
FOOD SECURITY IN TRENTON

WHAT FAMILIES, COMMUNITIES, AND GOVERNMENTS
CAN DO TO PROMOTE HEALTHY LIVING



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ACKNOWLEDGMENTS

We acknowledge the invaluable assistance of several people over the course of this project. The staff of Isles, Inc., our sponsor and client, with particular recognition of Meredith Taylor and Liz Johnson, who advised and guided our research, and Elyse Pivnick, who shared useful information about past, current, and ongoing efforts in this area. We thank Michael Yedidia, of the Rutgers Center for State Health Policy, and David Tulloch, of the Rutgers Center for Remote Sensing and Spatial Analysis, for their help with the maps. We had productive conversations with Phyllis Stoolmacher and Susan Jones, of the Mercer Street Friends Food Bank, and Jaymie Santiago, of the New Brunswick Community Farmer's Market, who gave us their insights into non-traditional food resources. Brian Lang, of The Food Trust, contributed his knowledge of grocery store financing. We are grateful to Domenic Vitiello, of the University of Pennsylvania School of Design, and Stacy McCormack, of Shaping NJ, for sharing their knowledge and ideas about urban agriculture and food systems planning. Assemblywoman Annette Quijano, representing New Jersey's 20th district, also deserves mention for her work on the recent related legislation. Finally, we thank Kathe Newman's Community Participation, Neighborhood Planning, and Food Seminar for allowing us to sit in on some of their lectures and conferences and gain a more comprehensive perspective.

EXECUTIVE SUMMARY

In the winter of 2011, Isles, Inc., a nonprofit community development organization, asked students and faculty at the Edward J. Bloustein School of Planning and Public Policy to describe the state of community food security in Trenton. An organization which provides a variety of services for the City of Trenton, a main focus of Isles, Inc. is environment and community health. This report broadens the findings of the 2005 Trenton Community Food Assessment completed by students at the Bloustein School in conjunction with Isles. This report adds elements such as a focus on childhood obesity and urban agriculture to the updated food access survey.

The basis of the following report lies within the Whole Measures for Community Food Systems tool, developed by the Community Food Security Whole Measures Working Group, as a planning and evaluation tool. Whole Measures encourages organizations to look at the big picture, beyond their specific mission, to enhance their local, healthy community. Whole Measures involves the identification and implementation of six elements: Justice and Fairness, Healthy People, Strong Communities, Vibrant Farms, Sustainable Ecosystems, and Thriving Local Economies. This report will focus on the elements of Justice and Fairness, Healthy People, and Strong Communities.

The methodology of this report includes substantive research of the City of Trenton, federal food and nutrition programs, and policies throughout the country related to urban agriculture, a map-analysis, visual surveys of Trenton's food outlets and food bank, and interviews with members of the educational and non-profit community. Many elements of this report build on data from a recent survey conducted by the Rutgers Center for State Health Policy, funded by the Robert Wood Johnson Foundation, the New Jersey Childhood Obesity Study, which found the City of Trenton to have the highest childhood obesity rate in the state, and meetings held by the New Jersey Partnership for Healthy Kids.

Action 1, Justice and Fairness evaluates access, affordability, and availability of nutritious food, particularly for lower-income residents of the city. Access was mainly assessed through analyzing the location of different types of food outlets, as well as their respective capacities for providing healthy food, in relation to lower-income neighborhoods in the city. Availability of food

was examined by surveying the selection and quality of food, including fresh food, at supermarkets, convenience stores, and small grocery stores. Affordability was assessed through comparing the prices of a selection of key food items at supermarkets close to Trenton, found to be residents' preferred food source, and looking at the effectiveness of major public assistance programs and food pantries. The research reveals that the healthiest and most affordable food outlet, supermarkets, are the least accessible. In comparison, small grocery stores are much more prevalent but have very limited fresh food capacity. Convenience stores are the least healthy but most accessible food outlet. Food pantries are located throughout the city, but need more staff capacity and resources.

Action 2, Healthy People, focuses on the growing problem of obesity for Trenton's youth. This section first outlines the problem of obesity nationwide, and why it is a cause for concern in terms of health and the economy. To further understand why the youth of Trenton are facing such an epidemic, this section outlines the main components of the National School Breakfast and Lunch Programs to illustrate holes in national policy related to the nutrition of school-aged children. To illustrate the direct connection between Trenton's high childhood obesity rates and the important role that schools play in the promotion of healthy lifestyle choices for students, this section builds upon the findings of the New Jersey Childhood Obesity Study, the New Jersey Partnership for Health Kids, and data collected from the Trenton School District.

Action 3, Strong Communities, examines opportunities for building community-based empowerment, awareness, social capital, and relationships around food security. Urban agriculture and farmers markets are identified as endeavors that further these goals. To help Trenton develop, expand, and better manage urban agriculture, examples of urban agriculture policy from across the country are presented, as well as specific qualities and tools already in place, for Trenton to take advantage of. These four items are the supply of vacant land in Trenton, program support, recently passed state legislation, and the Sustainability Element of the Master Plan. A map analysis of Trenton's four farmer's markets reveals that the farmers markets are not currently a significant source of food or community building opportunities. A case study of the New Brunswick Community Farmers Market show-cases strategies for using farmers markets to educate and organize communities around growing, cooking, and eating nutritious food.

EXECUTIVE SUMMARY

There are many areas in which the City of Trenton may enhance access to fresh, healthy food. In working together, City officials, community leaders, school representatives, and residents may improve the health and vitality of Trenton. This report offers policy recommendations within each action item as a basis for improvement. Action 1 recommends enhancing the capacity of food pantries; assisting corner stores and small grocer upgrade facilities to be able to provide healthier food; and creating supermarket financing incentives to bring new food retail into or help upgrade existing outlets in the city. Action 2 suggests ways in which school representatives should include nutrition education to the curriculum, and how such entities should promote balanced food and healthy lifestyle choices to students. Action 3 includes examples of how Trenton residents, non-profits, and city authorities can act to bring about greater acceptance and fulfillment of urban agriculture policies.

INTRODUCTION

In the United States, it has become common to speak of hunger in terms of its relationship to food insecurity. The U.S. Department of Agriculture makes the distinction between hunger and food insecurity by defining food insecurity as “a household-level economic and social condition of limited or uncertain access to adequate food,” and defining hunger as a possible result of that condition (USDA/ERS, 2011). In 2008, 49.1 million people lived in food insecure households. Those identified as being at greatest risk of food insecurity include households headed by single women, Hispanic or Black households, households with incomes below the Federal Poverty Line, households with children, and households located in the central city (USDA/ERS, 2011).

The City of Trenton is the capital of the State of New Jersey and county seat for Mercer County. Home to over 83,000 residents, Trenton is the largest city in Mercer County and one of the largest in the state. It has a high concentration of minority and low income households, with the 2009 American Community Survey reporting a racial and ethnic composition of 50 percent African American, 30 percent Hispanic, 17 percent White, and 3 percent Asian or of mixed race. Nearly 40 percent of Trenton’s 27,000 households include one or more people under the age of 18; roughly 21,000 children over the age of 3 are enrolled in the public school system.

Trenton’s economy has changed drastically over the past century. Once a vibrant manufacturing city, today the largest employer is the State government. Rather than being residents of the city, State employees tend to commute from the surrounding suburbs. The civilian labor force within Trenton consists of 40,400 people; of these, 13.9 percent were unemployed in 2009 and 13.4 percent received SNAP benefits within the calendar year. The median household income in 2009 was \$35,372, yet the living wage in Mercer County for a family of two adults and one child is \$53,060.80 (Pennsylvania State University, 2011). 22 percent of families’ incomes fall below the federal poverty line, a number that increases to nearly 31 percent of families with children under 18 years.

Isles, Inc., a nonprofit community development organization, asked students and faculty at the Edward J. Bloustein School of Planning and Public Policy to describe the state of community food security in Trenton. This report is an update and companion piece to the Trenton

Community Food Assessment conducted by Isles, Inc. and the Bloustein School in 2005. A community food assessment provides information on the availability of, access to, and affordability of food in a community.

The concept of community food security is difficult to define. Certainly, an assessment of where people buy food and what they need and what they buy is a large part of this. However, in order to achieve community food security, a community must also consider cultural appropriateness of food, good nutrition, supporting sustainable food production and delivery systems, promoting social justice and cohesion, economic viability, and economic opportunity. Food security implies a more comprehensive and integrated set of systems than simply the lack of hunger among households.

To tell the story of community food security in Trenton and begin to create a more structured dialogue about potential changes and their outcomes, we place this assessment in the context of a Whole Measures evaluation. The Whole Measures tool was developed by the Community Food Security Whole Measures Working Group. Originally intended as a planning and evaluation tool, we are using it here as the basis for a description and discussion of the community food situation in Trenton. Whole Measures involves the identification and implementation of six elements: Justice and Fairness, Healthy People, Strong Communities, Vibrant Farms, Sustainable Ecosystems, and Thriving Local Economies.

There is understandably a lot of overlap among element components; we make an effort to condense and simplify them for our purposes, concentrating on the outcomes most relevant to our project. Due to time and resource constraints, this report focuses mainly on the three elements of Justice and Fairness, Healthy People, and Strong Communities.

In order to achieve Justice and Fairness in a community food system, the community must ensure access to “fresh, healthy, affordable and culturally appropriate food” for all, find and correct injustices in the food system, uphold food system workers’ rights, and secure the support of public and local institutions (Abi-Nader et al., 2009). As this report is intended to be a survey of issues relating to access, we direct our studies toward only the first two elements. The emphasis here is not just on *all* community members having access to some form of sustenance or even to the same *quantity* of sustenance, but rather on each member having access to the same *quality* of sustenance as well. Community members must work to improve the equity of the system, so that local stores

sell high quality, nutritious products at affordable prices and each household receives enough food for healthy meals, regardless of income. Action 1 of this report examines this element focusing on supply-side indicators as a method of measurement. We conducted a map analysis in order to facilitate a description of the food environment in Trenton in the context of food outlet location. This was followed by a visual survey of convenience stores and a price comparison of selected foods at different food outlets to evaluate the access and quality of current food offerings. A visit to Mercer Street Friends, the local food bank, as well as research into food assistance programs yielded valuable insight into the potential successes and potential oversights of the social safety net.

