Public Perceptions of Food Insecurity: Camden, NJ

Planning Studio 2022 | Rowan University

PROJECT TEAM

ACKNOWLEDGMENTS

Spring 2022 Planning Studio | PLAN 31495 + 31695

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EXECUTIVE SUMMARY

This study was conducted as a semester-long project for Rowan University's Spring 2022 Planning Studio to better understand public perceptions of food insecurity and to gain a deeper knowledge of the systemic causes of food insecurity in Camden, New Jersey. To achieve this purpose, our team developed four goals to guide the research process:

1. To understand how residents and community stakeholders perceive current issues of food access and security in their neighborhoods;
2. To identify action steps all members of the community can take to address those issues;
3. To explore the potential of an online grocery delivery model as a viable solution; and
4. To gauge residents' willingness to adopt such a model.

Our team hopes to aid in community efforts through the research we conducted between January-May 2022 and present in this report. For the purposes of this project, our team focused on two southern neighborhoods in Camden: Waterfront South and Bergen Square.

At each stage of the process, we designed methods that involved community members to ensure our recommendations were responsive to their needs. Through our team's mixed methods approach, we were able to bring together community voices old and new that allowed us to understand why this topic has been intractable in the past. Those methods began with a food environment scan, followed by the distribution of an online survey, the facilitation of two focus groups (one in each of our study neighborhoods), and a series of individual interviews with community stakeholders.

The food environment scan identified fourteen food retail locations within the study area, eight of which were accessible to the project team. Upon observation, the team discovered there was no single location that offered all three of the staple foods determined by the project team as a baseline for analysis (bread, milk, and eggs). Prices for these products at the observed retail locations were more expensive than the numbers reported by the U.S. Bureau of Labor Statistics (2022) for both the national city average and the Northeast regional average. As for fresh produce, five of the eight locations offered fresh vegetables, but their supplies were mostly limited to potatoes and onions, with one store also offering lettuce and peppers.

In many ways, our community survey was a direct extension of our food environment scan, in that we asked neighborhood residents to help us better understand how they navigate the geographic contexts for their own grocery shopping needs. Based on their responses, a large percentage of Camden residents experience food insecurity and face difficulties when grocery shopping. Most respondents travel outside the city to purchase groceries at large-scale supermarkets rather than shopping at local corner stores because these neighborhood retailers do not have enough product variety and the quality of the products they offer is often inadequate. While many residents travel to other cities, those without a personal vehicle or reliable transportation have no choice but to purchase groceries from these corner stores. To address these difficulties, respondents recommended corner stores should improve produce quality, reduce produce prices, and expand current offerings. Another common

suggestion was to add more food retail locations to reduce the overall distance residents need to travel when purchasing groceries. Nearly half of respondents stated they would be comfortable with purchasing groceries online for home delivery, but the products they felt most comfortable ordering were non-perishable goods. Although online delivery may be a viable option for improving food access, the products Camden residents are comfortable ordering will not support a nutritionally adequate diet.

Like our findings from the community survey, our focus groups further confirmed that most participants agreed food insecurity/inequity was a persistent issue across the city and especially in our project area. They attributed these issues to a lack of options for food retailers within the city limits, a lack of reliable public transportation options, and a lack of healthy options at their local corner stores. There was a strong consensus about who should be involved in helping Camden achieve widespread and sustained food security, equity, and justice: everyone. In a city with hundreds of nonprofits all competing for the same funding, initiatives will only be successful if they foster collaboration among faith-based organizations, local farmers, local industries and businesses, schools, nonprofits, planning/zoning boards, and private investors. Our participants also offered a dynamic range of solutions, beginning with repeated calls to attract more grocery retailers to the city (whether large or small) that offer healthy foods at affordable prices. They also emphasized the importance of city-wide marketing campaigns to spread the word about local initiatives like the Virtua Mobile Farmers Market or other farmers markets/community gardens in surrounding neighborhoods that project area residents may be unaware of.

One solution our participants were divided on, though, was a potential online grocery delivery service. While a majority agreed the service would be convenient in theory, many of them had concerns about the quality of products they would receive when someone else was responsible for picking their items for them. Additionally, they expressed concerns about the timing of deliveries and whether they would have the option to receive their items directly, rather than having them placed on their doorsteps while they were not home. Despite their reservations, they contributed a list of ideal features they would like to see in the service, including basic functionality, ease-of-use, price comparisons, compatibility with coupons and food assistance programs, nutritional facts, name brands and off-brands, local employment opportunities, and locally sourced healthy foods.

For our final method, we conducted semi-structured interviews with individuals who work in the regional food system or individuals who maintain a community leadership role. While the city is home to numerous nonprofits all fighting for food justice, residents nonetheless struggle with being able to access and afford healthy foods—struggles many of our interviewees attributed to the city's lack of a large-scale supermarket and a saturation of nutrition education without proper follow-through. The lack of variety and options within the city, when paired with insufficient transportation, poses serious difficulties for residents, allowing residents of certain well-connected neighborhoods to disproportionately gain access to healthier options compared to their counterparts in less-connected neighborhoods. While half of the interviewees supported the idea of opening a large-scale grocery store within the project area, reasons for not securing one in the past included weak support from the administration and subtly discriminatory regional market mapping. As for the future, several interviewees cited capitalizing on the momentum of previous work, continuing to enhance collaboration across agencies, and utilizing existing professional networks to generate collaborative solutions for funding food equity initiatives.

Finally, we organized our recommendations into four major categories: collaboration, relationship-building and project longevity, future planning, and potential online grocery delivery models. Collaboration emphasizes the importance of Camden's many community partners finding ways to capitalize on the work of their colleagues so they may maximize their messaging and impact. Relationship-building and project longevity focuses on ways to continue engaging and empowering community residents in the planning and decision-making processes, as well as training those individuals to continue the work of organizations if funding runs out. Future planning highlights the need for all planning efforts to ensure equity across Camden's neighborhoods so all residents can experience the benefits of whatever reinvestments the city receives. Additionally, we recommend all neighborhood plans include more dynamic food systems elements so policymakers have explicit guidelines to follow when assessing solutions for enhancing residents' health and well-being. Finally, we offer recommendations for any potential online grocery delivery service models, chief among them the need to make those services usable by and accessible to as many portions of the population as possible, and to offer a "click-and-collect" option that blends the convenience of online ordering with the quality-assurance embedded in the physical shopping experience.

1. INTRODUCTION

ABOUT THE PROJECT

This project is the culmination of the work of Rowan University's Spring 2022 Planning Studio members, conducted under the guidance of Dr. Mahbubur Meenar. The purpose of this project was to gain a better understanding of community perceptions of food insecurity in the city of Camden, NJ. To achieve this purpose, our team developed four goals: (1) to understand how residents and community stakeholders perceive issues of food access and security; (2) to identify action steps all members of the community can take to address those issues; (3) to explore the potential of an online grocery delivery model as a viable solution; and (4) to gauge residents' willingness to adopt such a model. Our focus on this online grocery delivery model is inspired by the ongoing work of our primary community partner, Invincible City, and its founder Fredric Byarm, who is passionate about cultivating nutrition, economic growth, and dignity in his mission to eradicate food insecurity in Camden.

Historically, the city of Camden has experienced varying degrees of food insecurity following its economic downturn in the mid-twentieth century, with neighborhoods like Waterfront South and Bergen Square experiencing some of the most profound effects. Residents of these neighborhoods lament the loss of local food delivery services from their childhoods, where individuals would provide specific groceries (e.g., fish, milk, and fresh produce) from a mobile truck daily. This loss, when coupled with the current insufficiencies of the local food environment, has resulted in a persistent lack of access to healthy foods, options for grocery retailers, and public transportation. Achieving food equity in Camden will take sustained, collaborative efforts from community organizations, local government, investors, academic institutions, and the residents themselves.

Our team hopes to aid in those efforts through the research we conducted between January-May 2022 and present in this report. At each stage of the process, we designed methods that involved community members to ensure our recommendations were responsive to their needs. Those methods began with a food environment scan, followed by the distribution of an online survey, the facilitation of two focus groups (one in each of our study neighborhoods), and a series of individual interviews with community stakeholders. Our research culminated in a public presentation and the publication of this report.

Source: Studio Team

PROJECT TEAM & COMMUNITY PARTNERS

The Spring 2022 cohort of Rowan University's Planning Studio consisted of eight members, three graduate students in the Urban and Regional Planning program and five undergraduate students in the Community and Environmental Planning program. Dr. Mahbubur Meenar, Assistant Professor in the Geography, Planning, and Sustainability department, oversaw the Studio cohort as both project lead and liaison among the cohort, Invincible City, and the team's other community partners.

In addition to Invincible City, our team worked closely with Heart of Camden and Shalom Baptist Church, which were instrumental in assisting us with organizing and delivering focus groups in the Waterfront South and Bergen Square neighborhoods, respectively.

Timeline of Deliverables
PLANNING STUDIO, SPRING 2022

The Team
Organize and Prepare the Cohort & the Methods

The Process
Implement Our Mixed-Methods Approach

The Product
Analyze and Present Project Findings

Brainstorm
Conduct Literature Review and Design Methods

Facilitate and Analyze
Facilitate Focus Groups and Individual Interviews and Analyze Data

Publish
Publication of Final Report

JAN   FEB   MAR   APR   MAY

Implement and Design
Conduct Food Environment Scan, Distribute Online Survey, and Design Questions

Draft and Present
Draft Final Report and Deliver Virtual Public Presentation

Source: Studio Team

2. CONCEPTS

The purpose of our literature review was twofold: to evaluate past research on the topic of food insecurity and to identify key themes/concepts that connected publications across time, source of publication, and discipline. While concepts like "food insecurity" and "food equity" were more common and easier to define, others like "health equity" and "food justice" were more nuanced and required multiple searches from members of our team. Once we established a solid foundation for our project, we transitioned our next set of reviews to focus on concepts related to local food environments, as well as to the various types of initiatives or movements that address the core issues related to food insecurity.

EQUITY/JUSTICE

FOOD INSECURITY

At its core, food insecurity refers to a community's lack of access to healthy and affordable foods. Smith & Richards (2008) offer a more nuanced definition that describes food insecurity as "the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire foods in socially acceptable ways" (p. 550). Barrett (2010) further conceptualizes food insecurity "as resting on three pillars: availability, access and utilization" (p. 825), all of which influence how often a person, family, or household experiences food-related uncertainty or anxiety (Figure 2.1). As those periods of uncertainty and anxiety become more frequent, individuals' eating patterns become more disrupted, thereby placing them at greater risk for extreme food insecurity.

Although any member of a community may experience food insecurity, it is most commonly "associated with single parenthood, low socioeconomic status, having three or more children, having low educational attainment, being a member of a racial or ethnic minority," or being an immigrant (Flores & Amiri, 2019, p. 1). Coleman-Jensen et al. (2017) outline a series of

conditions related to food insecurity, of which individuals must meet six or more to be considered as suffering from "very low" food security. These conditions include running out of food before earning more money; current food not lasting long enough; being unable to afford balanced meals; adults having to cut or skip meals because of financial constraints; insecurity occurring more than once in three months; eating less than needed; experiencing hunger but lacking the money for food; and losing weight because of a lack of finances (Coleman-Jensen et al., 2017).

Figure 2.1 – Levels of Food Insecurity (Feeding America, 2021)

FOOD EQUITY

Food equity is one of the intended outcomes of remedying food insecurity, and it is achieved when "all people—regardless of identity, positionality, or power—have the right to grow, procure, and/or consume healthful, affordable and culturally preferred foods" (Mui et al., 2021, p. 354). Achieving food equity, though, requires an examination not just of the food system itself but also the social, cultural, and economic contexts in which that food system exists. Mui et al. (2021) capture the contours of this daunting task as six key factors: (1) nutritional adequacy of food; (2) food affordability for all; (3) cultural preferences for food; (4-5) social and space equity in the food system; and (6) people's agency in the food system.

