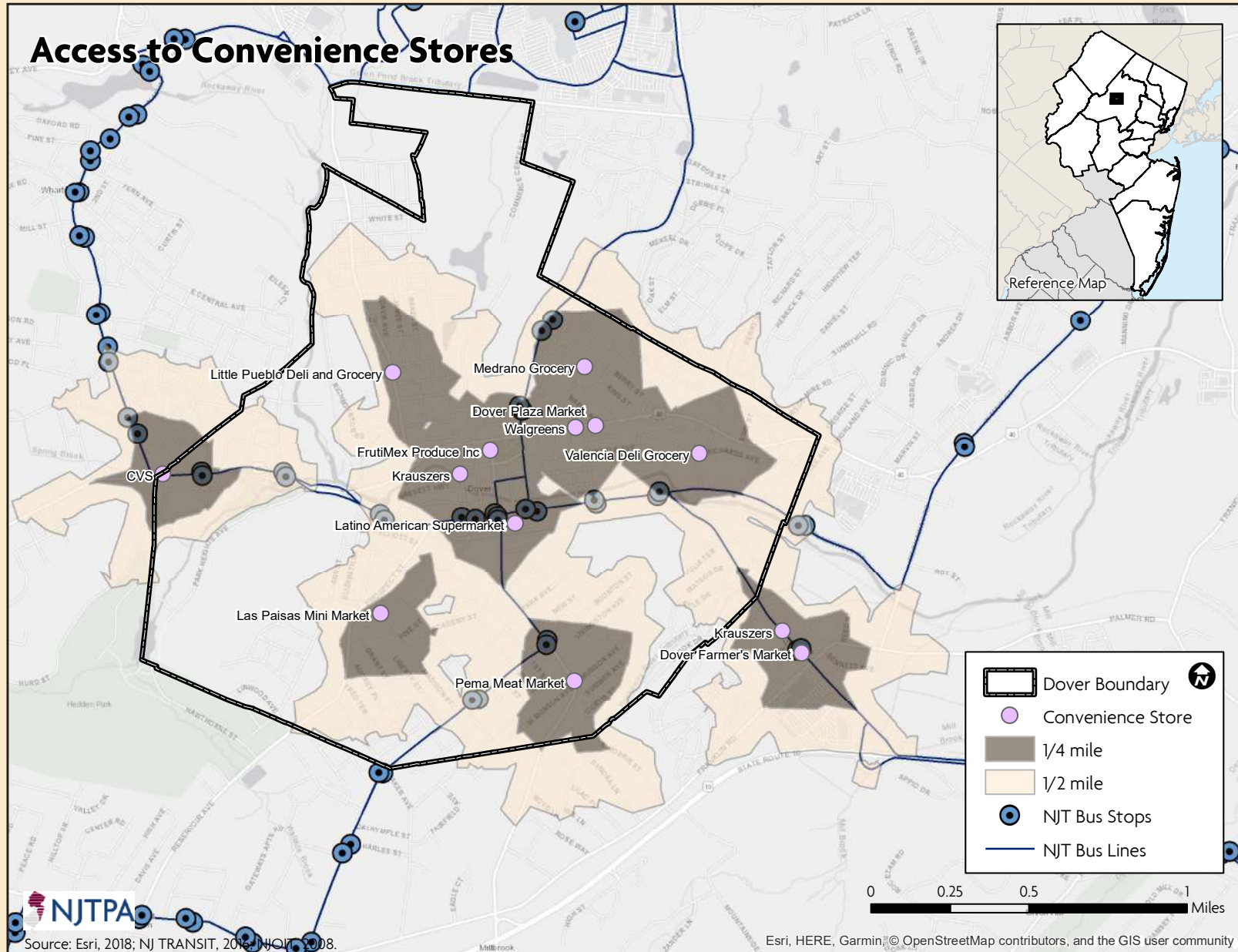