The element of Healthy People is inextricably linked to Justice and Fairness; we cannot explore the question of equal access without also touching upon the impact that the lack of equal access has upon the health of a community's individuals. "Ensuring the health and wellbeing of all people and promoting health and wellness" has both supply-side and demand-side factors (Abi-Nader et al., 2009). Research suggests that low-income communities with limited access to supermarkets and greater access to convenience stores have a higher prevalence of obesity and diet-related diseases (Cheung et al., 2009, 4), and that consumer consumption patterns depend on the individual's choice of food as well as the food being provided from which to choose (Barrett, 2002, 43). Thus, the contributing factors to diet-related disease rates and the effectiveness of nutrition education are both important metrics for establishing a Healthy People.

We built upon the *New Jersey Childhood Obesity Study*, a report by the Rutgers Center for State Health Policy, which found that the City of Trenton has an excessive rate of overweight and obese children, nearly 16 percentage points higher than the national average (47.3 percent as compared to 31.7 percent). This study allowed us to take a more in-depth look at childhood obesity in Trenton (New Jersey Childhood Obesity Study). In addition to interviews within the Trenton School District, an overview of the National School Meals Programs, and a brief look into the Trenton public school system's physical education requirements, and community input from the New Jersey Partnership for Healthy Kids-Trenton (NJPHK). The *New Jersey Childhood Obesity Study* provided an important component for discussion in this section, as well as being the source of the maps for the map analysis in the section dealing with Justice and Fairness.

The element of Strong Communities is meant to improve equity on the demand side of the food security equation. Communities should build food resource and production capacities, engage

in civic participation and political empowerment activities, and cultivate a responsive and learning community. Action 3 of this report explores mechanisms for reducing vulnerability and creating and maintaining space for food production through its investigation into urban agriculture policies and limitations.

JUSTICE AND FAIRNESS

ACTION 1

INTRODUCTION

We discuss three main components of Justice and Fairness: Access, Affordability, and Availability. These are all, in some way, unobservable characteristics, and difficult to quantify with no standardized metric in place. It is useful for us, then, to briefly review how other people have measured access, affordability, and availability, and what these concepts actually mean.

Generally, studies will take either an individual-level approach, focusing on households, or an area-level approach, focusing on geographic regions. A community food assessment requires information on the food outlets within reasonable reach of the community members, the types and prices of food provided by these outlets, and some sort of quality measure. According to the 2009 Report to Congress on Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences, tools in the assessment arsenal include but are certainly not limited to household surveys, geography and distance-based measures, and information on vehicle ownership and time use (Ver Ploeg et al., 2009). Measures of choice include analyses of food shopping behavior for SNAP participants, surveys, and EBT transaction patterns (Ver Ploeg et al., 2009).

For our purposes, we restrict our analysis to an evaluation of access—of which affordability and availability are arguably subsets—and leave the question of choice for future study. As there is no empirical formula that has been tested to fit our requirements, this is a generally descriptive report.

Access in its most basic form is largely a matter of determining the location of food outlets, and the significance of those food outlets in relation to where people are and how much they shop there. Distance measures are often employed to evaluate the convenience of a store's location, but the distances regarded as acceptable or reasonable are fundamentally arbitrary (Ver Ploeg et al., 2009). Rural areas have different standards than urban areas, a walkable distance is usually defined as 0.5 miles, and measurements from a residential area to a store fail to account for

the consideration that food shopping may be part of a larger shopping trip (Ver Ploeg et al., 2009). Such measures also neglect the idea of consumer choice, and the fact that many people do not shop at the nearest food retailer, but rather exhibit some form of preferential selection, whether for lower prices, better service, better quality products, or ethnically specialized goods (Ver Ploeg et al., 2009).

Measures of density will reflect the element of supplier competition by counting the number of retailers in a neighborhood. The 2009 Report to Congress cites several studies that use this method to describe food environments. This method could be particularly helpful when overlaid by a measure of population density or poverty-level indicators. We use this mapping analysis approach to tackle Access.

It is important to note that the measures of access described above only have the capacity to measure *potential* access and not *real* access. That is, measuring predicted behaviors based on location decisions rather than actual behaviors.

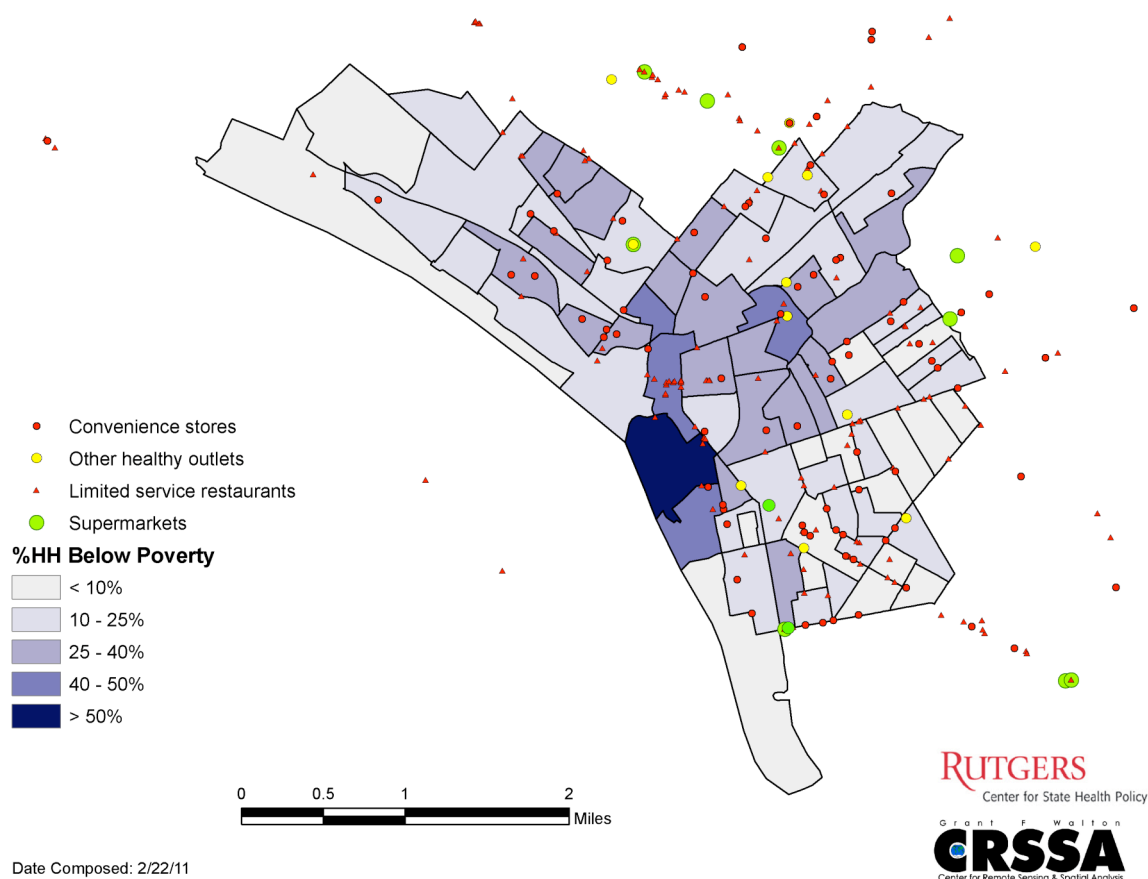
Affordability is a relative reference, whether to the price of a particular food across stores, a particular food in comparison to other foods, a particular food in relation to potential substitutes, or a basket of goods in comparison to some standard, such as the USDA Thrifty Food Plan. The Plan contains “foods in quantities that reflect current dietary recommendations, food composition data, food prices, and actual consumption patterns” (Ver Ploeg et al., 2009). Low-income consumers often face budget constraints when it comes to food prices, and must also consider travel costs, time costs, preparation and serving time costs, and the importance of food with respect to other living necessities like shelter and transportation. We use a price comparison of certain goods across selected food outlets and a glance at the effectiveness of public assistance programs and food pantries to investigate Affordability.

Availability is essentially an accounting of what is in the store and what is not. We expand this definition to include the quality as well as the quantity of goods available in different food outlets. We use a visual observation and survey of stores of look into Availability.