Considering these six key factors, Macias (2008) highlights affordability as one of the biggest obstacles that communities experience in achieving food equity, in terms of both traditional finances and unpaid labor. For either single- or dual-parent households living on median incomes and working multiple jobs, the higher prices for healthier, higher quality foods can be prohibitive. Even if these families can afford those foods, the unpaid labor involved in preparing unprocessed foods can be a serious challenge. Thus, it is imperative planners consider the "inequitable cultures, policies and institutions that stand in the way to achieving food justice" (Anderson et al., 2021, p. 115), starting with a close examination of regional plans to ensure they have adequate language related to addressing issues of food insecurity, food equity, and health equity (Mui et al., 2021).

HEALTH EQUITY

Health equity is intimately connected with food equity because it involves "equalizing access to power and flows of goods through food systems in order to promote human thriving" (Weiler et al., 2015, p. 1079, 1081) (Figure 2.2). Like food equity, health equity also requires planners to adopt a holistic approach that enables them to

"[identify] and equaliz[e] the spread of social and economic factors that shape human health" so whatever benefits come with improved human health are not limited solely to those with higher incomes who live in low-risk communities (Weiler et al., 2015, p. 1079).

In this way, health equity necessitates adopting a social justice approach to cultivate regional food systems that ensure equitable food access, availability, affordability, and quality (Friel & Baker, 2009). Friel & Baker (2009) also advocate for a reversal of the harmful consequences "[f]ood trade and governance arrangements and changes to the food production, procurement, and distribution systems" have had on "food practices, dietary consumption patterns and nutritional status," especially among members of lower socio-economic statuses (p. 625), which Weiler et al. (2015) categorize as a key step in their food sovereignty framework.

FOOD JUSTICE

In many ways, food justice is a culmination of the food and health equity movements because it galvanizes advocates to address "the problems of the industrial food system" and those of alternative food

Figure 2.2 – Elements of a Healthy Food Community (Despres, 2020)

networks that tend "not to place social justice in a position of

primacy" when discussing matters of food and health equity (Broad, 2016, p. 7). Food justice advocates view these problems as stemming from historical inequalities in race, class, and gender that are "reproduced and contested within food systems" (Glennie & Alkon, 2018, p. 1). As a result, food justice "encompasses many issues, including the opportunity to grow or purchase healthy food, diet-related health disparities, access to land, and wages and working conditions in agriculture, food processing and restaurant work" (Glennie & Alkon, 2018, p. 1), issues that require planners and advocates alike to decolonize problematic white, moralistic conceptualizations of food justice (Bradley & Herrera, 2016).

Despite the network of issues that food justice attempts to address, its goals are consistent. It fuses "concerns for ecological sustainability and social justice" to "ensur[e] that the benefits and risks of where, what, and how food is grown and produced, transported and distributed, and accessed and eaten are shared fairly" (Glennie & Alkon, 2018, p. 1; Gottlieb & Joshi, 2010, p. 7). It also aims to "[bring] about community change *and* a different kind of food system" by developing "a new language of social change in the food arena" (Gottlieb & Joshi, 2010, p. 5). Although the path to food justice may remain unclear, the movement nonetheless mobilizes

Figure 2.3 - The Four Components of a Food System (Burger, 2020)

linkages among advocates across disciplines to create a new alternative food system founded on environmental, food, land, and human sustainability.

THE FOOD ENVIRONMENT

LOCAL FOOD SYSTEMS

Although the concept of a local food system lacks a singular definition, it generally refers to the geographical context, or place, where food production, distribution, marketing, and distribution occur (Figure 2.3). Ideally, all these processes occur within the same community, and that community would primarily rely on local food products—ones that are distributed to and consumed by areas within 400 miles of the products' origins. To create a truly sustainable local food system, it must fulfill the following criteria: (1) improve access to nutritious diets for all community members; (2) rely on a stable base of family-owned and -operated farms that engage in sustainable production; (3) create direct links between local farmers and end consumers; (4) support food- and agriculture-related businesses that create local jobs and recirculate capital within the community; (5) improve working/living conditions for farmers and other food system laborers; and (6) implement policies that promote local food production and consumption (Feenstra, 2002).

A common criticism throughout local food systems literature is what Born & Purcell (2006) call "the local trap," which "assumes that a local-scale food system will be inherently more socially just than a national-scale or global-scale food system" (p. 195). These assumptions about the "local" come in many forms, such as the beliefs that local food is healthier, that healthy food is more environmentally friendly, and that local food supports the local economy. The basic desire to be more local, then, can be detrimental to communities at a case-specific level. Planning the scale of a food system thus needs to be responsive to each community and
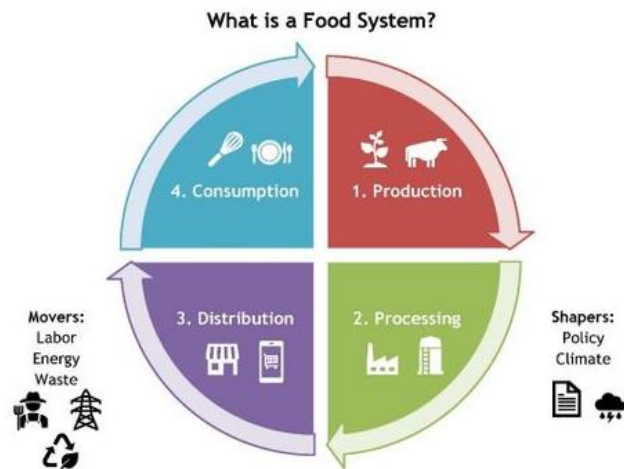
conducted in a way that maximizes the benefits equally throughout the community.

PERCEPTIONS OF THE FOOD ENVIRONMENT

Perceptions of the food environment are commonly measured and obtained through qualitative analysis, typically a combination of surveys and interviews with community residents and stakeholders (Holston et al., 2020). Perceptions of the food environment can vary based on location. For example, Garasky et al. (2009) found that rural Iowans were more likely to perceive their community as having inadequate grocery stores/supermarkets compared to their urban counterparts, who were less concerned about the number of stores and more concerned about the safety of the areas in which those stores appeared. Rural Iowans also frequently perceived healthy foods to be unaffordable, a common response among disadvantaged residents in The Hague (van der Velde et al., 2019) and low-income residents in Baltimore, Maryland (Vedovato et al., 2015). Dutch residents also highlighted an important conflict in their food environment, namely sufficient food sources but a proliferation of unhealthy food options to tempt them when doing their grocery shopping (van der Velde et al., 2019). Furthermore, Baltimore residents perceived healthy foods not just as unaffordable or inaccessible but also as less satisfying and more inconvenient to buy and prepare. Despite these negative perceptions, Baltimoreans reported a wide variety of food sources they patronized, ranging from more traditional grocery stores/supermarkets and convenience stores to more new-age options like online grocery outlets and mobile produce markets (Vedovato et al., 2015).

FOOD DESERTS

The Food Empowerment Project (2022) describes a food desert as "geographic areas where residents' access to affordable, healthy food options (especially fresh fruits and vegetables) is restricted or nonexistent due to the absence of grocery stores within convenient traveling distance" (para. 2). Traditionally, the term "food desert" refers mostly to a community's proximity to a major food retailer (i.e., a supermarket), without much consideration for that community's available transportation options that could influence the convenience of grocery shopping. Food deserts also typically occur in lower socio-economic communities with predominantly black or brown populations (The Food Empowerment Project, 2022). Because these communities tend to have fewer large-scale grocery stores, residents are at the mercy of whatever fast-food chains or convenience stores are available, thereby dramatically impacting their ability to seek and maintain healthy diets—hence the infrequently used term "food swamp" (Sevilla, 2021) (Figure 2.4).
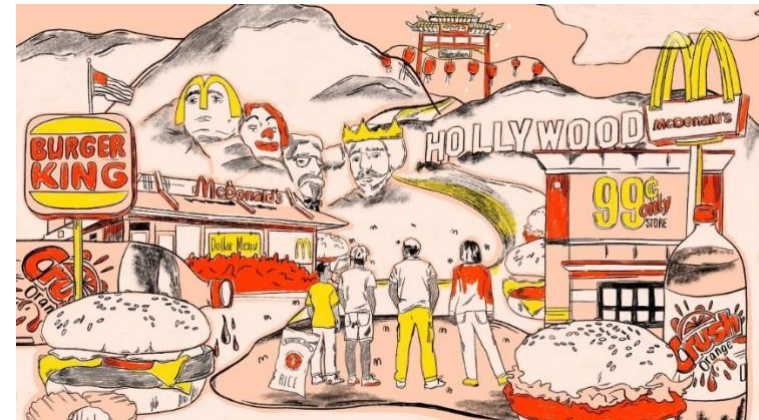

Figure 2.4 – The Cheap and Easy "Ports" in a Food Swamp (Uong, 2019)

Scholars, planning practitioners, and journalists are intensely divided on the efficacy of supermarkets as solutions to food deserts. In an interview with Devitt (2019) for *NYU News*, associate professor of economics Hunt Allcott explains how the presence of new supermarkets does not dramatically improve residents' eating or shopping habits. Rather than substituting the new supermarket for unhealthy local convenience stores, "people go from shopping at a far-away supermarket to [the] new supermarket nearby that offers the same types of groceries" (para. 10). Dubowitz et al. (2015) present similar findings from their studies of Pittsburgh neighborhoods:

although new supermarkets improved residents' perceptions of access to healthy foods, their consumption of said healthy foods did not necessarily increase. Moreover, Ghosh-Dastidar et al. (2017) discovered that, despite new supermarkets' influence on food prices in their immediate neighborhoods, they had little to no influence on the "net availability of healthy foods" (p. 1).

Like supermarkets as viable solutions to food insecurity, the term "food desert" has had a tumultuous history with scholars, many of whom have criticized and outright rejected it. As the Food Empowerment Project (2022) highlights, the term does not account for "factors such as racism, cost of living, people being time poor and cash poor, cultural appropriateness of available foods, [and/or] the ability of people to grow their own foods" (para. 1). Not only does the term "[pull] focus from the underlying root causes of the lack of access to healthy food in communities" (Sevilla, 2021, para. 1), but it also misuses the term "desert" by divorcing it from its natural ecological roots and co-opting it to refer to poor food environments that are man-made (Raja, n.d.).

In the wake of the COVID-19 pandemic causing dramatic increases in global food insecurity, scholars advocate for the adoption of the term "food apartheid" because it "focuses our examination on the intersectional root causes that created low-income and low food access areas, and importantly, points us towards working for structural change to address these root causes" (Sevilla, 2021, para. 8). By addressing these root causes, advocates and planners can help create food sovereignty within high-risk communities.

SUPPORT SERVICES

THE "ALTERNATIVE FOOD MOVEMENT" & COMMUNITY FOOD PROJECTS

The idea of an "alternative food movement" has recently grown out of opposition to and criticism for more mainstream or traditional food systems, arguing that such food systems generate profit only for larger corporations, promote unhealthy eating habits, and rarely benefit local communities in their attempts to address issues of food access and insecurity (Mount et al., 2013).

In addition to supporting the achievement of food access and security, the alternative food movement, which some scholars refer to as "alternative food networks" or AFNs (Hodgins & Fraser, 2018), intends to assist local communities with establishing "regional food self-sufficiency" through the creation of various community food projects including, but not limited to, non-profit food banks, urban farming, and community gardens (Hodgins & Fraser, 2018, p. 149).