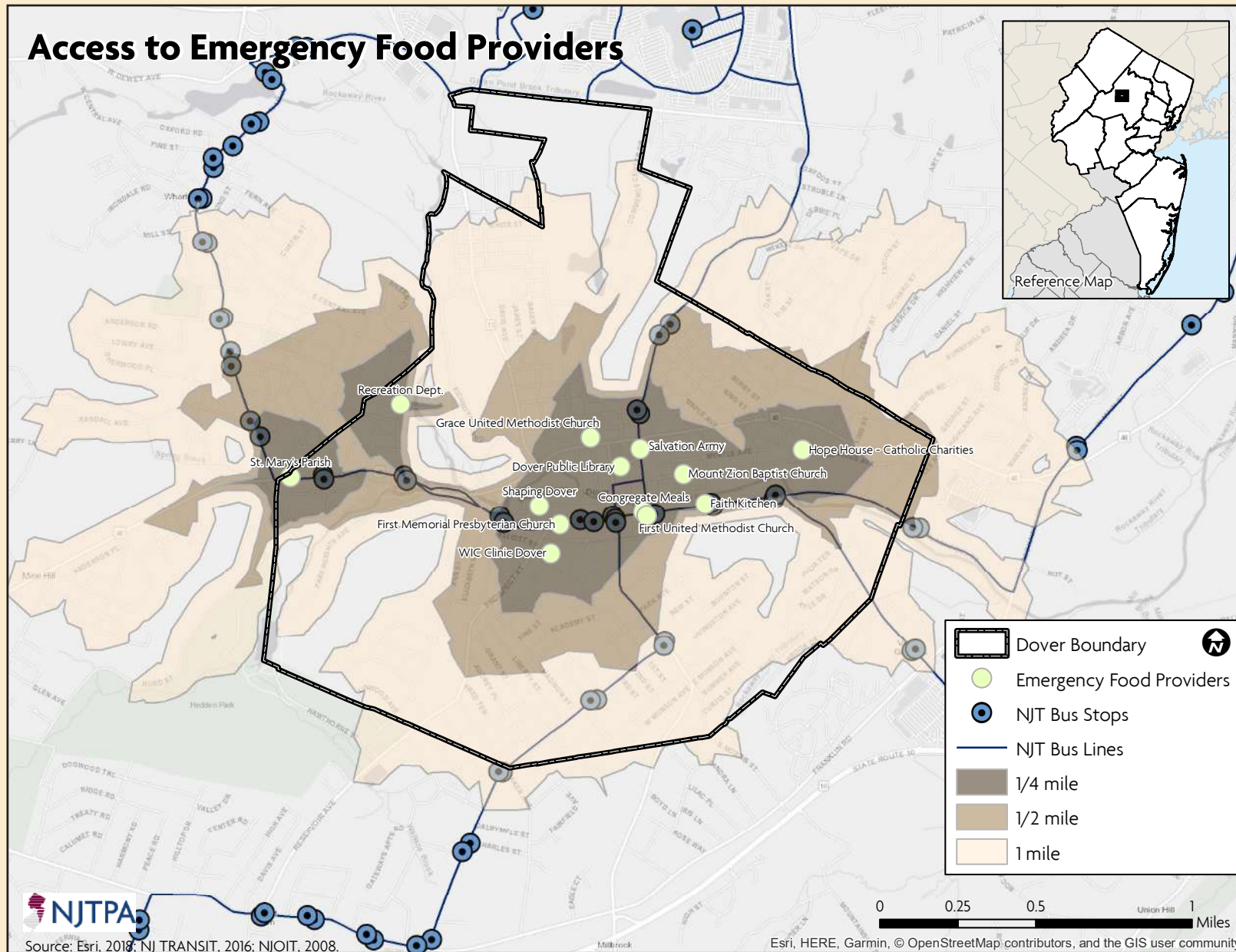