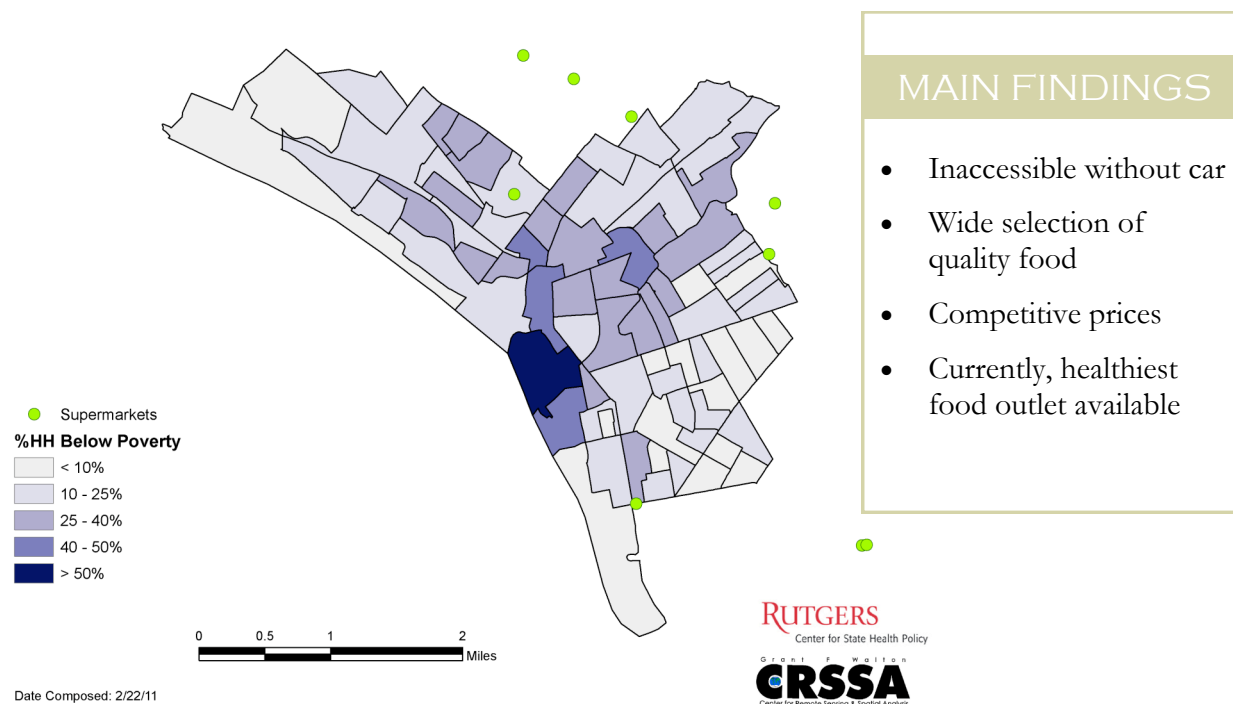
SECTION 1: FOOD OUTLET MAPPING ANALYSIS

The map analysis is intended to provide a starting point for our discussion. It tells us where food outlets are, and gives us a solid overview of their locations relative to each other and to people in order to descriptively analyze spread and clustering. We chose to include four outlets: supermarkets, other healthy food outlets, convenience stores, and limited service restaurants. These are typical outlets found in urban settings. Survey data (Rutgers, 2010) and focus groups (NJPFK, 2011) indicate that the main retail sources of food Trentonians rely on are Supermarkets, followed by small neighborhood grocers and convenience stores. Farmers markets appear to play a much smaller role. A large number of Trentonians also regularly depend on food pantries for food staples. The shading on the maps is an indicator of poverty level rather than population density, and serves to illustrate disparities in access.

Map 1: Trenton Food Outlets



Map 2: Supermarkets:



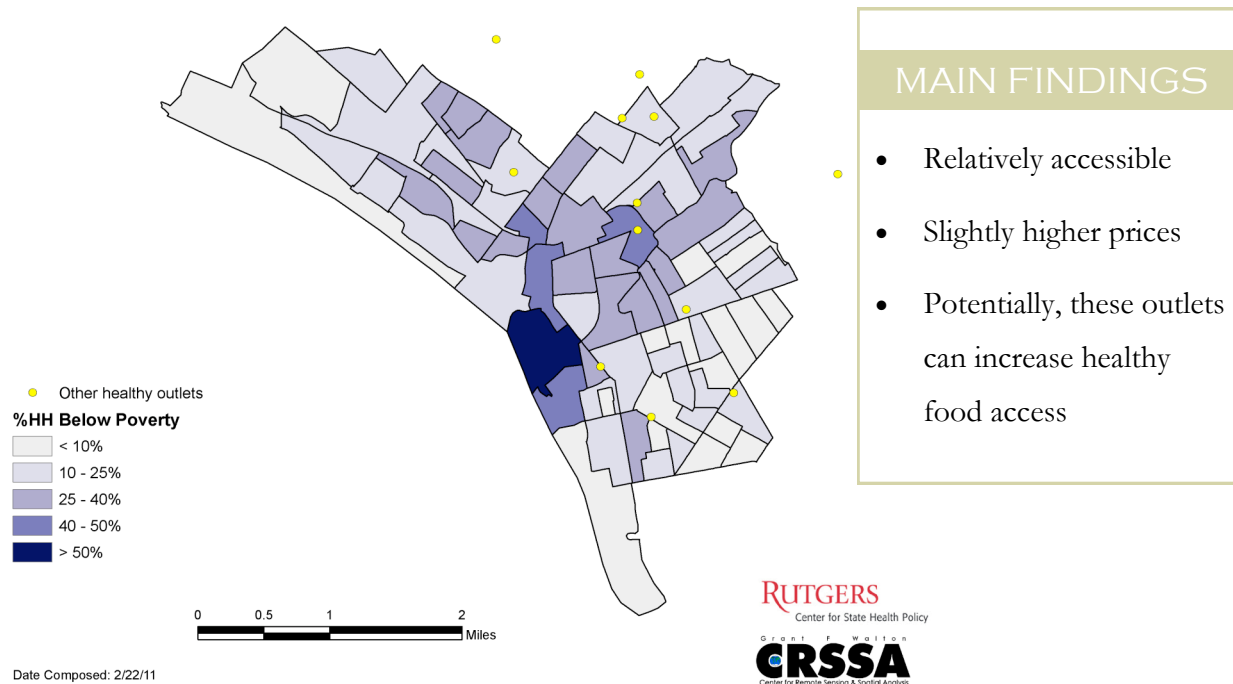
As Map 2 indicates, only two supermarkets are located in the city- the Food Bazaar on South Clinton Avenue, and Super Food on Pennington Avenue. Three supermarkets border Trenton and neighboring towns (such as Ewing) and a few more are located in the neighboring suburbs. The three supermarkets in neighboring towns range from 3.7 to nine miles from the city center. Therefore, very few Trentonians are likely to live within the 0.5 miles of a grocery store considered to be a walkable distance (Ver Ploeg et al., 2009).

Access to supermarkets is an important aspect of food security because supermarkets tend to provide relatively affordable prices and healthier food items. Larger size and better facilities, such as extensive refrigeration units, allow supermarkets to provide a wide selection of high quality food, including fresh produce, meat, and dairy. Typically associated with national chains with a large customer base and considerable financial and market clout, supermarkets are also able to provide the most competitive prices. The link between greater access to supermarkets and healthier eating habits and better health is well-documented (Treuhart and Karpyn 2010):

- A multi-state study found that for every additional supermarket in a census tract, produce consumption increases 32 percent for African Americans and 11 percent for whites;
 - The study also found that people with access to only supermarkets or to supermarkets and grocery stores have the lowest rates of obesity and overweight, while those without access to supermarkets have the highest rates;
 - Another study found Chicago and Detroit residents who live farther from grocery stores than from convenience stores and fast food restaurants have significantly higher rates of premature death from diabetes.
 - Statistically controlling for other factors, researchers estimated that adding a new grocery store to a high poverty neighborhood in Indianapolis would lead to a three pound weight decrease among residents.
-

Trenton residents, however, generally have to drive beyond their neighborhoods to access supermarkets. The Rutgers childhood obesity study indicates that about 80 percent of Trenton parents of children aged 3-18 are able to arrange car pools or other means of transportation to access supermarkets (Rutgers, 2010). However, that still indicates a dependence on local food outlets at other times. This also does not give us information on residents without young children – seniors, for example, can be particularly vulnerable to transportation barriers. Moreover, the remaining 20 percent of parents may include some of Trenton’s poorest residents who are not able to arrange transportation to supermarkets. The overall situation, therefore, represents a major gap in equitable food access in Trenton.

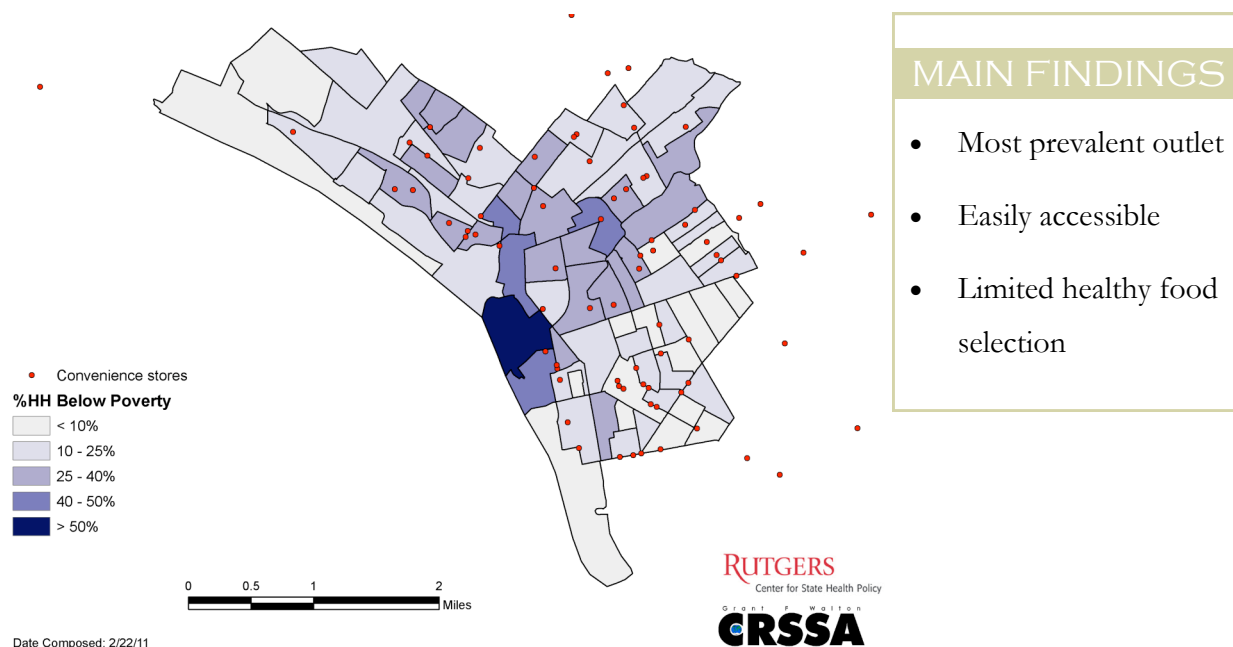
Map 3: Other Healthy Food Outlets:



The designation, “other healthy food outlets” on the accompanying map refers to small neighborhood grocery stores. Trenton has 11 such outlets, some of them located within the lower-income population centers. Although much smaller than supermarkets, these stores often stock most of the major food items, particularly pantry staples. Other items can include dairy, meat, specialty ethnic food, and some produce. Located within downtown and residential areas, they can retain some of the accessibility of convenience stores and also provide some of the healthier foods options available at supermarkets.