Because of the sheer number of different types of community food projects and alternative food initiatives, there is no scholarly consensus on whether these projects and initiatives should remain separate or work together to achieve convergence. Despite differences in organizational structures, rationales, or approaches, Mount et al. (2013) highlight the potential benefits of convergence among projects/initiatives, chiefly "an expanded definition of agricultural land use to facilitate on-farm value-added processing and retailing," "adjusted zoning and land use by-laws to facilitate food markets in urban places," and "increased funding for local food initiatives from the public and private sector" (pp. 601-602). Additionally, in their brief defense of community-university food-related projects, Rosing & Odoms-Young (2015) note that such projects can drastically increase nutritional education and access to healthy foods in low-income communities of color.

FEDERAL FOOD ASSISTANCE & HUNGER RELIEF PROGRAMS

Food access is at the heart of the food justice movement, and the various food assistance and hunger relief programs across the country

allow millions of individuals to achieve access to the foods they need to sustain themselves (Bruckner et al., 2021). Two of the most well-known and -utilized programs are the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), both of which provide participants with access to healthy foods and to educational programs related to nutrition and personal health.

There are, however, key issues inherent in these assistance programs, especially that of individuals obtaining participation and subsequently identifying participating retailers. Before individuals in need can begin to use these programs, they are often disheartened by what Bruckner et al. (2021) call "red tape"—the long, convoluted application process that involves "the burden of proving financial hardship as a requisite to access emergency food resources" (p. 102). When individuals gain access to these programs, they must then often navigate problematic interpersonal interactions with food program staff, characterized by mistrust and humiliation, leading to profound self-stigmatization and feelings of shame. "Free" food thus comes with a high emotional price. Furthermore, as alternative food initiatives become increasingly popular, SNAP and WIC participants are frequently unable to use their food assistance programs at places like farmers markets and other similar venues selling locally produced food (Suitor, 2011). Moving forward, food assistance programs need to increase ways in which participants can use their hard-earned benefits at retailers in both mainstream and alternative food systems.

Types of Community Food Projects

Nutrition education, food policy councils, community and youth gardening, community-supported agriculture, farm-to-school programs, farmers markets, gleaning, & community kitchens (Tauber & Fisher, n.d.)

SAMPLE LOCAL AND/OR STATE FOOD INCENTIVES

One of the most important statewide initiatives in New Jersey is the Healthy Corner Stores Initiative, which began in 2014 as a partnership between The Food Trust and the New Jersey Partnership for Healthy Kids, with participating locations in cities ranging from East Orange, Perth Amboy, and Asbury Park to Trenton, Camden, and Atlantic City. The impetus for this initiative was the realization that residents in communities without nearby supermarkets tended to do most of their shopping at local corner or convenience stores, many of which did not sell a wide variety of fresh produce or healthy foods (The Food Trust, 2014). Thus, the initiative's two main goals are to strengthen local businesses and build healthy communities through measures like supplying participating merchants with the necessary storage and display units for fresh products and encouraging younger shoppers to purchase nutrient-rich snacks and beverages whenever they visit a local bodega (The Food Trust, 2014).

This focus on ensuring the health of younger generations forms the basis of another statewide initiative, the NJ Department of Agriculture's Jersey Fresh Farm to School program. By partnering schools with local farmers in their immediate area, this program hopes to increase students' health, nutritional awareness, and knowledge of the farming process, thereby fostering a greater sense of environmental stewardship and community (State of New Jersey, 2015). The Food Trust, along with Cooper Pediatrics and the Camden Coalition, instituted a Camden-specific initiative entitled Food Bucks Rx (Figure 2.5). This initiative is a food prescription voucher program that allows SNAP participants to redeem said vouchers for fresh produce at either Fayer's Market (1400 Haddon Avenue) or the Virtua Mobile Farmers Market when it is open for the season (Pederson, 2018). Food Bucks Rx, which the Campbell Soup Company and the U.S. Department of Agriculture have both endorsed, has allowed community health advocates to have newfound conversations about food access with patients, and its

partner programs hope it will lay the foundation for more coordinated social and medical care in the region.

Figure 2.5 – Food Bucks Rx, the Ticket to Fresh Produce (Food Trust, 2012)

ONLINE GROCERY SERVICES

Like many other product markets, online grocery shopping and delivery was born at a time when most Americans did not have a computer, a time before Amazon became ubiquitous with online shopping (Figure 2.6). The concept behind the model is simple: rather than drive to a physical grocery store and navigate aisles of products, customers can select their desired groceries from an online repository, set up a delivery time, and wait for delivery—all from the comfort of their own home or office. Opting to conduct grocery shopping online comes with many benefits, such as saving time, reducing physical limitations for individuals with disabilities, saving money through real-time cart totals and easier price comparisons, and possibly improving access to healthy food and limiting unhealthy impulse purchases (Zatz et al., 2021). Many of these delivery services even offer extra incentives for customers to sign up, whether in the form of discounts on their order totals or having delivery fees waived for a certain time. Yet, as Semuels (2019) reports, once those

incentives end, so too do customers' subscriptions, resulting in online grocery sales accounting for only 3% of total grocery sales.

The success of online grocery delivery services is thus hampered by obstacles at two crucial points in the supply chain: the end consumer and the distribution process. While cost is a concern for customers who are looking for new ways to get fresh groceries cheaper and quicker, many shoppers still prefer to visit a physical grocery store and hand-pick their items, perusing the aisles not just for their favorite brands but also for new ones they may be spontaneously inspired to try. Semuels (2019) notes that some shoppers find the overall grocery shopping experience to be a welcomed distraction, especially as some stores have started renovating their spaces to include services like wine bars and cafeterias to enhance their appeal. Other reasons some consumers are reluctant to make the change to ordering groceries online include concerns about the quality of perishable goods, the availability of substitutions, the higher prices for the convenience of the service, and the hassle of dealing with incorrect orders, returns, and the delivery itself (Zatz et al., 2021).

From a business standpoint, online grocery delivery presents slim profit margins because of how cost-, time-, and labor-intensive the process is, from the time the shopper begins collecting products in a warehouse to the time it takes a delivery driver to unload heavy totes of groceries at a customer's home after sitting in traffic for longer than the service may have forecasted. In addition to poor logistics, physical grocery retailers have also begun to offer a hybrid grocery service referred to as "click and collect," wherein customers can still order groceries online but must pick them up at a physical location instead of having them delivered to their homes (Semuels, 2019). This hybrid service accounts for approximately half of grocery sales, which, when taken together with the host of logistical issues embedded in the delivery process, offers a compelling explanation for why some services are suspending business in certain regions.
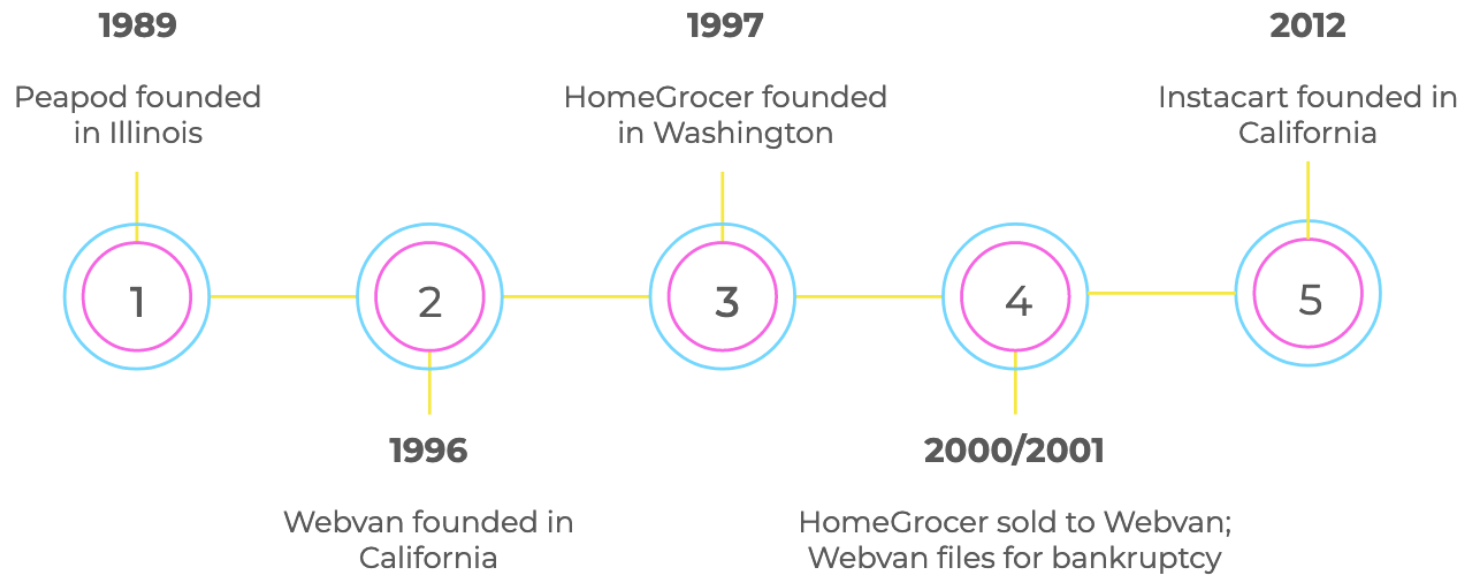
1989

Peapod founded
in Illinois

1997

HomeGrocer founded
in Washington

2012

Instacart founded in
California

1   2   3   4   5

1996

Webvan founded in
California

2000/2001

HomeGrocer sold to Webvan;
Webvan files for bankruptcy

Figure 2.6 – A Brief History of the Major Players in Early Online Grocery Shopping (Data: Saunders, 2018; Graphic: Studio Team)

3. EXISTING CONDITIONS

PROJECT AREA

From the Civil War to the decades following WWII, the city of Camden was an economic and industrial powerhouse that was pivotal in the growth and advancement of the nation. With its prime location along the Delaware River across from Philadelphia, businesses like Radio Corporation of America (RCA) and Campbell's Soup were drawn to Camden's waterfront, bustling ferries to Philadelphia, and the Camden and Amboy Railroad that provided access to New York City. As of the mid-20th century, Camden was home to 124,555 residents (Bureau of the Census, 1950), but the city experienced a sharp decline in industrial production during the second half of the century, which prompted many residents and jobs to relocate. Despite this downturn, Camden has recently seen "investments from residents, community organizations, health care institutions, local universities, government, and the private sector," which "have begun to reinvigorate the city that has struggled with severe poverty and disinvestment for decades" (DVRPC, 2021, p. 3). While predominantly residential neighborhoods in the northern and central sections of Camden such as Cooper Grant and Lanning Square have undergone dramatic revitalization in recent decades, other southern residential neighborhoods like Waterfront South and Bergen Square have not received a similar level of reinvestment.