Figure 7 Access to Emergency Food Providers, Dover, NJ



Step 6. Develop Recommendations

To improve a community's access to food resources it is important to understand the barriers to accessing them. If the food resources are located close to the residents, then it is unlikely that there is an access or transportation-related problem. It is only when the food resources are located away from the residents that the access problem arises. Information on access challenges can be directly collected from the residents either by organizing a public meeting or conducting household surveys. They can also be collected from community leaders through focus groups or meetings. Household surveys are expensive, so public meetings and focus group meetings are easier to conduct for low-budget projects.

Common challenges to accessing fresh and healthy food resources include:

- Distance from home to the food resources
- Lack of affordable for-hire transportation (taxi, Uber, or Lyft) for households without auto access
- Lack of safe paths (such as sidewalks) for pedestrians
- Lack of comfortable roads for bicycling
- Lack of safe crossings of highways, railroad tracks, bridges, or waterways for pedestrians and bicyclists
- Lack of public transportation from home to the food resources

Availability of public transportation is often an important factor of food resource access, especially in low-income communities; it is important to check if the food resource points are served by public transportation and how frequently. This information may be available from the transportation agencies and organizations serving the community.

After understanding the barriers to community food access, recommendations can be formulated to address them. In addition to information about the barriers, the community profile, public and local stakeholder input, and results of canvassing the community food resource points can be used to develop recommendations. The recommendations are usually general in nature and require more investigation for implementation.



NJTPA staff work with local stakeholders to identify food access issues.

IDENTIFYING BARRIERS AND DEVELOPING RECOMMENDATIONS

In Dover, the project team conducted a meeting with the members of the assessment team to understand all the barriers that residents of Dover face while accessing food. Due to limited time and resources, in this project household surveys or focus group meetings were not conducted to understand barriers. Also because Dover is a small municipality, the assessment team members were well aware of food access problems and spoke at length about them. However, for large area projects it may be necessary to have focus group meetings and/or conduct surveys, as the assessment team members may not be fully aware of the challenges on ground. It should be noted that the assessment team obtained other information related to the community and food resource points prior to the meeting, which helped facilitate the conversation.

Some of the barriers and recommendations identified for Dover are as follows:

Barriers

1. Demographic and socio-economic indicators suggest that compared to the population of Morris County, a significant portion of Dover's population is at risk of food insecurity due to poverty.
2. Most residents have access to convenience stores, federal food assistance resources and emergency food resources via walking and public transportation. However, for supermarkets such as Walmart and Aldi, they have to travel to neighboring municipalities.
3. Most of the food resource points are served by NJ TRANSIT buses; however, limited bus service is a barrier even on weekdays.
4. Due to limited bus service, many residents have to take a taxi or Uber/Lyft while getting their food which further strains their monthly budget. Sometimes they have to depend on a ride from family or friends.
5. Poor sidewalk conditions or lack of sidewalks create inconvenience for people walking to and from the food resource points especially with food carts. At times steep topography compounds the problem.
6. Lack of lighting in some parts of the town also creates an inconvenient walking environment.

Recommendations

1. DOVER DIAL-A-RIDE: Increase awareness of Dover Dial-A-Ride, which provides rides to Dover residents for food shopping from 8 a.m. to 2:30 p.m. from Monday to Friday.
2. SHOPRITE DELIVERY: Increase awareness of ShopRite's grocery delivery system Instacart, which delivers food to customers' doorsteps within 24 hours.
3. DEDICATED SHUTTLE SERVICE: Work with community organizations, such as the Morris County Organization for Hispanic Affairs, to start a shuttle dedicated to transporting people to food resource locations.
4. PEDESTRIAN SAFETY CAMPAIGN: Conduct pedestrian safety campaigns through programs such as the NJTPA's Street Smart NJ pedestrian and driver safety education program. These campaigns help people walk safely to and from food resource locations.
5. IMPROVE INFRASTRUCTURE: Dover should consider planning for and implementing Complete Streets projects, based on the town's existing Complete Streets policy. Doing so will improve sidewalk conditions and lighting and increase pedestrian and bicycle facilities, enabling residents to access food resources by different travel modes.
6. TRAIL NETWORK: Dover should consider working to connect the already existing trails to build an integrated network connecting residents to various food resource locations.

NEXT STEPS



At the conclusion of a study, the assessment team should identify implementation champions who will use their expertise and networks to advance the recommended strategies. The champions may be assessment team members, or they may be recruited from outside the assessment team. In either case, they should be people with connections to the local community and populations at risk of food insecurity.