However, the variety and quality of food available at these stores is limited by a number of factors, including store size and lack of adequate refrigeration units. Produce in particular is very limited and not always fresh. Prices also tend to be slightly higher than those at supermarkets. The results of a focus group study with Trenton residents (NJPFK, 2011) and conversations with small grocery store owners indicate that these stores are not the primary source of food for most Trenton residents. People tend to come to such stores for particular specialties, such as ethnic food or a good meat or deli selection, or to fill in gaps between supermarket visits.

Map 4: Convenience Stores:

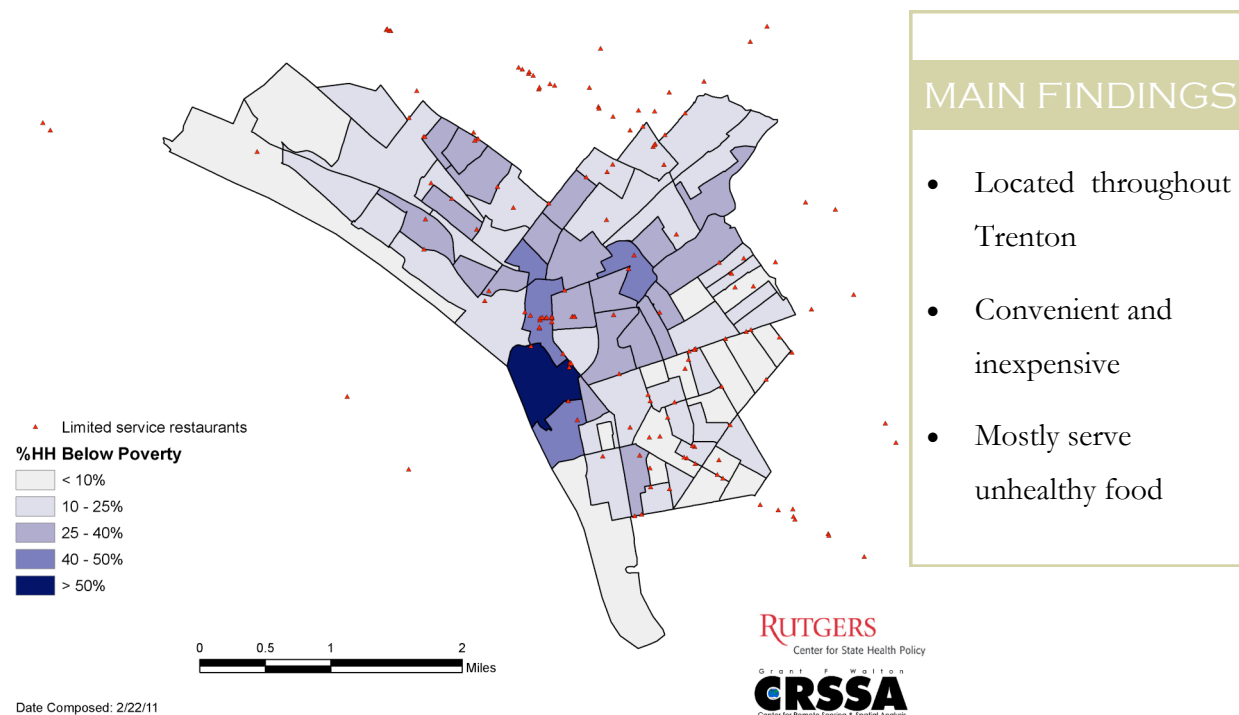


With respect to density, convenience stores, also known as bodegas, are clearly the most prevalent and accessible food outlets available, a trend found in many urban areas. Nationwide, convenience stores outnumber supermarkets 146,341 to 36,149 and continue to grow steadily in number (NACS 2011). However, this trend is particularly endemic to predominantly low-income areas such as Trenton – nationally, low income zip codes have 30 percent more convenience stores than middle-income zip codes (Treuhaft and Karpyn, 2010).

Map 4 indicates that there are multiple convenience stores in Trenton and that they are primarily located in the lower income areas. Our in-person survey of food outlets indicated that, unlike the other food outlets, there is a high concentration of convenience stores in residential areas and around schools. The “convenience” of corner stores naturally arises from their easy accessibility, representing a potential opportunity for food access for people with limited mobility, including seniors and lower-income families unable to afford regular access to motorized transport. Corner stores, because of their presence in the community, can also be social gathering spots, a trend we observed in our survey.

However, convenience stores generally offer some of the unhealthiest food items, including soda, candy, cigarettes, alcohol, tobacco, and packaged food and beverages of minimal nutritional value (“Healthy Corner Stores,” 2011). Many bodegas also offer cooked fast food. Fresh produce or meat or dairy offerings are very limited or absent altogether. Corner stores, because of their presence in the community, can also be social gathering spots. Our visits to bodegas in Trenton largely confirmed all of these characteristics.

Map 5: Limited Service Restaurants



Limited service restaurants include outlets that sell prepared meals, such as fast food restaurants and food stands. As shown in Map 5, these outlets are abundantly located throughout Trenton, especially in the poorer neighborhoods. Overall, limited service restaurants are popular because of their convenience and low prices. Buying food that is already prepared is a quick and easy option. Unfortunately, fast food outlets specialize in selling products that are unhealthy, such as pizza, fried foods, and sandwiches with little nutritional value. Research controlling for other factors estimates that eliminating a fast food restaurant in a neighborhood with a high density of fast food outlets would lead to a one pound weight decrease (Treuhart and Karpyn 2010). As

mentioned previously, a study conducted in Chicago and Detroit indicates that residents who live farther from grocery stores than from convenience stores and fast food restaurants have significantly higher rates of premature death from diabetes (Treuhft and Karpyn 2010).

SECTION 2: FOOD SURVEY

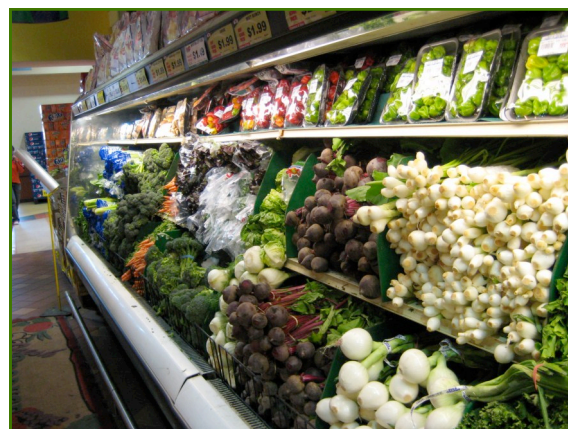
Why perform a food survey?

Conducting a food survey is an important component to justice and fairness. The majority of our food survey focuses on supermarkets.

Supermarkets are an essential food outlet, and many residents shop at these locations on a regular basis.

Based on the previous mapping analysis, it is apparent that most supermarkets are located outside the city. In addition to their location, it is also important to determine what types of products supermarkets sell, and how much they charge for

essential food items. Furthermore, a food survey is useful in evaluating a store's ambiance and quality. Overall, a food survey provides a richer understanding of Trenton's food system.



Produce selection at Trenton Food Bazaar

What stores did we evaluate?

Three major supermarkets in the Trenton region were evaluated: The Shop Rite of Ewing, the Aldi of Ewing, and the Food Bazaar of Trenton. These stores were chosen because of their location and overall popularity amongst community members. All three supermarkets are major food outlets for Trentonians. Overall, evaluating these outlets provides a better understanding of the Trenton food system.

In addition, we chose the Shop Rite of Lawrenceville as a comparison store. The Lawrenceville Shop Rite is one of the finest grocery stores in Mercer County, offering a vast selection of fresh food. Evaluating the Lawrenceville Shop Rite allowed us to make direct comparisons to the major supermarkets in the region. Throughout this section the Lawrenceville Shop Rite will be compared with the Trenton-based supermarkets.

Store Profiles:

Shop Rite of Ewing

1750 N Olden Avenue

Ewing, NJ 08638

The Ewing Shop Rite is located four miles from the Downtown Trenton. Shop Rite supermarkets are known for their wide variety of quality food products and competitive prices. In 2009, the store went through a dramatic remodeling and expansion. The expansion provided an additional six aisles, resulting in 26

total aisles. However, a large portion of this expansion was devoted to non-grocery related items, such as home and garden products and pet supplies. Nonetheless, the Ewing Shop Rite is one of the largest grocery stores in the nearby Trenton region.



Image 1: Ewing Shop Rite

Aldi of Ewing

1650 North Olden Avenue

Ewing, NJ 08638

Aldi is a discount grocery store located 3.7 miles from Trenton. Aldi is the manufacturer for the vast majority of food products sold in the store. However, the products are oftentimes designed to resemble popular name-brand items. Aldi is the smallest supermarket evaluated in our study, but its low prices and decent selection make it a popular food outlet for many Trentonians.



Image 2: Ewing Aldi

Food Bazaar of Trenton

635 South Clinton Avenue

Trenton, NJ 08611

The Food Bazaar located in the Trenton Roebling Market first opened in mid-2008. Overall, the Food Bazaar is a major recent addition to the Trenton food system. Previously the location was home to a Super G grocery outlet, which closed in 2005. The Food Bazaar is one of two supermarkets located in Trenton. The store offers a wide variety of international foods and traditional grocery products. The Food Bazaar is a popular food outlet because of its large selection of specialty foods and convenient location.



Image 3: Food Bazaar

Comparison Store:

Shop Rite of Lawrenceville

US 1 S at Quaker Bridge Road

Lawrenceville, NJ 0864

The Lawrenceville Shop Rite was chosen as a comparison store for our evaluation. We selected the Lawrenceville Shop Rite because it is farther away from Trenton (9 miles from Downtown Trenton), but still located in the general region. Our purpose is to distinguish the differences between supermarkets in and near Trenton to one that is farther outside the city limits. The Lawrenceville Shop Rite is a premium grocery outlet. It offers a vast selection of products and many specialty items, included ethic, organic, and kosher foods.