For the purposes of this project, our team focused on two southern neighborhoods in the city of Camden: Waterfront South and Bergen Square (Figure 3.1). Originally settled in 1851 as Stockton, Waterfront South is a historically industrialized area that is roughly a mile and a half long and a half mile wide (Meenar et al., 2020). It is bounded by a major highway on the east (I-676) and the Delaware River on the west. Most residential homes are in the northeast, while South Jersey Port Corporation, the Camden County Municipal
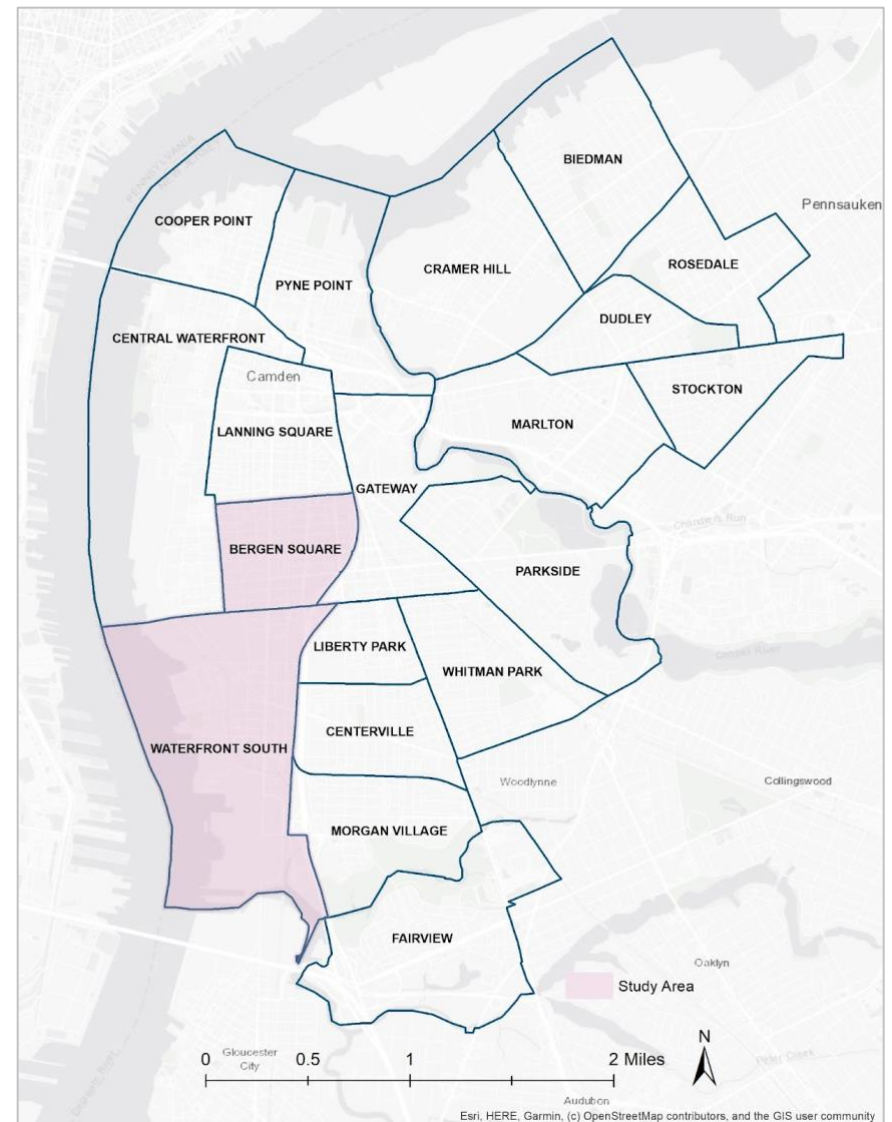

Figure 3.1 – Outline of Project Study Area (Studio Team)

Utilities Authority (CCMUA), Covanta Camden Energy Recovery Center (a waste-to-energy facility), Holtec International, and Eastern Metal Recycling (EMR, formerly Camden Iron and Metal) are prominent industrial operations in the southern portion of the
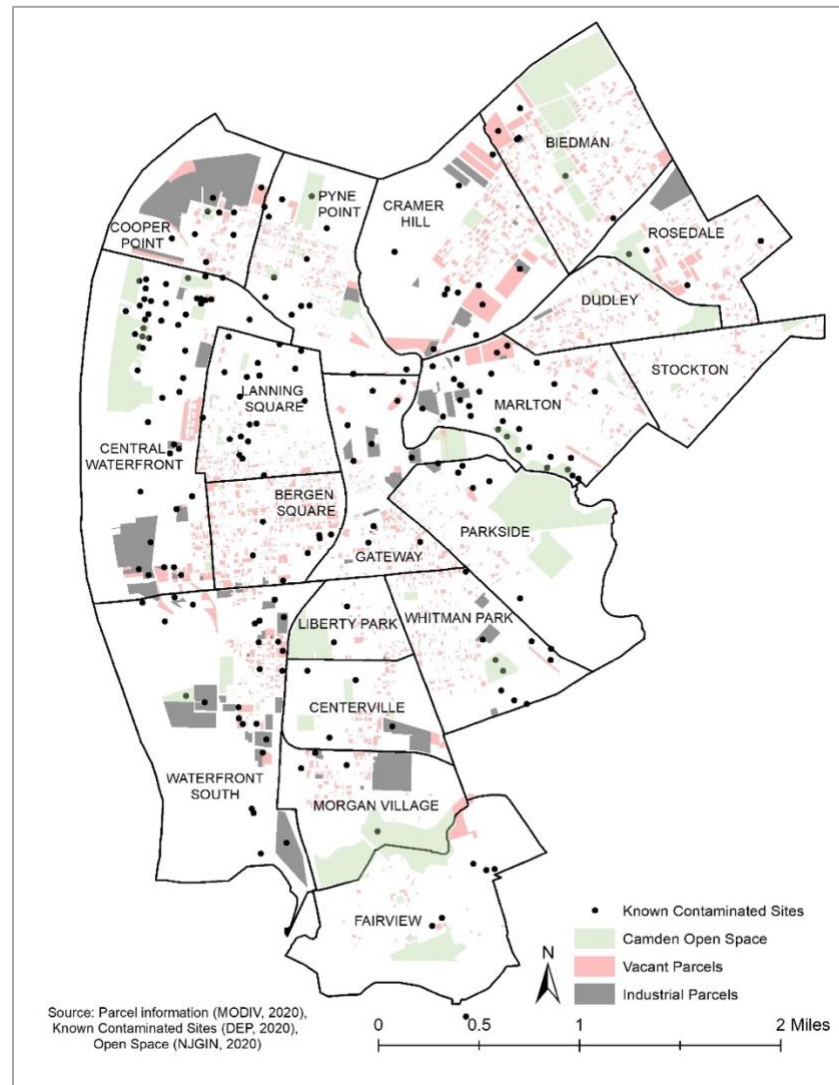

Figure 3.2 – Outline of Project Study Area (Studio Team)

neighborhood. Bergen Square is a residential neighborhood just north of Waterfront South and is a half mile by a half mile. It is bounded by I-676 to the east, the Central Waterfront district to the west, and Lanning Square to the north. It is also home to the Camden Water utility plant. Although Waterfront South has made recent strides toward revitalization, Bergen Square still awaits redevelopment.

The State of New Jersey's Department of Environmental Protection has identified over 20 contaminated sites throughout the project area and one superfund site located at 1542 South Broadway, formerly home to Martin Aaron Inc. The persistent siting of heavily polluting industries has dramatically impacted air quality for residents in the project area, resulting in high numbers of asthma and cancer diagnoses. These industries have also left behind a broad network of impervious surfaces with little vegetation, which, when paired with both neighborhoods' improperly maintained combined sewer systems (CSS), "[make] the Waterfront South neighborhood highly prone to flooding" and sewer back-ups, often to the point where the CSS "discharg[es] stormwater and sewage" to the street level (Meenar, et al., 2020, p. 6). Both neighborhoods also experience high levels of illegal dumping, wherein automobile, household, and commercial refuse crowd sidewalks, roadways, and vacant lots (Figure 3.2).

SOCIO-ECONOMIC LANDSCAPE

Industry defines much of the Waterfront South landscape. EMR is a metal recycling company with a port and processing plant in South Camden that disassembles and shreds heavy metals and salvaged cars 24 hours a day. It has received millions of dollars in federal funding and employs neighborhood residents, but it is a constant source of noxious fumes, noise pollution, propane tank explosions, and life-threatening fires (Trethan, 2019). Waterfront South is also home to one of only four waste-to-energy incinerators in the state, which negatively affects the air quality for surrounding communities and the health of nearby residents. Despite these health risks, Waterfront

South continues to be a target for heavily polluting industries, which prevents it from achieving environmental, social, and economic justice (Kitson et al., 2019). Vacant parcels, derelict buildings, illegal dumping, and crumbling infrastructure are unfortunately key characteristics of the neighborhood, although there is a mixture of large parks and smaller pocket parks scattered throughout.

Both Bergen Square and Waterfront South have a diverse population and a median income that is lower than the average for the city (Figure 3.3). Bergen Square shares many of Waterfront South's negative characteristics, albeit on a much larger scale. Homelessness, drug use, trash accumulation, and inadequate housing are rampant, leading community members and journalists to call it "the most desolate and uncared-for neighborhood in the city" of Camden (DiUlio, 2020, para. 30). The neighborhood remains in dire need for economic development and reinvestment, but its current state does more to drive away investors than it does to attract them.
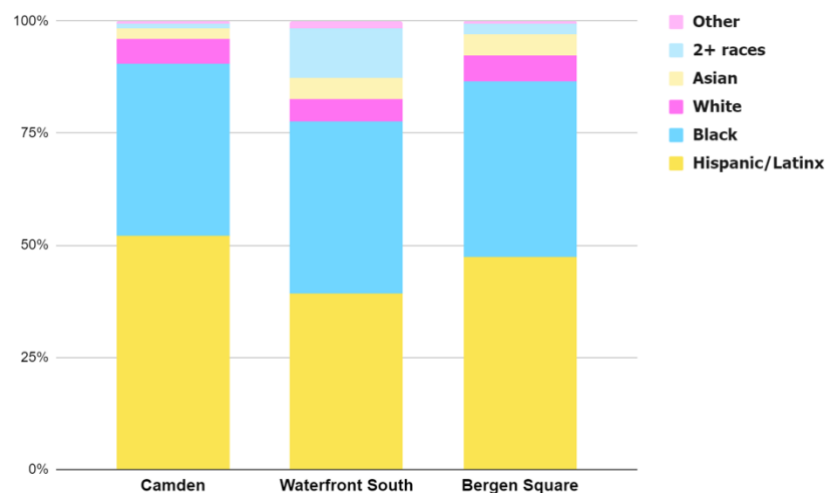

*Figure 3.3 – Outline of Project Study Area (Studio Team)*

FOOD ENVIRONMENT

Despite being the headquarters of the Campbell's Food Company for decades, Camden experiences serious inequities when it comes to healthy food access, compounded by the absence of a local large-scale or name-brand supermarket within the city limits and the lack of healthy food options in its many corner stores. The city's primary grocery store, Price Rite (2881 Mt. Ephraim Ave.), closed its doors mid-2021, and its fate remains uncertain as city officials attempt to entice a new operator (Walsh, 2021). Two prospective grocery retail chains were set to come to Camden in 2008 and 2013 but ultimately backed out because of problematic regional market structuring (C. Tirri, personal communication, March 7, 2022).

Raja et al. (2008) argue "the quality of food environments in places where people live, work, and play carries significant health consequences" (p. 1). We kept this connection at the forefront of our decision-making process for conducting our food environment scan across our project area. While there are numerous corner/convenience stores and bodegas across the area, very few of them offer a variety of healthy and fresh food options, and even staples like bread, milk, and eggs are not consistently available or cheap. Many of these locations are surrounded by poorly maintained infrastructure (e.g., sidewalks, curbs, and roads), vacant lots, and abandoned buildings, and some lack inviting exteriors and interiors. These corner stores are seemingly outnumbered by liquor stores and ethnic food take-out locations. Even fast-food chains, while far from ideal for healthy eating purposes, are equally scarce across the city.