As recommended strategies are implemented, the partnered stakeholders can regularly monitor progress by tracking performance measures. Selected performance measures should help track conditions and trends in the study area and should be evaluated at regular intervals. Depending on available resources, this may be as frequent as once a year. The data gathered in the food access study can serve as a “baseline” against which to measure progress. Measuring progress will require the collection and analysis of data, such as:

- Information collected and reported by others (population growth, public transportation frequency, obesity rates)
- Information compiled by municipal departments (sidewalk quality, crime statistics)
- Collect your own data (travel mode used to access food resources). This may require conducting a survey or polling residents at community events.

Progress monitoring efforts might also involve repeating some of the analytical activities carried out during the initial study, such as administering surveys or mapping access. While performance measures were not determined within the scope of this project, they may be developed as next steps to evaluate the study’s recommendations.

RESOURCES

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Appendix A: Funding and Resources

TABLE A-1 FUNDING OPPORTUNITIES

Program Name	Program Description	Eligibility	Source	Website
Congestion Mitigation and Air Quality Regional and Local Mobility Initiatives Program (CMAQ)	Provides grants to advance readily implementable and innovative projects and services that improve air quality and reduce congestion, including the development of financially sustainable and innovative shuttle services.	• State • NJTPA regional and subregional partners • Municipalities • Railway companies	North Jersey Transportation Planning Authority (NJTPA)	https://www.njtpa.org/project-programs/mobility-programs/cmaq-local-mobility
FTA Enhanced Mobility for Seniors and Individuals with Disabilities (Section 5310) Program	An annual competitive grant for capital and operating projects specifically for the provision of transportation for seniors and people with disabilities.	• Non-profits • For-profits providing shared ride transportation • Public entities	NJ TRANSIT	https://www.njtpa.org/project-programs/mobility-programs/jarc-new-freedom
Healthy Food Access Portal	The Healthy Food Access Portal harnesses a vast array of data and information to support the successful planning and implementation of policies, programs, and projects for advocates, entrepreneurs, and stakeholders to improve access to healthy foods in low-income communities and communities of color.	• Non-profits • Local governments • Food cooperatives	The Food Trust	http://www.healthyfoodaccess.org/
New Jersey Healthy Communities Network (NJHCN) Community Grants	Provides grants for work by local partners that align with NJHCN strategies to support sustainable community change through increased physical activity and increased consumption of healthy foods and beverages. Grantees also receive training, peer-to-peer learning, on-call support and other benefits.	• Non-profits • Local governments • Non-governmental organizations	New Jersey Healthy Communities Network (NJHCN)	https://www.njhcn.org/get-involved/apply-for-a-grant/

Program Name	Program Description	Eligibility	Source	Website
New Jersey Healthy Corner Store Initiative	Connects corner store owners and community leaders with the resources they need to increase the availability of fresh fruits and vegetables and other healthy foods in corner stores and bodegas in lower-income communities.	• Corner store owners	American Heart Association, The Food Trust, and New Jersey Partnership for Healthy Kids	https://njhealthycornerstores.heart.org/
NJ Job Access and Reverse Commute (NJ-JARC)	NJ-JARC provides operating assistance for transportation shuttle services to connect low-income residents to jobs and employment-related services. Eligible services include shuttles and connector services to public transportation or warehouse facilities.	• Local governments • Non-profits	NJ TRANSIT	https://www.njtpa.org/project-programs/mobility-programs/jarc-new-freedom
Real Estate Impact fund	The Real Estate Impact Fund provides financing for commercial and mixed-use redevelopment projects in designated Urban Aid Municipalities and other qualifying areas. The program seeks to strengthen existing and future development opportunities and private investment.	• Project must be located in an Urban Aid Municipality, Fort Monmouth or meet requirements pertaining to university/college sponsorship.	NJ Economic Development Authority	https://www.njeda.com/financing_incentives/programs/grow_nj
Reinvestment Fund	Reinvestment Fund uses integrated data, current policy and strategic investments to improve the quality of life in low-income neighborhoods. The Fund aims to bring high-quality grocery stores, affordable housing, schools and health centers to communities to help families lead healthier, more productive lives.	• Non-profits • Local governments	Reinvestment Fund	https://www.reinvestment.com/
Robert Wood Johnson Foundation Grants and Grant Programs	The Robert Wood Johnson Foundation funds policy initiatives and programs in four key areas related to health equity: health systems, healthy children, healthy communities and health leadership	• Varies by program	Robert Wood Johnson Foundation	https://www.rwjf.org/en/how-we-work/grants-and-grant-programs.html