Image 4: Lawrenceville Shop Rite (Comparison Store)

How was the food survey conducted?

The survey includes two main components: a store inventory that consists of price comparisons, and a qualitative evaluation of store and food quality. The store inventory includes a variety of common food products from the main food groups. At Shop Rite, we recorded prices for Shop Rite brand products; we used the same approach at Aldi. In comparison, Bogopa brand products were recorded for the Food Bazaar inventory. Bogopa is the parent company of Food Bazaar. These products were recorded because they are less expensive than the popular name brand option. Regular prices were recorded, avoiding sale and discount prices. Discounted items were ignored because they only reflect a temporary price point. During instances when store brand products were unavailable, the least expensive option was recorded. Throughout the inventory careful attention was devoted to recording the least expensive food items.

However, the full story typically lies beyond numbers. In addition to price, we also qualitatively evaluated the supermarkets, small neighborhood grocery stores, and corner stores we visited for the other factors that can make a store an appealing and convenient source of varied and nutritious food for its customers. The qualitative measures we recorded include store layout, food selection, food quality, and promotion of healthy food. This approach offers additional information that cannot be gathered with a price comparison. Combining the information gathered from the price comparison and the qualitative observations provides a more comprehensive understanding of the Trenton food system.

PRICE COMPARISON

For the price comparison, we divided food items into five major categories: fresh produce, meat and dairy, grains, pantry and frozen foods, and common household food items. Each category includes a variety of essential and popular household food products. The goal of the price comparison is to determine the similarities and key differences between the three major supermarkets. In addition, the inventory demonstrates the typical costs that Trentonians pay for common food items. Prices for the Lawrenceville Shop Rite are practically identical with the Ewing location. To avoid repetition, the Lawrenceville prices will not be displayed. However, comparisons between the Lawrenceville Shop Rite and the other supermarkets will be made when appropriate.

Table 1- Price Comparison: Fresh Produce			
Food Item	Food Bazaar	Shop Rite Ewing	Aldi Ewing
Apples/lb	.99	.80	.76
Bananas/lb	.59	.69	.39
Tomatoes/lb	1.79	2.49	1.59
Broccoli/lb	1.49	1.69	1.59
Collard Greens/lb	.79	.99	N/A
Iceberg Lettuce/ each	1.99	2.49	1.19
Romaine Lettuce	1.99 full heart	2.49/lb	1.99/3 hearts
Potatoes/5lb	.99	1.49	2.79

Table 1 compares prices for standard fresh produce items. Overall, Aldi's products are less expensive when compared to the Food Bazaar and Shop Rite, with the exception of potatoes. However, it is important to note that Aldi has very limited variety and quantity options for each food item. Fruits and vegetables are oftentimes limited to one-size packages. For example, the romaine lettuce at Aldi is only available in a bag with three small hearts. In comparison, Shop Rite and Food Bazaar allow shoppers to choose the quantity they want. Both the Shop Rite and Food Bazaar offer a vast selection of fresh produce. Customers who regularly shop at those two locations have greater fresh food options but tend to pay a higher price. Nonetheless, the Lawrenceville Shop Rite has a larger produce selection than either of these two stores.

Table 2- Price Comparison: Meat and Dairy			
Food Item	Food Bazaar	Shop Rite Ewing	Aldi Ewing
Ground Beef 73- 80%/lb	3.19 (75%)	2.49 (80%)	2.19 (73%) 2.49 (80%)
Ground Beef >80%	4.49 (83%)	2.79 (85%)	N/A
Skim Milk/Gallon	3.99	N/A	N/A
2% Milk/Gallon	3.99	4.09	2.69
Butter Sticks, 16oz	4.99	2.99	2.29
American Cheese/lb	3.85	2.66	2.99
Eggs dozen	1.29	2.29	.99
Chicken Breast/lb	3.09	1.99	2.49

The three supermarkets have noticeable differences with respect to meat and dairy products. As shown in Table 2, none of the supermarkets offer ground beef with less than 15% fat. The Aldi does not stock ground beef above 80% lean, while the Shop Rite in Ewing does not stock ground beef below 80% lean. In contrast, the Shop Rite in Lawrenceville supplies both 93% and 95% lean ground beef options. When compared to the three Trenton-based supermarkets, the Lawrenceville Shop Rite has a much larger and healthier meat selection.

The Food Bazaar is the only supermarket to stock skim milk by the gallon. Shop Rite provides several half-gallon skim milk options, but these tend to be expensive organic products. Aldi offers a limited meat and dairy selection, but does have the least expensive milk, butter, and egg options. In contrast, the Food Bazaar is noticeably more expensive than the other two stores in respect to butter, chicken breast, ground beef, and American cheese. The Food Bazaar is a closer store for many Trentonians, but also more expensive for several major meat and dairy food staples.

Table 3- Price Comparison: Grains			
Food Item	Food Bazaar	Shop Rite Ewing	Aldi Ewing
Bread Loaf (White)/lb	.89	1.59	.63
Bread Loaf (Wheat)/lb	1.11	1.69	.99
Pasta (Spaghetti)/lb	1.29	1.00	.75
Rice/lb	.66	.60	.56

Overall, all three locations supply the four grain options listed in Table 3. Aldi offers the least expensive prices for all four items. As shown in Table 3, healthier wheat bread is more expensive than its white bread counterpart. Consequently, Trentonians who prefer wheat bread will have to pay a higher price. However, Shop Rite offers the smallest price gap between white and wheat bread. For both locations, Shop Rite has the most expensive bread options, but offers a wide variety of options.

Table 4- Price Comparison: Pantry and Frozen Foods			
Food Item	Food Bazaar	Shop Rite Ewing	Aldi Ewing
Canned Corn/lb	.79	.70	.49
Canned Mixed Vegetables/lb	.79	.71	.49
Frozen Mixed Vegetables/lb	1.00	1.40	.99
Canned Tuna Fish	.89/6oz	.99/5oz	.52/5oz
Mac and Cheese/lb	1.10	1.11	.64
Frozen Corn/lb	1.00	1.40	.65
Canned Beans (Black)/lb	1.06	.80	.57
Tomato Sauce/lb	.79	.91	.79

Once again, Aldi offers the lowest prices for pantry and frozen food items. As a whole, Shop Rite and Food Bazaar prices are comparable. Canned goods are less expensive at Shop Rite, while frozen vegetables are cheaper at Food Bazaar. Both Food Bazaar and Shop Rite have several options for each item, but none of the options were less expensive than Aldi. While Aldi's prices are lower, the options are once again limited for each item.

Interestingly, package size varies by food items and amongst stores. As shown in Table 4, the Food Bazaar stocks 6oz cans of tuna fish, whereas the Shop Rite and Aldi offers 5oz cans. Similar differences were found with the canned goods and macaroni and cheese packages. These distinctions can be explained by recent efforts by various companies to reduce food quantities without lowering the price. From the naked eye, the packages look similar in size, but closer inspection demonstrates that quantities can vary amongst products.

Table 5- Price Comparison: Common Household Food Items			
Food Item	Food Bazaar	Shop Rite Ewing	Aldi Ewing
Ketchup/lb	.65	.93	.60
Mayonnaise/lb	1.89	1.97	1.07
Vegetable Oil/qt	3.32	2.40	1.33
Coffee, Instant/lb	7.98	7.99	5.98
Coffee, Ground/lb	5.95	3.84	3.39
Orange Juice/qt	1.25	1.25	1.79
Peanut Butter/lb	1.59	1.34	1.18

The items included in Table 5 are popular condiments and other household food products. These items are not major food staples like vegetables and grains, but they are typical products found in many kitchens. With the exception of orange juice, Aldi's prices are the lowest. However, Aldi does not offer many options for each item. For example, Aldi only stocks store brand condiments, whereas the two other supermarkets stock several varieties. Vegetable oil and ground coffee is noticeably more expensive at Food Bazaar. In comparison, ketchup and mayonnaise is more expensive at Shop Rite.

Once again, there were noticeable variations in packaging size. The prices above reflect the unit price per pound for consistency purposes. Ketchup bottles and peanut butter jars have varying quantities amongst companies. For example, some peanut butter jars are 18oz, whereas others are 16.3oz. The packages look similar in size, but range in quantity. As a result, unsuspected shoppers may purchase smaller quantities without knowing it.

Summary of Findings:

The price comparison demonstrates that in many categories, Aldi offers the lowest prices. While the store has limited selection and variety, it also stocks most of the food items included in our evaluation. In comparison, Shop Rite and Food Bazaar tend to be more expensive, but offer much greater food options. Both stores are comparable in terms of price, but Food Bazaar is noticeably more expensive than Shop Rite in respect to meat and dairy products. The Lawrenceville Shop Rite has the same prices as the Ewing location, but does offer a larger variety of fresh produce and meat. In addition, the Lawrenceville location has a wide selection of nonperishable food items, frozen foods, and bread options.

OVERALL AMBIANCE AND QUALITY

The price comparison demonstrates that Aldi provides the most reasonable grocery prices in the Trenton region. However, while price is a major component of a food survey, there are other factors worth considering, including store layout, food selection, and food quality. Our observations indicate that price efficiency and food and store quality are not necessarily related..

To assess layout, we considered factors such as the space, lighting, organization, and the ease of locating items. For food selection, we surveyed the variety and options available for each food item inventoried, with particular attention given to fresh food items such as meat, dairy, and produce. For quality, we were particularly attentive to the freshness of produce and to the overall cleanliness of the store. We also observed whether a store appeared to promote healthy or unhealthy food items.