18

PRIOR STUDIES

The *Camden Health Element* (2021) and *Cultivating Camden: The City's Food Economy Strategy* (2015), both prepared by the Delaware Valley Regional Planning Commission (DVRPC), are two of the most comprehensive reports on the city of Camden's food system. The *Camden Health Element* (*CHE*) collected a broad range of data like population, education, race, income, chronic disease, physical activity, transportation methods, housing, and vehicle access, as well as a few city-wide categories like traffic safety, contaminated sites, and park access. The *Cultivating Camden* (*CC*) report, however, focused primarily on demographics closely related to the city's food system, including household income/poverty levels, unemployment rates, vehicle ownership rates, food security data from a questionnaire developed by Our Lady of Lourdes, SNAP enrollment, participating SNAP retail locations, food access outlets, healthy food retailers, and food-related employment rates. For this report, the DVRPC conducted a series of interviews with key stakeholders across the city to "[collect] information about other programs, initiatives, projects, and reports; [create] a mechanism to collect diverse recommendations; identif[y] the food economy's most influential actors; and [detect] gaps in research, support services, infrastructure, programs, and nonprofit activities" (p. 5).
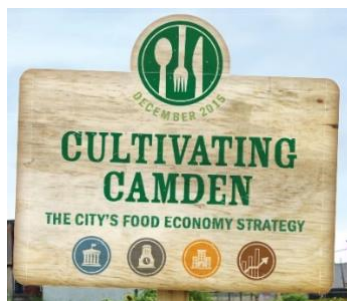
Source: DVRPC, 2015 & 2021

Cultivating Camden also provides valuable, albeit slightly dated, insights regarding barriers to alternative healthy food options and support for regional food. Although farmers and mobile markets are viable options in theory because of their low overhead and ability to provide fresh food options in food-insecure areas, the DVRPC cites low customer demand as the main explanation for why many of these initiatives lack staying power—a stark contrast to our team's findings during our focus groups. As for purchasing regional food, the DVRPC cites cost (e.g., multiple contracts or cumbersome purchasing process), seasonal variety (e.g., limited growing season and high demand), safety and quality (i.e., more robust quality assurance programs result in higher costs for end-users), and minimum purchasing requirements (i.e., the chokehold of group purchasing organizations, or GPOs) as the main barriers. Despite these barriers, Camden residents have consistently expressed a desire for locally- or regionally sourced foods and food production that would generate local jobs.
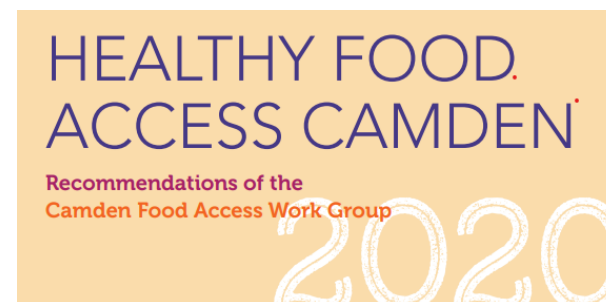
Source: Camden Food Access Work Group, 2020

Although *Healthy Food Access Camden* (2020) is significantly shorter compared to the DVRPC's reports, it represents the kind of cross-collaboration among community organizations our report recommends in its final section. Created by the Camden Food Access Work Group, *Healthy Food Access Camden* (*HFAC*) offers twelve recommendations focused on innovation and differentiation in the pursuit of improving healthy food access across the city. The report is organized into three themes: nutrition incentives, healthy corner

stores, and farmers markets and farms, each of which contains four unique recommendations. Nutrition incentives should benefit the triple bottom line of people, planet, and profit, wherein community residents have access to better quality foods, those foods come from responsible, local sources, and the profits primarily remain in the community. Although the Camden Healthy Corner Store Network has positively impacted over 50 stores across the city, many locations remain unfit for healthy food access.

The next section emphasizes the importance of offering guidance to business owners to transform their business models from profit-centric grab-and-go's to valuable social service hubs for their surrounding communities. Finally, the final section highlights Camden's rich history of farmers markets throughout the first quarter of the century, but current markets need more dynamic connections with community members and anchor institutions to ensure local food becomes available at as many outlets as possible.

SELECTED PREVIOUSLY PUBLISHED RECOMMENDATIONS FOR ADDRESSING FOOD INSECURITY

1. "Increase regional food purchasing by creating a Regional Purchasing Organization (RPO) and working with international food vendors and management companies" (*CC*, p. 35).
2. "Encourage further collaboration on food-system related research between nonprofits, hospitals, universities, and schools to expand the evidence base for food-related programming" (*CC*, p. 38).
3. "Launch a Fresh Carts Initiative that partners with local institutions, such as hospitals, to increase access to healthy foods and support local food entrepreneurs" (*CC*, p. 40).
4. "Better utilize 2-1-1 to coordinate emergency food programs to include referrals and schedule appointments" (*CC*, p. 42).
5. "Create a prioritized land inventory to identify existing and potential community gardens and urban farms" (*CC*, p. 55).
6. "Create a community food resources guide to connect Camden residents to existing food resources" (*CC*, p. 65).
7. "Expand the Virtual Supermarket program" (*CC*, p. 72).
8. "Support the growth of alternative food access venues like the Virtua Mobile Farmers Market and Center for Family Services (CFS) ShopRite delivery program" (*CHE*, p. 19).
9. "Improve walking, biking, and public transit to healthy food outlets by conducting 'safe routes to food' audits" (*CHE*, p. 22).
10. "Increase access to and knowledge of nutrition incentive programs" (*HFAC*, p. 4).
11. "Create sustainable economic development support systems for corner store owners" (*HFAC*, p. 6).
12. "Advocate for better policies to support small urban farms and farmers markets" (*HFAC*, p. 9).

4. PROCESS

Qualitative research aims to "contribute to a better understanding of social realities and to draw attention to processes, meaning patterns and structural features" related to human beings' lived experiences (Flick et al., 2004, p. 3). This type of research thus demands a mixed methods approach to uncover patterns of behavior and environmental influences and ultimately generate a set of holistic, triangulable results. Our research team, aided by the input of our community partners, developed a set of four methods to assess issues of food access and insecurity in our project area: a food environment scan, a community survey, focus groups, and stakeholder interviews.[1] The food environment scan assessed the current landscape of food retailers across the Waterfront South and Bergen Square neighborhoods, while each of our subsequent methods adopted an increasingly future-focused approach to understand not just how residents and stakeholders perceive the current food environment but also what improvements they hope to see in future proposals.

FOOD ENVIRONMENT SCAN

Our team utilized NJ MAP and Google Maps to identify the locations of corner stores currently in operation within the project area, ultimately collecting a total of fourteen potential stores. Our team then created a spreadsheet of key features to note while in the field: general infrastructure surrounding the store, exterior and interior appearance, acceptance of food assistance programs (e.g., EBT, SNAP, and WIC), price of food staples (e.g., milk, bread, and eggs), and the overall availability of fresh food. Splitting into pairs or groups of three, our team conducted three separate food environment scans between February 14-17, 2022.

COMMUNITY SURVEY

Our team initially developed 20 questions, which we then requested our community partners to vet prior to the distribution of the online survey. After receiving their feedback, we reduced the number of demographic-based questions and focused instead on

ordering the questions according to theme. These themes included (1) demographics and shopping considerations, (2) grocery shopping experiences, (3) social/cultural issues, and (4) online delivery. We relied on our community partners to initially distribute the online survey, along with a small number of physical copies of it, subsequently using the snowball method of sampling to expand distribution. Our team launched the survey on February 14, 2022, and as of its conclusion on April 4, 2022, we received 91 responses.

FOCUS GROUPS

Our community partners Social Responsibility through Me and Workforce Economic Revitalization for Communities were instrumental in helping our team invite participants and secure locations for our two focus groups. The first occurred on March 7, 2022, at Heart of Camden in Waterfront South, and the second on March 9, 2022, at Shalom Baptist Church in Bergen Square. In total, these two focus groups engaged fifteen participants that included members from local political offices, community-based organizations, faith-based institutions, and academic institutions, as well as members

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[1] These four methods fall under the purview of the approval our team received from Rowan University's Institutional Review Board (IRB), whose purpose is to review all proposals involving human subject research to ensure the privacy, welfare, and rights of those subjects.

of the general population. Each session lasted approximately an hour and fifteen minutes and was organized according to the following format: a brief welcome and introduction to the project, three small group stations, and a final large group discussion. The small group stations focused on the themes of (1) personal food history and eating/cooking habits, (2) geographic contexts of current food shopping and desired grocery store locations, and (3) past experiences with online grocery shopping and perceptions of a proposed online grocery delivery service model. Participants spent roughly ten minutes at each station answering various questions and thirty minutes in the large group discussion, where they responded to open-ended questions related to food access/insecurity and what should be done to address the issue.

STAKEHOLDER INTERVIEWS

To develop a list of potential interviewees, we sought input from our community partners to ensure our list included stakeholders who represented a combination of new and old voices in the conversation about Camden's issues with food insecurity. We contacted a total of sixteen community stakeholders, eight of whom agreed to participate in one-on-one interviews with a member of our project team to discuss their organization's role in improving the city's food system. Our interviewees held affiliations with four different non-profit organizations (three of which were based in Camden), two academic institutions, a regional planning commission, and city council. We conducted these semi-structured interviews via Zoom between March 7-17, 2022, and we asked a series of eight questions over the course of 30-45 minutes, depending on the interviewees' availability. We utilized Zoom's recording and transcription features to capture the content for subsequent analysis.

5. FINDINGS

🔍 FOOD ENVIRONMENT SCAN

Of the fourteen food retail locations we identified in the project area, four locations were permanently closed and two were inaccessible to our team. There were various sites of illegal dumping/littering near almost every location, and more than half of the stores' surrounding infrastructure was in poor condition (e.g., deteriorating sidewalks and roadways). Each of the storefronts possessed a vastly different physical appearance, including façade colors and designs, signage, internal visibility, wheelchair accessibility, and overall aesthetic appeal (Figure 5.1). Of the eight locations we surveyed, seven had clear exterior advertisements indicating their acceptance of nutrition assistance programs such as SNAP/EBT and WIC.

Figure 5.1 – Collage of Food Retail Locations (Studio Team)

Prior to conducting our scans, our team agreed upon three staple foods to look for at each location to establish a cohesive baseline for analysis: bread, milk, and eggs. Seven of our eight stores offered at least two of these three staples, while the remaining store did not offer any, indicating that customers would need to visit multiple food retail locations to purchase these essential goods. The prices for each of our three staples ranged from $1.69-$2.79, $4.00-$4.99, and $2.75-$3.00 respectively, and their averages were more expensive than the numbers reported by the U.S. Bureau of Labor Statistics (2022) for both the national city average and the Northeast regional average (Table 5.1). Regarding fresh produce, five of the eight locations offered fresh vegetables, but their supplies were mostly limited to potatoes and onions, with one store also offering lettuce and peppers. Fresh fruit and culturally appropriate options were even more limited, with only one store offering a small number of mangos and another offering Hispanic-influenced groceries.