Appendix B: Dover Community Profile

TABLE B-1 SOCIO-DEMOGRAPHIC PROFILE, DOVER, NJ

Characteristic	Dover Number	Dover Percentage	Morris County	New Jersey
Total Population	18,317	100.0%	498,215	8,915,456
Households				
Total households	5,366	100.0%	179,734	3,195,014
Average household size	3.37	---	2.72	2.73
Race & Ethnicity, by Hispanic or Latino Origin				
Not Hispanic or Latino	5,386	29.4%	87.3%	80.7%
White	3,599	19.6%	72.5%	56.7%
African American	925	5.0%	3.0%	12.7%
American Indian/Alaskan Native	0	0.0%	0.1%	0.1%
Asian	440	2.4%	9.9%	9.1%
Native Hawaiian and Other Pacific Islander	0	0.0%	0.0%	0.0%
Some Other Race	258	1.4%	0.2%	0.4%
Two or more races	164	0.9%	1.6%	1.6%
Hispanic or Latino	12,931	70.6%	12.7%	19.3%
National Origin				
Foreign born	8,344	45.6%	18.9%	21.8%
Sex				
Male	9,570	52.2%	49.0%	48.8%
Female	8,747	47.8%	51.0%	51.2%
Age				
17 or under	3,919	21.4%	22.3%	22.5%
18-24	1,722	9.4%	8.2%	8.9%
25-44	5,921	32.3%	23.6%	26.0%
45-64	4,904	26.8%	30.4%	27.8%
65-74	984	5.4%	8.5%	8.1%
75-84	615	3.4%	4.5%	4.4%
85 and over	252	1.4%	2.4%	2.2%
Educational Attainment				
Less than 9th grade	2,217	17.5%	3.0%	5.2%
9th to 12th grade, no diploma	885	7.0%	3.1%	5.9%
High school graduate (includes equivalency)	4,334	34.2%	21.7%	28.2%
Some college, no degree	2,134	16.8%	14.1%	16.8%
Associate's degree	1,007	7.9%	6.3%	6.4%
Bachelor's degree	1,594	12.6%	30.6%	23.1%
Graduate or professional degree	505	4.0%	21.3%	14.4%

Source: U.S. Census Bureau 5-Year ACS Estimates, 2012-2016

TABLE B-2 FOOD SECURITY INDICATORS, DOVER, NJ

Indicator	Dover Number	Dover Percentage	Morris County	New Jersey
Economic Indicators				
Median household income	\$64,310	---	\$102,798	\$73,702
Unemployment	402	3.8%	3.9%	5.0%
Households in poverty	545	10.2%	4.8%	10.6%
People in poverty	1,525	8.5%	4.6%	10.9%
People at 185% of poverty level	5,005	27.8%	11.6%	22.5%
Socio-demographic Indicators				
Limited English Proficiency (LEP)	6,080	34.9%	8.8%	12.2%
Female head of household with child	333	6.2%	3.8%	6.7%
Person with a disability	1,389	7.7%	8.1%	10.4%
With independent living difficulty (18 and over)*	509	3.6%	4.1%	5.1%
Youth (under 18 years)	3,919	21.4%	22.3%	22.5%
Older adults (65 years and over)	1,851	10.1%	15.4%	14.7%
(Older adults (75 years and over)	867	4.7%	7.0%	6.6%
Carless Households	877	16.3%	4.7%	11.6%

Source: U.S. Census Bureau 5-Year ACS Estimates, 2012-2016, New Jersey Data Book

*Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping

TABLE B-3 PUBLIC ASSISTANCE, DOVER, NJ

Program	Dover Number	Dover Percentage	Morris County	New Jersey
Households receiving SNAP	794	14.8%	3.4%	9.3%
Students eligible for Free Lunch (2017-2018)	2,044	63.1%	11.0%	---
Students eligible for Reduced Lunch (2017-2018)	434	13.4%	2.7%	---