Aldi:

Although Aldi ranked well in the price comparison, it did relatively poorly on most of our qualitative indicators. With respect to layout, the store was dim, somewhat dirty, and designed somewhat as a one way maze. Between the aisles, however, the store was very spacious. Aldi also had a very limited selection of each item compared with the other supermarkets. Unlike a typical supermarket, Aldi only carried products packaged by its parent company, usually only one variety and size

choice for each item. The selection of produce was also limited for a supermarket and some items were not very fresh – the romaine lettuce, for example, was only available as a visibly bruised packaged variety and the broccoli was only available in a dry packaged form. On entering the store, some of the first items displayed included candy and soda. Moreover, the layout was inconducive to backtracking, making it inconvenient to put those items back at a later point. However, in some surprising ways, Aldi appeared to promote itself as a healthy food outlet. It carried a relatively



Image 1: Aldi entrance

good, and affordable, selection of whole grain, whole wheat, and rye breads, for instance. Also, many of its store brand items, from teas to canned vegetables, are packaged to mimic premium quality items that one might find at high end or natural food stores. Overall, it appeared to be a very convenient place to grab low-cost pantry items.

Food Bazaar:

The Food Bazaar was slightly more expensive than Shop Rite for certain key items such as canned black beans, significant as the store otherwise appeared to cater heavily to Hispanic customers. However, its prices were less expensive for other items such as bread and frozen vegetables. It had good lighting and a decent layout. It had a significant variety for most food items, outranking other stores on certain items such as its extensive selection of specialty rice and on items such as coffee and vegetable oil. Organic options were available for certain items such as iceberg lettuce, eggs, and canned vegetables. It also had an extensive selection of produce, and carried ethnic specialties such as avocados, plantains, and various peppers. Some of the produce items, however, were bruised or unripe. Good lighting and layout was manageable. The meat selection was somewhat limited, with no lean beef options. The first thing one would notice on entering the store are the mounds of fruits and vegetables. Overall, this was an inviting and unique store with good selection of ethnic and specialty foods.



Image 2: Food Bazaar produce section



Image 3: Food Bazaar's unique layout

Shop Rite Ewing

The Shop Rite in Ewing was very large and spacious with excellent lighting. It had a very good selection of quality produce. The dairy and meat section was also good, but lacked lean meat and skim milk. Store was very large and spacious, with excellent lighting. Although not as big or comprehensive as the Lawrenceville Shop Rite, it was similar on most other factors. It was larger than the Food Bazaar.

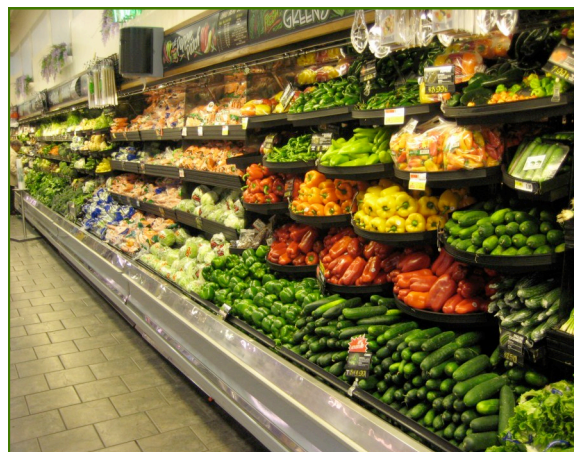


Image 4: Produce section at Ewing Shop Rite

Lawrenceville Shop Rite:

The Lawrenceville Shop Rite was also well-lit and inviting, although the layout was somewhat cluttered in certain sections. This was the largest grocery store we visited, had the most extensive selection of produce, meat, deli meats and cheeses, and a good variety of ethnic, kosher, and organic products. There was also a wide variety of prepared foods, including well stocked salad bars. Overall, this appeared to be the best store with respect to selection, quality of items, and lighting. Fittingly, it displayed a large banner celebrating its selection as the “Best Supermarket” by local papers’ Readers Choice Awards.

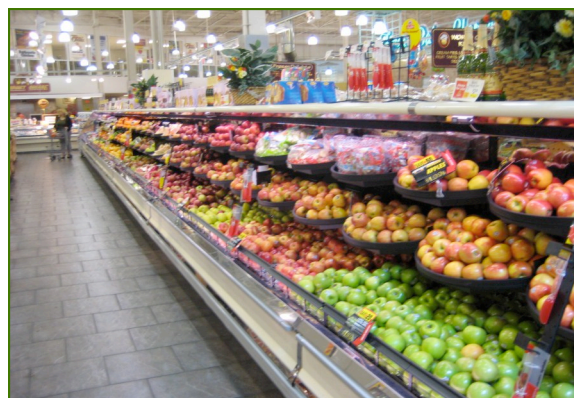


Image 5: Lawrenceville Shop Rite's large produce section



Image 6: Lawrenceville Shop Rite entrance

How did corner stores and small neighborhood grocery stores compare?

In addition to detailed price comparisons at the supermarkets, we surveyed a few bodegas and smaller grocery stores for food selection, quality, and general ambiance.

Selecto Supermarket

531 South Broad Street

Trenton

The Selecto Supermarket is a small grocery store that specializes in Hispanic foods. The store offers a limited selection of fresh produce and meats. In addition to specialty items, the store sells a limited selection of most of the traditional food items included in the price comparison study. Its convenient location and unique selection of specialty items makes it a regular food outlet for many Hispanic community members. However, the owner indicated that most of its customers come here for a particular specialty, such as deli meats, or to find a missing ingredient between supermarket trips. Many of the regulars go to a variety of other food outlets, including discount clubs such as Sam's Club, for their other grocery needs. The store was relatively clean and decently lit, but somewhat cramped by the three full aisles squeezed into a relatively small space.

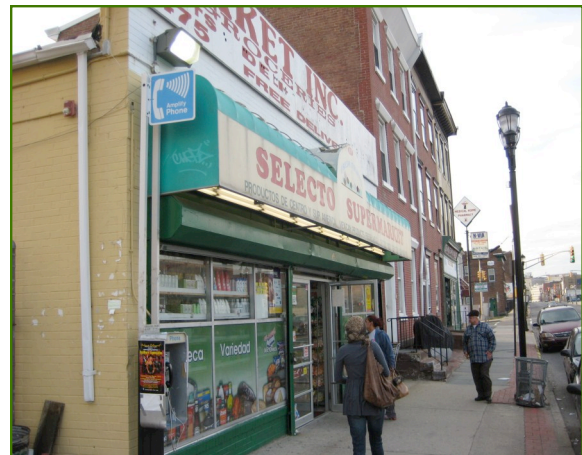


Image 1: Selecto Supermarket



Image 2: Selecto Supermarket's small produce section

Tiburon 2 Super Market

North Broad Street

Trenton

The Tiburon 2 store is a combination corner store and fast food restaurant located one block from Mercer County Community College in downtown. The store offers a limited supply of packaged food options, and does not stock fresh produce or meat. During lunch-time the market serves prepared meals such as cheesesteaks and subs.

Unhealthy food is prominently displayed in the store, with a large stand devoted to cigarettes and candy. With very limited space devoted to food and few tables by one wall, the store appeared relatively spacious. The store also appeared to be a social gathering and meeting place for regulars.



Image 2: Tiburon 2 Super Market

Melvin's Deli and Grocery

475 MLK Jr Blvd

Trenton

This small corner store is located on a residential, albeit downtrodden street with multiple boarded-up houses. It stocks a very limited variety of food items. A small aisle of canned goods and condiments makes up the grocery portion of the store. The remaining space is dedicated to common party store items,

such as cigarettes, ice cream products, and snack foods. The store also features a small kitchen to prepare hot sandwiches and fried foods. This was the least well-lit, clean, or spacious of all the outlets we visited. However, the store appeared to be social gathering spot, with many customers and by-standers interacting with each other and the store clerks inside and outside the store.



Image 3: Melvin's Deli and Grocery

SECTION 3: FOOD ASSISTANCE PROGRAMS

Trentonians are not limited to food stores; emergency feeding programs frequently supplement retail purchases. The existence of the national safety net of food assistance programs is an important factor in evaluating food access and affordability. In a constant state of development since the Great Depression, there are currently a growing number of federal, state, and local government programs and policies promoting and regulating local food initiatives- many of which overlap or contradict each other in methods, beneficiaries, objectives, and administration. These programs may contribute either to the emergency food assistance safety net- which provides for access to affordable food; the nutrition safety net- which provides for education and access to healthy food, or both. The effectiveness of these programs as a whole, or even individually, is difficult to measure given that the ultimate objective of establishing food security is inherently unobservable- that is, there is no definite quantitatively measurable outcome. Rather we study a series of related outcomes such as food expenditures, diet-related disease rates and morbidity, changes in household income and workforce development, and attempt to discern from these whether a program may have had some impact (Barrett, 2002, 51).

It is generally agreed that these programs do have an impact in reducing food insecurity, as there is evidence from a natural experiment that “a 10-percentage-point cut in the share of the population that receives public assistance increases the share of food-insecure households by about 5 percentage points” (LeBlanc et al., 2007). However, it has been argued that these programs are not adequately targeted, too easily manipulated by political machinations and the desire to provide immediate relief (Barrett, 2002, 34). The exact magnitude of impact on a particular subset of the population is, as stated above, hard to determine, especially when we consider that most measures of outcome seem to be measures of an “addition” to an individual’s food security rather than an “improvement” (Barrett, 2002, 52).

We will not attempt to assess program effects in this section, except to cite utilization statistics where applicable. Research indicates that lack of information and substantial participation and transaction costs are the primary drivers of non-participation in public assistance programs (Barrett, 2002, 65). Thus, we provide a short overview of some of the available programs here, with details listed in the report’s Appendix- but it is by no means an exhaustive list. These food

assistance programs can be roughly grouped into four categories: Financial Assistance Programs, Nutrition Programs, Grant Programs, and Distribution Programs.

1. Financial Assistance Programs

Also known as food subsidy programs, these programs allow the government to increase access to food for low income households by making food more affordable. They normally follow some type of Federal Poverty Level-based income guidelines for eligibility, and may have other requirements or necessitate other administrative costs.