Food Staple	Observed Avg.	U.S. City Avg.	Northeast Regional Avg.
Bread	$2.31	$1.61	$1.99
Milk	$4.52	$3.92	$4.34
Eggs	$2.75	$2.05	$2.22

Table 5.1 – A Comparison of Staple Food Prices (Studio Team)

COMMUNITY SURVEY

DEMOGRAPHICS & SHOPPING CONSIDERATIONS

More than half of the survey respondents (60%) were between the ages of 35 and 54, with approximately 27% being older than 54 and 13% being younger than 35. When asked how many people for whom they purchase groceries, the most common response was 3-5, which indicates many of the respondents are adults providing for children within their households. The amount of money spent each week on groceries was almost evenly distributed across all survey answers, but the greatest percentage of respondents (32%) selected $50-$74 per person. Most respondents pay for groceries using a debit or credit card or with cash, and approximately 24% said they use nutrition assistance programs such as SNAP/EBT or WIC. While most respondents selected there are no dietary restrictions in their households, those that did selected dairy free, gluten free, and vegetarian/vegan. Respondents who selected "other" provided responses such as no pork, pescatarian, and low sodium. When asked how many times a week someone in their household prepares food,
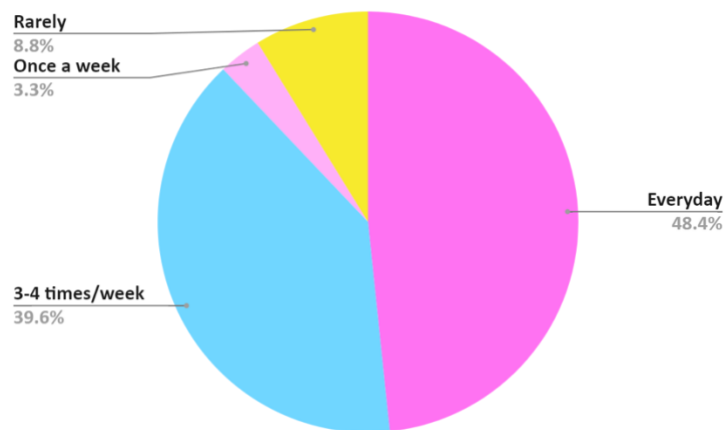

Figure 5.2 – How Many Times Respondents Prepare Food at Home (Studio Team)

nearly 50% of respondents selected "every day," while 40% selected 3-4 times a week (Figure 5.2).

GROCERY SHOPPING EXPERIENCES

An overwhelming majority of respondents (89%) reported they experience difficulties when purchasing groceries, including issues like price, transportation, poor selection of products, and lack of retail stores within the area (Figure 5.3). Most respondents indicated they shop at supermarkets (e.g., Price Rite, ACME, Shoprite), big box stores (e.g., Sam's Club, Walmart), and discount grocery stores (e.g., Aldi, Save-a-Lot) while very few respondents shop at local corner stores. Approximately 81% of respondents reported the closest food retailer is one or more miles away from their homes, with many of them using personal vehicles to conduct their shopping.
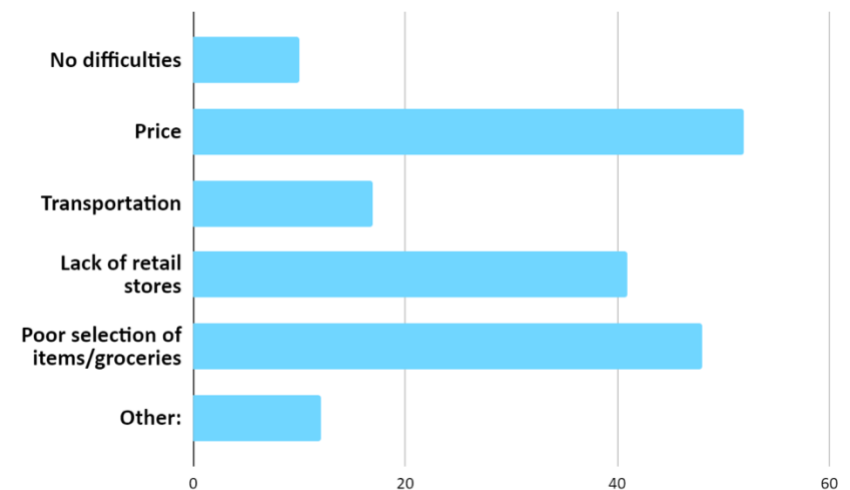

Figure 5.3 – Respondents' Common Difficulties with Shopping (Studio Team)

SOCIAL & CULTURAL ISSUES

Approximately 85% of respondents worry to some degree about having access to fresh, healthy, and affordable food (Figure 5.4). When asked how to improve food access within their neighborhood, the most common responses were to add more food retail locations, expand the variety and quality of current offerings, and have grocery trucks travel through the neighborhoods (like Virtua's Mobile Farmers Market). Respondents were also asked whether they would participate in local food production programs such as community or private gardens, and the majority (86%) said they would be interested but they may not have the time, space, or knowledge to do so.
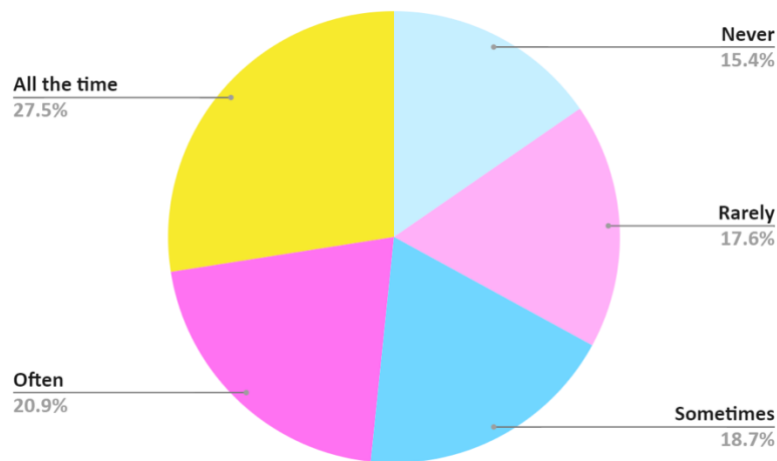

Figure 5.4 – How Often Respondents Worry about Food Access (Studio Team)

ONLINE DELIVERY

Nearly all respondents (91%) said they have reliable access to the internet, a smartphone, or other internet-enabled devices. Five respondents selected they "sometimes" have access to these resources, while three respondents selected that they do not. Although most respondents (45%) said they would be comfortable purchasing items online for home delivery, 31% said they would not, and 24% were neutral or had no opinion (Figure 5.5). Respondents were also asked which food groups they would feel comfortable ordering online, and the most common responses were snacks and grains/carbs, followed by vegetables and fruits, indicating a potential preference for online ordering only for more shelf-stable items.
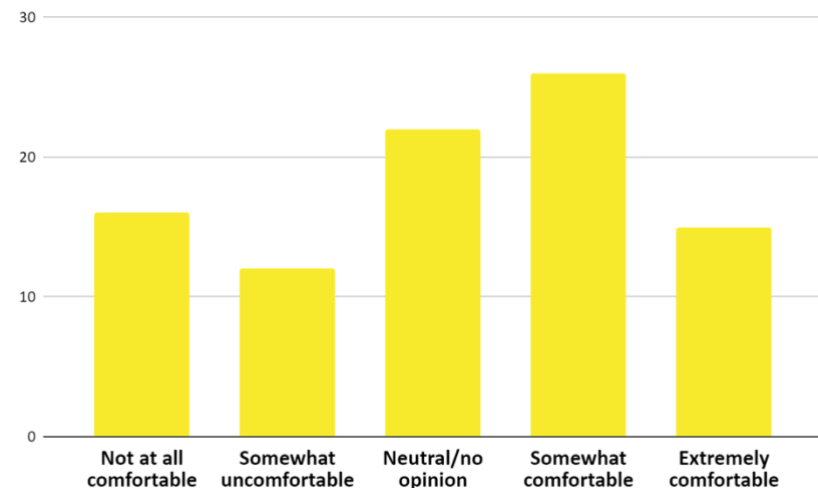

Figure 5.5 – Respondents' Level of Comfort with Ordering Groceries Online (Studio Team)

FOCUS GROUPS

STATION 1: PERSONAL FOOD HISTORY

The first station asked participants to provide brief "grocery lists" of the types of foods they ate growing up compared to the ones they currently like to eat. Based on this discussion, participants identified a wide variety of food groups, ethnic foods, and prepared or shelf-stable items, altogether creating a series of dynamic diets (Figure 5.6). They were then asked to estimate the number of times they cook per week and to describe any limitations they encounter when preparing meals at home. Common limitations included lack of time and energy, as well as the inconvenience of having to travel to supermarkets outside their neighborhoods to obtain necessary ingredients.
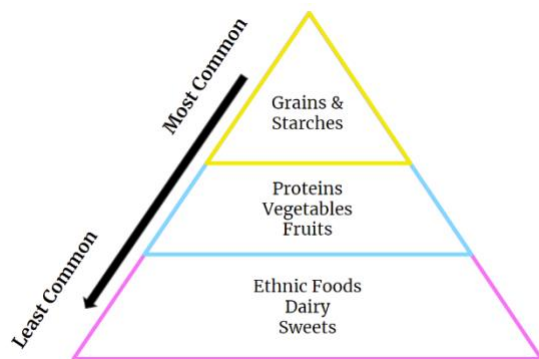

Figure 5.6 – Most Common Foods in Participants' Diets (Studio Team)

Source: Studio Team

STATION 2: GEOGRAPHIC CONTEXTS

Station two sought to understand where people live in relation to where they purchase most of their groceries. Participants added planning dots to a map of Camden to indicate where they live, where they purchase groceries, and where they would like to see a new grocery store. Each participant used the same color dot with different symbols for each location (i.e., triangle for home location, circle for current shopping location, and square for desirable grocery store location). Most participants indicated they travel an average of 10 miles outside of the Camden city limits to obtain the bulk of their groceries, frequently citing Brooklawn, Cherry Hill, Deptford, Moorestown, and Medford as their normal shopping locations. Reasons for traveling further included better selections and prices and the desire to complete their shopping at as few locations as possible. Participants also discussed whether the COVID-19 pandemic impacted their grocery shopping habits (see Figure 5.7 at the end of this section).

Source: Studio Team

STATION 3: ONLINE GROCERY SHOPPING & DELIVERY

Our final station was designed to gauge participants' experiences with and perceptions of current and proposed online grocery delivery services. Most of our participants indicated they had never ordered groceries online because they prefer to see and touch their groceries, they do not trust whoever would be picking their groceries for them, and the services do not adequately accommodate single individuals. The few participants who had used such services before appreciated their convenience and variety of product offerings. The discussion then transitioned to a hypothetical new online grocery delivery service that would serve their neighborhoods. Participants first generated a combination of positive, neutral, and negative responses to the general idea (Figure 5.8), where sentiments related to convenience and ease of use were the most frequent. An equal number of respondents, however, expressed feelings of uncertainty about the model based on their bad experiences with similar services.

Figure 5.8 – Participants' Responses to a New Service (Studio Team)

Our participants then generated lists of ideal features they would like to see in the service, challenges they anticipate with the service being successful, and concerns about having groceries delivered to their homes (Table 5.2). Participants were adamant about making sure the service was as local as possible, in terms of both product sources (e.g., local farmers or distributors) and employment of residents. Almost all participants indicated a desire for transparent and thorough product information, ranging from nutritional facts and expiration dates to quantity remaining and how the products were grown (e.g., organic, non-GMO, fair trade). Relatedly, they expressed interest in fair and competitive pricing to allow for easy comparisons between name-brands and off-brands, taking advantage of weekly sales, and utilizing coupons and food assistance programs. Finally, they listed multiple features related to user-friendliness, including appropriate readability, flexible delivery times, and ease of payment.

Source: Studio Team

Participants' perceived challenges with the use and success of the model were primarily logistical in nature: the timing of deliveries, payment options and spikes in delivery fees, the availability and variety of brands, and the overall user experience. The most common challenge was quality because so many participants prefer to pick their own produce, meats, and other perishable items. These participants worried about what recourse they would have if they received products that did not meet or exceed their expectations and the inconvenience of having to repurchase those same items. The most unique challenge one of our participants offered was the negative perceptions of Camden and how those perceptions would influence the delivery service's willingness to do business in/deliver to certain areas of the city. This concern echoes a key theme we discovered in our literature review, which is that Camden continues

to suffer from territorial stigma that has a profound effect on which businesses agree to operate in the city.