Source: U.S. Census Bureau 5-Year ACS Estimates, 2012-2016; State of New Jersey Department of Education, 2017-2018 Enrollment District Reported Data

TABLE B-4 MEANS OF TRANSPORTATION TO WORK, DOVER, NJ

Indicator	Dover Number	Dover Percentage	Morris County	New Jersey
Car, truck, or van - drove alone	6,568	62.1%	79.3%	71.7%
Car, truck, or van - carpooled	2,413	22.8%	7.1%	8.1%
Public transportation (excluding taxicab)	641	6.1%	5.2%	11.2%
Taxicab	335	3.2%	0.2%	0.2%
Motorcycle	0	0.0%	0.1%	0.1%
Bicycle	5	0.0%	0.2%	0.3%
Walked	357	3.4%	2.1%	3.0%
Other means	54	0.5%	0.5%	1.2%
Worked at home	199	1.9%	5.4%	4.1%
Total (workers 16 years and over)	10,572	100.0%	254,869	4,233,592

Source: U.S. Census Bureau 5-Year ACS Estimates, 2012-2016

Appendix C: Together North Jersey Food Access Questionnaire



Together North Jersey Food Access Questionnaire

What's your zip code? _____

Where do you get your food? Please answer for each location where you get your groceries.

Name of store/place/event: _____

Location (town or street, if you know it): _____

What food do you get there?

- | | | |
|--|---|---|
| ☐ Fruits & Vegetables | ☐ Grains & Beans | ☐ Snacks (Chips, Cookies, Popcorn) |
| ☐ Eggs & Dairy (Milk, Cheese) | ☐ Breads | |
| | ☐ Meat & Fish | |

How do you get there?

- | | | |
|--|--|---------------------------------|
| ☐ Drive | ☐ Ride from relative/friend | ☐ Other: |
| ☐ Bus | ☐ Walk or Bike | |
| ☐ Taxi or Uber/Lyft | | |

Is it difficult to get to this location? If so, why?

- | | | |
|---|--|---------------------------------|
| ☐ Too far/distance | ☐ Too expensive | ☐ Other: |
| ☐ Limited hours | ☐ Lack of public transportation | |

Name of store/place/event:

Location (town or street, if you know it): _____

What food do you get there?

- | | | |
|--|---|---|
| ☐ Fruits & Vegetables | ☐ Grains & Beans | ☐ Snacks (Chips, Cookies, Popcorn) |
| ☐ Eggs & Dairy (Milk, Cheese) | ☐ Breads | |
| | ☐ Meat & Fish | |

How do you get there?

- | | | |
|--|--|---------------------------------|
| ☐ Drive | ☐ Ride from relative/friend | ☐ Other: |
| ☐ Bus | ☐ Walk or Bike | |
| ☐ Taxi or Uber/Lyft | | |

Is it difficult to get to this location? If so, why?

- | | | |
|---|--|---------------------------------|
| ☐ Too far/distance | ☐ Too expensive | ☐ Other: |
| ☐ Limited hours | ☐ Lack of public transportation | |

Appendix D: Healthy Food Availability Index Form

Store ID: _____ Store #: _____		Dover, NJ Food Access Study Healthy Food Availability Index		Data Collector: _____			
Type: ☐ Public Market ☐ Supermarket ☐ Small Grocery ☐ Specialty Store ☐ Discount Store ☐ Convenience Store ☐ Gas Station	Store Name: _____ Store Address: _____ _____ _____			Date: _____			
Comments: _____ _____							
Measure 1: Milk	Measure 2: Juice	Measure 3: Fruit	Measure 4: Vegetables	Measure 5: Beef	Measure 6: Chicken		
Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No		
Measure 7: Seafood	Measure 8: Cereal	Measure 9: Frozen Foods	Measure 10: Packaged Foods	Measure 11: Canned Foods	Measure 12: Bread		
Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No	Available ☐ Yes ☐ No		
Points							
Milk	1	Vegetables (a little)	2	Seafood	1	Canned Foods	1
Juice	1	Vegetables (a lot)	4	Cereal	1	Bread	1
Fruit (a little)	2	Beef	1	Frozen Foods	0.5		
Fruit (a lot)	4	Chicken	1	Packaged Foods	0.5		