2. Nutrition Programs

Nutrition programs are also usually government subsidies, intended to promote certain nutritional values in a particular targeted population. They may also fund nutrition education.

3. Grant Programs

These are programs designed to support a variety of community food activities, in an effort to build system sustainability and promote local initiatives. Funding by application only. Applicants and beneficiaries are generally restricted to group entities rather than individuals, resulting in indirect benefits to community members.

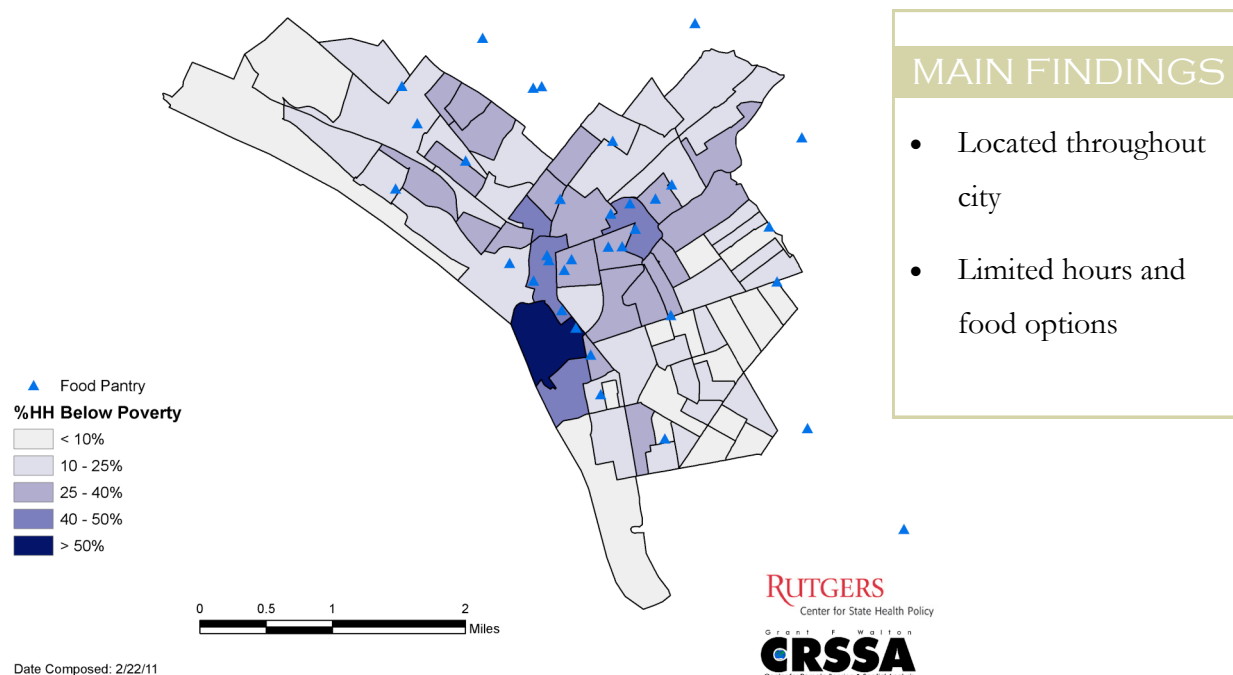
4. Distribution Programs

These programs are designed to distribute food resources to needy populations. Food for these programs is usually obtained from federal government programs, private donations, and nonprofit providers. These food donation programs are intended to help close the gap between a household's purchasing power and the cost of the minimum food basket. Some concerns have been voiced about how these programs may limit food choice, that storage and transport add to administrative costs, and that they are subject to creating market distortions and disincentives to provide own food, and vulnerable to theft, fraud, and uncertain outcomes (Barrett, 2002). They also seem to have mixed effects on nutrition, as nutrition is often not their primary goal. (LeBlanc et al., 2007).

The resources distributed by donation programs are usually handled by Emergency Feeding Organizations (EFOs). The EFO serving Mercer County is the Mercer Street Friends Food Bank. This is discussed in more detail in the following section:

LOCAL FOOD PANTRIES

Map 1: Trenton Food Pantries



Mercer County food pantries served about 6,000 families per month in the first half of 2010; an increase of 24 percent over 2009. This section serves as a more in-depth discussion of the non-profit sector. Mercer Street Friends (MSF) is a Regional Food Bank belonging to the national network of Feeding America. Of the six regional food banks in New Jersey, MSF is geographically the smallest. About 95 percent of those served at the Morrisville Food Pantry in Pennsylvania are also Trenton residents.

Food banks play several important roles in the food system. They are primarily distribution centers. Their clients are agencies and charities, and these charities serve citizens. These charities include soup kitchens and ancillary locations (meals), choice pantries, pre-bagged, individual bag pantries (grocery bags), shelters (meal and shelter), and most non-profits and religious organizations that have programs to feed the hungry. The majority of charitable food agencies in Trenton are bagged food pantries, but some are choice pantries. Bagged food pantries generally

provide pre-packed bags, but some have individual bags and some pre-packed food packages are customized depending on personal characteristics (diabetic accommodation, etc.). Food banks also concern themselves with nutrition education and advocacy, looking to inform, educate, and persuade policymakers on key issues. MSF does food stamp outreach (pre-screening, applying, coordination, njhelps.org), and has a part-time food stamp outreach coordinator to help community members enroll in food stamp programs to increase food access.

MSF has 55 member agencies, including food pantries, soup kitchens, social service agencies with food programs, daycares, shelters. Sites are visited once a year for compliance. Not all pantries are open regularly, and sometimes as infrequently as just once a month.

Food Stock:

The food resources managed by the food bank typically come from one of four sources: state or federal government, food industry or private donations, Feeding America/Community Food Bank, or goods purchased by the food bank with public money. Farmers individually are generally too small and also have a different mentality about punctuality and acceptable quality of food.

Federal and State Government:

50 percent of food stock comes from TEFAP. TEFAP resources are allocated based on poverty and unemployment levels. The New Jersey Department of Agriculture also allocates based on poverty and unemployment levels, while food banks allocate to their clients based on the number of people they serve. The federal portion relative to all sources has been increasing, which is a concern because it is not good to be dependent on federal funding when the USDA budget is always set to change, so the amount is variable.

Both the state and the federal governments tend to choose the same products over and over (protein, canned fruits/vegetables, dairy). TEFAP provides over 70 different food items, including grains like rice, pasta, and cereal, canned goods like beans, meat and fish, and fruits and vegetables, raisins, peanut butter, and fruit juices (New Jersey Department of Agriculture, 2010). Sometimes the TEFAP allocation includes bonus commodities, which are given to the State for

free and largely depend on farmers' surpluses.

TEFAP and states have to do reporting for free programs, and there is a set calculation for each agency depending on households served. MSF must therefore be careful to keep track of incoming/outgoing and pick-up/drop-off logistics.

Food Industry/Retailers Donations:

Currently, less quantity and quality of foods is being provided by the food industry, and food drive donations are down. This can most likely be attributed to the economic situation. Food from food industry changes daily (in terms of both quantity and what it is). Sam's Club provides free frozen meat that needs to get off the shelves, but it comes with compulsory purchase of baked goods. Target is also a common provider, and some pantries also do smaller pick-ups direct at retailers like Panera and Trader Joe's.

Purchased:

Food purchased with State money (using the State Food Purchase Program, which is discussed in more detail in the Appendix) is free to all food pantry participants, but not all food at food banks is free. MSF is selective about foods it accepts; 90 percent "healthy" according to USDA. They are very concerned about obesity, and want to provide healthier food. The only consistent food items stocked at food banks are purchases (canned veggies, peanut butter and jelly, apple juice) and occasionally some rare non-food items like hand sanitizer or paper towels.

Operations:

Staff:

Food pantries largely rely on volunteers, but the volunteer base is largely aging out. Student volunteers are helpful but tend to have school breaks and other obligations that take priority, thus making them an unstable volunteer demographic.

Storage/Capacity:

Physical space for food storage and limited refrigerator/freezer space are issues for both the food bank and their client agencies. MSF uses banana boxes to store and sort, and vehicles with freezer blankets to transport goods that need refrigeration.

Pantries can turn down allocations, although they cannot throw out USDA food because it's tracked. Oversupply (like white rice) takes up floor space. There is also a process for discarding (ruining) food so people cannot dumpster dive for discarded products.

Delivery/Pick-up:

It is the individual charity's responsibility to pick up their allocation. Due to a lack of resources, many of these organizations need multiple trips. Donations are generally slow through January and February.

Produce is collected 1-2 times a week, from the Community Food Bank of NJ, Cumberland County auction leftovers, and occasionally the Tri-county Farm Co-op for summer, and a produce broker for winter, paid for with State money. Farmers Against Hunger pick up food farmers couldn't sell—less structure, no warehouse. Distribution days are Wednesday afternoon and Thursday.

Obstacles:

- Largest growth in those served is at suburban pantries; food insecurity is no longer an urban issue, as it is also growing in the suburban areas. Middle-class families never asked for help before the recession, and have mindset barriers. They do not know how to qualify for food stamps.
- Pantries seem to have trouble keeping up with the demographic changes. More Latino population results in translation problems amongst food pantries. Low income Asian populations are increasing as well.

POLICY RECOMMENDATIONS

1. Enhancing Food Pantry Capacities

Based on our conversation with MSF, we propose the following recommendations to improve the ability of food pantries to better serve their beneficiaries.

- **More refrigeration and cooler space:** A refrigerated truck would make things easier for longer and larger shipping routes.
- **Increased money for operations and capital:** For instance, refrigeration adds to the utilities bill for electricity. Since churches and other charities have minimum volunteers, more operations money would allow them to increase their staff for things like picking up food during limited hours and providing services. More money would also permit pantries to increase their open hours.
- **Teaching kitchen and a facility:** Resources for someone to provide nutritional education and cooking classes.