We concluded this station with a discussion about participants' concerns about possibly having (perishable) groceries delivered to their homes. Every participant referred to what they called "porch pirates," or individuals who canvas the neighborhood for packages left unattended on front steps or porches for extended periods of time and steal them. Freshness and quality were once again a frequent concern among participants, especially when they considered the type of packaging the service would need to use to sustain the proper temperature for their groceries until the recipients arrived home to store them. In this same vein, timing of delivery became a more pressing concern, going beyond some participants' initial hesitations about simply wanting to receive the delivery by hand. Concerns about receiving the wrong products and employee food literacy were directly connected, with some participants worrying about whether the employees responsible for picking items would understand how to identify less-common groceries. Two participants in particular expressed concern about receiving inconsistent customer service compared to previous orders they may have placed and to other customers placing similar orders, which ultimately comes down to the recurring issue of product quality.

LARGE GROUP DISCUSSION: ADDRESSING COMMUNITY FOOD INSECURITY

Our opening question polled participants about whether they believed their neighborhood experienced food insecurity. 91% of participants responded "yes." These respondents highlighted issues such as limited access to fresh produce/healthy food at existing grocery retailers within their neighborhoods, the absence of a large-scale grocery store within the city, transportation, and a variety of issues related to local corner stores, ranging from safety (e.g., loitering, cleanliness) and limited hours of operation to higher prices and limited variety. When asked what should be done to address these issues, participants were equally adamant about the opening of a name-brand supermarket or a series of smaller, specialty shops, which would enhance walkability. They also emphasized the importance of word-of-mouth marketing throughout their neighborhood, the creation of advertising initiatives with local transportation hubs (e.g., the Walter Rand Transportation Center and Uber/Lyft), as well as establishing residents' health and well-being as a city-wide priority. Finally, many participants said they wanted to see more subsidies, food assistance programs, and state tax incentives. The group discussion ended with a conversation about who should be involved, and the answer was simple for many participants:

IDEAL FEATURES	CHALLENGES WITH USE	CONCERNS ABOUT DELIVERY
Local products and employment	Timing	Theft
Product information	Payment and fees	Freshness/quality
User-friendliness	Brand availability and variety	Timing
Fair and competitive pricing	Perceptions of Camden	Receiving the wrong product
High-quality and consistent customer service	Quality of groceries	Employee food literacy
Variety	User experience	Inconsistent customer service

Table 5.2 – Participants' Ideal Features for and Perceived Challenges/Concerns about a New Online Grocery Delivery Service (Studio Team)

everybody, including faith-based organizations, local farmers, local industries/businesses, schools, nonprofits, planning/zoning boards, and private investors.

Source: Studio Team

STAKEHOLDER INTERVIEWS

Semi-structured interviews were conducted with individuals who work in the regional food system or maintain a community leadership role, many of whom represented organizations with varying levels of involvement with issues of food insecurity in our project area (Figure 5.9). Those who work directly in/with these neighborhoods focus their efforts on conducting food education and operating food pantries. Others work to reinvest the money residents spend using their own incomes or federal food assistance dollars to bring healthier food options into more neighborhoods in Camden, as well as to increase residents' buying power and assist corner stores with becoming healthier food retailers. At the broadest level, one organization represents the region, which means their efforts focus mostly on researching, understanding, and proposing recommendations for the Delaware Valley as a whole.

FOOD-RELATED DIFFICULTIES

Interviewees tended to characterize Camden's current food environment as something of a paradox. While the city is home to numerous nonprofits all fighting for food justice and is the site of the Healthy Corner Store initiative, residents struggle with being able to access and afford healthy foods—struggles many of our interviewees attributed to the city's lack of a large-scale supermarket and a saturation of nutrition education without proper follow-through. As a result, many residents must travel outside the city limits to conduct most of their grocery shopping at stores like ShopRite, Walmart, and

> "We do have supermarkets. They are not name-brand and they are not maybe the desired supermarkets, but there are supermarkets in a city of over 77,000 people."
> – *Community Health Advocate*

Aldi. What makes Camden a "food swamp" for some interviewees, though, is not just a lack of food options but also a lack of transportation options that prohibit residents without cars from having equal access to better stores and healthier options. Our interviewees also cited the prices of travel and of groceries as frequent difficulties, although delivery fees for online grocery orders may be cheaper than traveling to multiple grocery stores. The lack of variety and options within the city, paired with insufficient transportation, also poses serious difficulties for residents, allowing residents of certain well-connected neighborhoods to disproportionately gain access to healthier options compared to their counterparts in less-connected neighborhoods.

Figure 5.9 – Interviewees' Affiliated Organizations (Studio Team)

PREVIOUS EFFORTS IN THIS REALM

Many interviewees highlighted the great work that the Campbell Soup Company has done and praised its role in developing the Healthy Corner Store Initiative. Some interviewees, however, qualified their endorsements of the initiative, stating that simply offering healthier options does not mean residents will choose to buy them. Behavior change has been and continues to be an intractable part of food equity work. Neighborhoods across the city have also

"Campbell's did a really great thing [by] using this collective impact model and bringing everybody together."
– Community Health Manager

committed themselves to educating residents on how to grow their own fresh produce to inspire them to join forces with existing community gardens or to start their own. Some interviewees noted the benefits of the recently created Virtua Mobile Farmers Market (Figure 5.10), although they'd like to see it expand to serve a larger portion of the city. Interviewees also underscored the importance of fostering collaboration among residents and local community organizations and influencing the revision of planning documents to address the Camden SMART (Stormwater Management and

Figure 5.10 – Healthy Food on the Go (Virtua Health, 2022)

Resource Training) Initiative and include more green stormwater infrastructure recommendations.

IS A LARGE-SCALE GROCERY STORE THE ANSWER?

For this question, respondents were almost evenly split. Reasons for not securing a large-scale grocer in the past include (1) relatively low numbers of residents, (2) weak support from the administration, and (3) subtly discriminatory regional market mapping. In previous years, potential grocery stores have conducted preliminary analyses but ultimately backed out because the corporations consider Camden to be "East Philadelphia" and thus believe whatever stores operate in Philadelphia proper are adequate for the population of neighboring regions across the Delaware River. Even if a major grocery store were to open within the city, the issue of accessibility remains for individuals who do not reside in the selected neighborhood. Other interviewees stated a grocery store is not necessarily the appropriate solution and would rather see efforts to support and improve existing stores within the community. These stores offer the necessary foods for a nutritionally adequate diet but need support to help lower product prices so they can compete with large-scale grocery stores.

"I think that the issue isn't necessarily a grocery store coming to Camden. I think it's supporting what's there."
– Program Manager

LOOKING TO THE FUTURE

Several interviewees cited enhancing collaboration across agencies like the Camden Collaborative Initiative and utilizing existing professional networks to generate collaborative solutions for funding food equity initiatives. Encouraging collaboration would minimize

competition among Camden's charitable organizations and allow those organizations to better serve their communities.

"A collaboration...indicates that there are multiple perspectives, so how do you get multiple perspectives into alignment?"

– *Youth Empowerment Organization Founder*

One interviewee suggested performing a collective audit of previous actions to understand what worked and what did not to inform better planning recommendations in the future. Another interviewee highlighted the prospect of attracting investors to expand the Virtua Mobile Farmers Market so it may serve neighborhoods throughout the city rather than only those closest to the hospital or Whitman Park. Finally, a representative from the Camden Community Partnership expressed excitement about seeing how an agricultural economy in an urban environment like Camden could survive.

A NEED FOR POLICY CHANGES

Our interviewees offered a range of perspectives on ongoing initiatives and proposed policy recommendations. For example, one interviewee mentioned The Food Trust is collaborating with the 33 corner store owners who formed an association during the pandemic to collectively purchase goods and services so their stores could

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"What can we do to support the community as a whole or support the corner stores? The corner stores are needed, regardless of whether they're providing the best [food]."

– *School District Nutrition Director*

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compete with large-scale grocery stores. Another interviewee criticized short-term programs and policy changes like imposing soda

taxes or mislabeling "luxury" items as ineffective in generating changes in residents' eating and purchasing behaviors. A community health advocate drew inspiration from the historic "No Child Left Behind" act to conceptualize a "No Community Member Left Behind" initiative that would allow for greater sensitivity toward the diverse populations in Camden and for ensuring members of those populations have a seat at the table whenever planning negotiations occur. This advocate explained that even if a policy cannot reach everybody, residents must at least believe policymakers made a concerted effort and made resources available to the best of their abilities. Finally, two interviewees highlighted farmers markets as valuable opportunities to expand food access in the community. However, they cited current limitations (e.g., size requirements) that prevent community gardens from becoming eligible produce vendors, as well as ones that prohibit small farm operations from being able to accept SNAP and WIC.

IS AN ONLINE GROCERY DELIVERY BUSINESS MODEL SUITABLE FOR CAMDEN?

Most of our interviewees recognized the opportunities a new online grocery delivery service would offer residents of our project area. One interviewee characterized it as an "economic engine" for the city because of how greatly it would expand food access and purchasing power. Another interviewee supported the hypothetical service because it would eliminate geographic barriers in the city that make products and services inaccessible for some residents and not others. To this end, such a service would provide access to fresh and healthy

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"This possibility of this food delivery program...puts a new energy into the air [as] another possible way that people could really have access to better food."

– *Associate Director*

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foods to residents who do not have access to public transportation or a private vehicle. This same interviewee recommended the use of smaller, specialty mobile grocers to help fill gaps in the online service's area of operation if/as needed.

Despite these anticipated benefits, interviewees' two main concerns about the model were the technology literacy of Camden's senior population and thus their willingness to adopt and use an online grocery delivery service. Some interviewees noted the possibility of similar barriers for non-English speakers. In addition to pricing and advertising concerns, many residents prefer to shop in person as a means of community engagement or socialization.

Has the pandemic changed the way you shop for groceries?

YES
- Less items available
- More delivery & online
- Quality of items is worse

SOMEWHAT
- Order online a bit more now
- Not shopping at peak hours (early hours preferred)
- Now buy meat in bulk

NO
- No change
- Didn't think they'd deliver in Camden
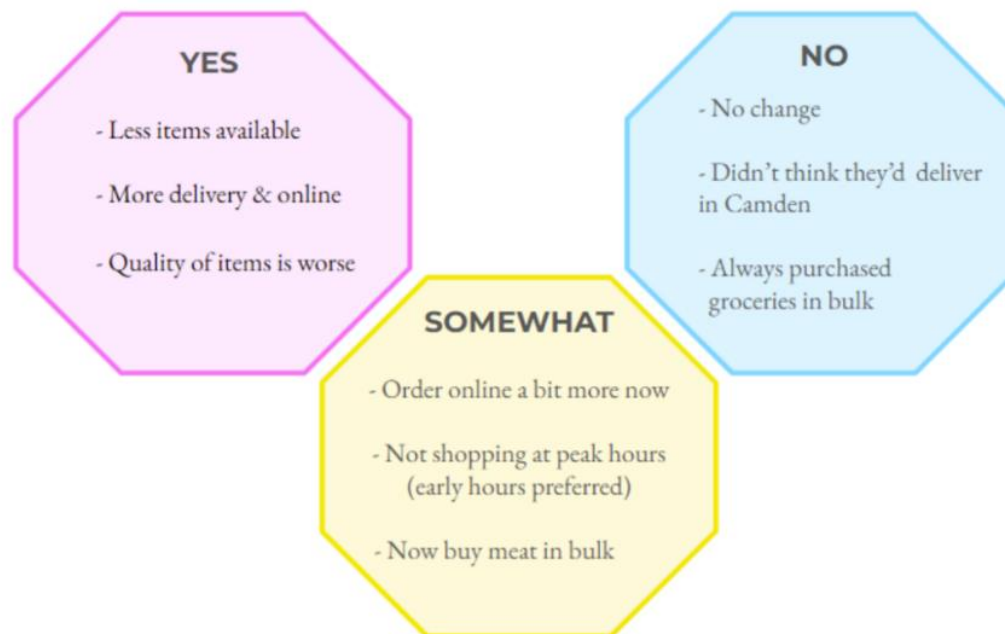- Always purchased groceries in bulk

Figure 5.7 – The Impacts of COVID-19 on Participants' Grocery Shopping (Studio Team)

6. RECOMMENDATIONS

These recommendations reflect a synthesis of our findings from our methods detailed in the previous section, especially our focus groups and stakeholder interviews, as these methods provided greater depth and thick description on the topic. We also drew from previously published reports on the local and regional food systems, as well as research on the debate concerning supermarkets as a solution to food insecurity.

COLLABORATION

Coordinate with existing initiatives to normalize purchase agreements across the city that support local agriculture and employment.

Our Roots to Prevention representative cited there has been success in creating a purchase agreement for one of Camden's larger medical institutions to purchase locally grown food. There are many more corporate and foundational institutions that may follow this model. Many participants indicated a keen interest in bringing more local produce into the city, as well as in boosting employment rates in their neighborhoods. In the past, initiatives focused on improving Camden promised to generate jobs for residents but often failed to keep those promises. This model strengthens both possibilities.

Partner with community organizations to minimize competition and maximize service and efficiency across the food system.

Participants in our second focus group cited detrimental overlap in the efforts of the city's numerous nonprofits, in that many of these nonprofits prefer to apply for grants or other funding on their own rather than to collaborate with other organizations striving for the same goals. If more organizations partnered their efforts, they could promote consistency in their missions, messaging, and approaches.

Identify partnerships that help promote food-based initiatives.

Despite whatever food-based initiatives have occurred in the past or are currently happening in the city, participants indicated a widespread lack of knowledge of said initiatives among residents. It is crucial for local organizations to assist with marketing these initiatives to ensure residents can take advantage of them and to build the foundation for long-term success.

RELATIONSHIP-BUILDING & PROJECT LONGEVITY

Establish clear channels of communication that foster trust and transparency.

Participants in our first focus group expressed a desire to be continuously involved and informed about the proposed initiatives in their neighborhoods. Such continued involvement has rarely occurred in the past, leading many residents to feel like "guinea pigs" instead of passionate human beings fighting for the health and success of their communities. Creating opportunities for the long-term inclusion and engagement of community residents would empower them on a human level and foster greater trust for new initiatives.

Increase the appointment of community members to policymaking positions.

Simply including community members in the early stages of the planning process does not necessarily mean policymakers will take their ideas into consideration. Thus, it is important to appoint residents to policymaking positions or committees so they can ensure their own colleagues' voices are heard and make an impact.

Train and compensate community members to continue food systems support work across the city and avoid the damaging effects of stopping and starting initiatives.

Oftentimes, initiatives are tied to finite resources organizations obtain through grants or other subsidies, which means those initiatives tend to halt or disappear completely as soon as the time, money, and manpower run out. By training laypeople to continue the important work of these initiatives after their initial stages, community members can take active roles in providing their neighborhoods with the benefits they need to achieve food justice well into the future.

FUTURE PLANNING

Adopt an "Equity in All Policies" approach that grants all neighborhoods in Camden equal access to potential benefits.

Camden has experienced recent bouts of revitalization but only in designated areas of the city, which means that neighborhoods further south do not have the same opportunities to benefit from that revitalization as their northern counterparts do. Planners and policymakers alike must thus adopt an "Equity in All Policies" approach that "will serve and benefit all residents of a community in ways that reduce or eliminate inequity" (American Planning Association, 2019, p. 6).

Ensure neighborhood plans include dynamic food systems elements.

During our initial literature review, our team discovered that many of the neighborhoods in Camden, especially Waterfront South and Bergen Square, have adopted neighborhood plans that either do not include food systems elements at all or do not include them in a meaningful or detailed way. Incorporating these elements into future revisions conveys to residents that those in power recognize the importance of food systems planning in building a sustainable future for their communities.

Identify areas for future grocery retailers.

Our focus group participants and many of our interviewees were adamant about attracting new grocery retailers to the project area. While some agreed a large-scale grocery store or supermarket was the best option, others expressed more interest in a series of smaller, specialty shops that could help revitalize the Broadway corridor and restore the "downtown" feel from Camden's heyday. Based on current research on the efficacy of interventions in other cities, planners could use future revisions of neighborhood plans to site potential locations for such stores and provide rationales or challenges for each so neighborhood policymakers could make informed decisions.

POTENTIAL ONLINE GROCERY DELIVERY MODELS

⊕ *Implement technical considerations for ease of use that enable all populations to access and use the system.*

Many of our interviewees emphasized the importance of designing solutions to food access that properly address and include all members of the community, regardless of age, ability, education, or race. They were particularly concerned about how elderly residents would be able to use/navigate a primarily digital ordering service unless the designer of that service implemented technical considerations like readability (e.g., font size, colors), ease of use (e.g., straightforward ordering mechanics), and support (e.g., a live phone number for orders and technical support).

📱 *Consider a hybrid "click-and-collect" model that allows residents to place orders online but pick up in-person.*

Based on survey and focus group responses, an online-only model might not best serve the entire city because most residents are not comfortable with having perishable groceries delivered to their homes—whether because of time constraints or the fear of "porch pirates" who scour the area for packages left unattended. The gray literature we consulted argues that a "click-and-collect" model is the most logical model to ensure the long-term success of an online grocery ordering/delivery service because it offers customers a valuable compromise that combines the convenience of online shopping with the quality-control of shopping in-person.

🥕🍎 *Use partner excess capacity for streamlining delivery efficiency and sourcing goods*

To keep consumer costs and delivery fees at a minimum, any online grocery delivery model should employ best practices when it comes to placing unit orders and sourcing products. Minimizing costs related to the movement of goods is also critical. Added value may come from partnering with other food systems entities in the region and "piggybacking" on the excess capacity of their operations, resulting in long-term efficiencies like consolidating freight, packaging, and carbon footprints.
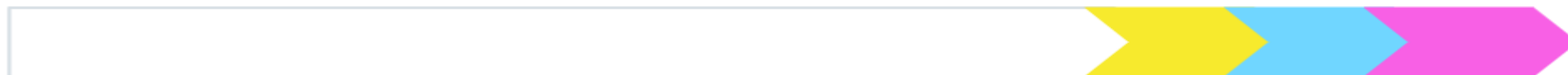
7. CONCLUSION

This semester-long study provided deeper knowledge on the systemic causes of food insecurity in two neighborhoods in Camden, NJ: Waterfront South and Bergen Square. Through our team's mixed methods approach, we brought together community voices old and new that allowed us to understand why this topic has been intractable in the past. A stratified approach across all neighborhoods is required to keep the community, government, nonprofits, and the private sector engaged and committed to positive courses of action. There have been several previous successful efforts and should be reconsidered, along with new ideas that offer the thoughtful and regenerative involvement of community members. Transparency and communication to residents is paramount throughout.

Most resident and stakeholder participants agreed that food insecurity/inequity were persistent issues across the city and especially in our project area. They attributed these issues to a lack of options for food retailers within the city limits, a lack of reliable public transportation options, and a lack of healthy options at their local corner stores. While many of our participants praised Campbell Soup's Healthy Corner Store Initiative, it ultimately lacked sustained commitment and engagement from investors and community members alike. We believe that any combination of our recommendations under the "Collaboration" and "Relationship-Building" sections would provide valuable foundations for ensuring the longevity of future community-based food initiatives like this one.

There was a strong consensus among participants about who should be involved in helping Camden achieve widespread and sustained food security, equity, and justice: everyone. However simplistic the answer may be, it is incredibly accurate because, in a city with hundreds of nonprofits all competing for the same funding, initiatives will only be successful if they encourage collaboration among faith-based organizations, local farmers, local

industries/businesses, schools, nonprofits, planning/zoning boards, and private investors. Participants also offered a dynamic range of solutions, beginning with repeated calls to attract more grocery retailers to the city (whether large or small) that offer healthy foods at affordable prices. They emphasized the importance of city-wide marketing campaigns to help spread the word about local initiatives like the Virtua Mobile Farmers Market or other farmers markets/community gardens in surrounding areas that residents may be unaware of. On a city level, participants advocated for a greater focus on residents' health and well-being, as well as concerted efforts from policymakers to obtain more subsidies and/or tax incentives that could channel crucial reinvestment funds into the local and regional food system.

One solution our participants were divided on, though, was a potential online grocery delivery service. While almost all of them agreed the service would be convenient in theory, many of them had serious concerns about the quality of products they would receive

Foster **collaboration** among existing stakeholders to minimize competition among nonprofits and maximize impact

Create neighborhood plans that are more **responsive** to residents' needs & inclusive of food systems elements

Source: Studio Team

when someone else was responsible for picking their items. Additionally, they expressed concerns about the timing of deliveries—whether delivery times would be flexible or accurate and whether they would have the option to receive their items directly, rather than having them placed on their doorsteps while they were not home. Despite their reservations, they contributed a list of ideal features they would like to see in the service, including basic functionality and ease-of-use, price comparisons, compatibility with coupons and food assistance programs, nutritional facts, a robust selection of name brands and off-brands, local employment opportunities, and locally sourced healthy foods.

Build **relationships** with community members to increase transparency, involvement, trust, and empowerment

Consider a hybrid "click-and-collect" model for online grocery delivery that is user friendly & community focused

Source: Studio Team

LIMITATIONS

Because our study team was comprised of undergraduate and graduate students, the focus groups featured in this report had to be conducted during normally-scheduled class times (i.e., Monday and

Wednesday evenings from 5-7:45pm), which made it difficult to recruit attendees and identify organizations that could offer meeting spaces, especially for our Wednesday night session in Bergen Square, as participants informed us it conflicted with weekly Bible Study. Our team also relied heavily on our community partners to distribute and promote the community survey since Rowan University's main campus is in Glassboro, approximately 25 minutes south of Camden and is therefore not as embedded in the fabric of the community as those partners are. Given these time and geographic constraints, this project would not have been possible without their support.

RECOMMENDATIONS & NEXT STEPS

We have organized our recommendations into four major categories, although we do acknowledge a certain amount of positive overlap that can and should occur across these categories. "Collaboration" emphasizes the importance of Camden's many community partners finding ways to capitalize on the work of their colleagues so they may maximize their messaging and impact. Next, "relationship-building and project longevity" focuses on ways to continue engaging and empowering community residents in the planning and decision-making processes, as well as training these individuals to continue the work of organizations if funding runs out. "Future planning" highlights the need for all planning efforts to ensure equity across Camden's neighborhoods so all residents can access and experience the benefits of whatever reinvestments the city receives. Additionally, we recommend all neighborhood plans include more dynamic food systems elements so policymakers have explicit guidelines to follow when assessing solutions for enhancing residents' health and well-being. Finally, we offer recommendations for any potential online grocery delivery service models Camden advocates may create in the future, chief among them the need to make those services usable by and accessible to as many portions of the population as possible, and to offer a "click-and-collect" option that blends the convenience of online ordering with the quality-assurance embedded in the physical shopping experience.

Although this report concludes the first phase of this project, Rowan University's Community Planning + Visualization Lab remains committed to continuing its work in and with Camden, aided by future cohorts of talented undergraduate and graduate students, as well as the ongoing collaboration with Invincible City and other community organizations. Our Spring 2022 team received an outpouring of support from survey respondents, focus group participants, and interviewees who provided their contact information as expressions of interest in follow-up meetings so they can participate in future phases of the project.

Source: Studio Team

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