2. Corner Store Conversions

A major reason why corner stores do not promote healthy food is because of costs. Many Trenton-based corner stores are individually owned and operated and the owners simply lack the financial capacity to sell healthy food. For example, fresh produce and meat requires refrigeration, whereas nonperishable food items are less expensive to stock. As a result, the added expense to purchase and maintain refrigeration units discourage corner stores from selling healthy food. (“Fresh Food Retail,” 2011). One way to address this problem is by offering financial incentives to corner stores that make efforts to supply fresh food.

The City of Trenton can establish a corner store conversion grant program to encourage corner stores to sell healthy food products. Such grants can be used for the following purposes:

- Help storeowners pay for refrigeration units.
- Subsidize increased electricity costs associated with stocking fresh food.
- Modest store layout and remodeling changes to better accommodate healthy food.
- Employee training.
- Marketing and promotional materials.

Converting existing corner stores into healthy food outlets provides immediate and effective results. Corner stores are already well represented throughout the city. In contrast, it can take years to encourage a supermarket franchise to locate in downtown Trenton, and there is no guarantee that such efforts will end in success. Building a major supermarket in downtown Trenton will undoubtedly improve the overall food system, but such proposals are expensive, time consuming, and difficult to accomplish. Consequently, the most efficient way to strengthen Trenton's food system is by maximizing what is already there. Existing corner stores have the potential to be substantial fresh food outlets.

While such a policy may sound straightforward, corner store conversions are not without challenges. Throughout the nation, corner stores have traditionally relied on selling fuel, tobacco, and nonperishable food items. The dozens of corner stores located throughout Trenton certainly follow this pattern. Consequently, storeowners and city officials may incorrectly assume that there is not enough demand for fresh food. However, declining fuel and tobacco sales nationwide are causing corner storeowners to reevaluate their business practices (AAFC, 2010). Because of a lack of supermarkets in Trenton, corner stores can serve as a convenient fresh food outlet for many community members. Trentonians travel to supermarkets because there are few grocery options available within the city. The demand for fresh food in Trenton already exists, but unfortunately there is little supply currently available for Trentonians. Improving corner stores is an effective way to address the lack of supply that presently exists in Trenton.

Ultimately, enhancing healthy food access is an investment that can yield numerous societal and health benefits. Furthermore, corner store conversions can provide economic benefits as well. Many community members currently buy groceries from supermarkets outside the city limits.

However, improving healthy food access in Trenton will keep dollars from leaving the city (“Healthy Corner Stores,” 2011). In the end, corner store conversions can greatly improve Trenton’s overall food security, while also stimulating the local economy.

Policy in Practice: Philadelphia

Corner store conversions have proven to be a successful policy initiative. The Healthy Corner Store Network (HCSN) strives to improve Philadelphia’s food security by providing funding and support for corner store conversions. The HCSN is a collaborative effort administered by city officials, local nonprofit organizations, and community members. While based in Philadelphia, the HCSN has nationwide support, with over 500 corner stores participating throughout the country. HCSN project manager Brianna Almaguer Sandoval believes the initiative has been tremendously successful at persuading storeowners to promote healthy foods. Sandoval claims, “Store owners are really embracing the program. Many of them already recognize the value of selling healthy products both for their business and for community health, saying that they just needed the help to get started” (“Fresh Food Retail,” 2011, 3). Ultimately, the HCSN proves that corner store conversion programs can be enormously effective at strengthening food security in communities with inadequate fresh food access.

Additional Resources:

The Food Trust Healthy Corner Store Initiative (HCSI) is a successful store conversion program that can also work in Trenton. The HCSI website provides additional information and guidance for converting corner stores.

<http://www.thefoodtrust.org/php/programs/corner.store.campaign.php>

The Healthy Corner Stores Network (HCSN) has many resources and reports dedicated to promoting healthy corner stores. These reports outline various ways communities can convert corner stores to healthy food outlets.

<http://healthycornerstores.org/resources/reports/>

The Brick City Development Corporation (BCDC) of Newark has recently started The Small Grocer Initiative to improve healthy food access in corner stores. Their program provides a nice model for Trenton to emulate.

<http://www.bcdcnewark.org/small-business/small-grocer-initiative/index.html>

3. Supermarket Financing

A review of the major literature on food access, encompassing 132 studies, reveals significant findings linking supermarket access and food justice (Treuhart and Karpyn, 2010):

- **Proximity to supermarkets is clearly linked with healthier eating habits, particularly more fresh food consumption** – e.g. one study found adults with no supermarkets within a mile of their homes 25 to 46 percent less likely to have a healthy diet than those with the most supermarkets near their homes.
- **Proximity to supermarkets is linked with lower diet-related disease** – e.g. adults living in neighborhoods with supermarkets or with supermarkets and grocery stores have the lowest rates of obesity and overweight, teens with increased access to supermarkets are less likely to be overweight, and Philadelphians with a lack of supermarket access have higher rates of diet-related death.
- **People living in low-income and minority neighborhoods are less likely to live in proximity to a supermarket** – e.g. low-income neighborhoods have half as many supermarkets as the wealthiest neighborhoods and majority black neighborhoods have about half as many and majority Latino neighborhoods have a third as many supermarkets as predominantly white neighborhoods.
- **Bringing food retail such as supermarkets to underserved communities creates jobs and helps revitalize low-income neighborhoods** – e.g. underserved communities could retain the estimated \$8.7 billion in annual “grocery leakage” from inner-city neighborhoods; new supermarkets in under-served areas increased home property values four to seven percent (an average \$1,500); and grocery stores tend to attract complementary businesses like banks and pharmacies into the neighborhood.

Bringing supermarkets to lower-income areas is, therefore, important for many of the inter-related issues surrounding food justice, including access, health, and economic opportunity. Because there is only one supermarket located in Trenton, this is an option that needs to be considered, along with more immediate efforts such as the Healthy Corner Store Initiative, as a longer term strategy for increasing food access in Trenton. Moreover, the financing initiatives used to bring large supermarkets into underserved areas have also helped small neighborhood grocers up-grade their facilities and capacity. The Food Trust pioneered both initiatives as complementary efforts to increase food access in lower-income and under-served areas.

Policy in Practice: Pennsylvania Fresh Food Initiative

The Pennsylvania Fresh Food Financing Initiative (FFFI) is a public-private partnership created to provide loan and grant financing for qualified food retailers in underserved low-income communities and to help upgrade existing stores. This crucial service helps new business overcome the higher costs of venturing into underserved areas and helps existing stores to renovate and expand to provide healthier food. Since 2004, FFFI has helped develop 83 supermarkets and fresh food outlets throughout the state, increased healthy food access for over 400,000 residents and created or retained 5,000 jobs in those communities (Healthy Food, 2009).

The initiative started with the Food Trust, a non-profit dedicated to increasing healthy food access, the leadership of a committed congressional representative, and the \$30 million in state seed money the representative was able to leverage. Through a partnership with the Reinvestment Fund (TRF), a community investment group specializing in neighborhood revitalization finance, the initiative was able to generate projects totaling \$190 million.

New Opportunities: New Jersey Food Access Initiative and National Healthy Food Financing Initiative

The New Jersey Food Access Initiative (NJFAI) was created through a partnership between the New Jersey Economic Development Authority (NJEDA) and TRF to increase supermarkets and grocery stores in underserved areas in New Jersey. The nine priority cities for the initiative include Trenton, along with Atlantic City, Camden, East Orange, Elizabeth, Jersey City, Newark, New Brunswick, Paterson, and Trenton.

NJFAI provides financing for supermarkets wishing to locate in underserved areas where conventional financial institutions often fail to meet the infrastructure costs and credit needs. It provides loans to finance land acquisition, equipment, and construction. The program also has access to New Market Tax Credits (NMTC) funds, which provide below-market rate financing and financing with equity-like features. This can benefit borrowers by limiting their equity.

In November 2010, a bipartisan coalition in the House and Senate introduced bills to create a National Healthy Food Financing Initiative. The initiative would invest \$500 million in federal loans and grants to help leverage private investments to create and expand fresh food outlets in underserved communities. The President had proposed \$345 million to fund the initiative in the FY 2011 budget.

Resources:

The Pennsylvania Fresh Food Financing Initiative (FFFI) by the Food Trust was the pioneering supermarket financing program. The FFFI website provides information, studies and information brochures to help set up a financing initiative: <http://www.thefoodtrust.org/php/programs/fffi.php>.

The Reinvestment Fund (TRF) leveraged independent funding for the Pennsylvania Fresh Food Finance Initiative and is collaborating on healthy food financing initiatives in New Jersey and at the national level. See the following pages for information on:

Supermarket financing: <http://www.trfund.com/financing/realestate/supermarkets.html>.

New Jersey Food Access Initiative Fact Sheet and Application: http://www.trfund.com/financing/realestate/NJ_FoodAccessInitiative_HandoutwApp.pdf.

Comprehensive Fact Sheet on the Pennsylvania FFFI: http://www.trfund.com/resource/downloads/Fresh_Food_Financing_Initiative_Comprehensive.pdf

National Healthy Food Financing Initiative: <http://www.trfund.com/financing/realestate/NFFFI.html>

Infill Philadelphia: Food Access presents innovative designs options to increase fresh food retail in urban neighborhoods: <http://infillphiladelphia.org/food-access.php>

HEALTHY PEOPLE

ACTION 2

INTRODUCTION

The following portion of our report builds upon the elements presented within Justice and Fairness by highlighting elements in Trenton that inhibit the health of its residents. The element of Healthy People looks to “ensure the health and well-being of all people, inclusive of race and class” (Whole Measures 2009, 8). However, due to a variety of aspects expressed within Justice and Fairness, the residents of Trenton, especially its school-aged population, do not have access to fresh, healthy food. A 2010 study by the Rutgers Center for State Health Policy and the Robert Wood Johnson Foundation found that Trenton has the highest rate of overweight and obese students in New Jersey (New Jersey Childhood Obesity Study). To further investigate this result we first define obesity and why it is a cause for concern in terms of health and the economy. Second, we outline main components of the National School Breakfast and Lunch Programs to illustrate holes in national policy related to the nutrition of school-aged children. Finally, we apply the findings of the New Jersey Childhood Obesity Study to data we collected from the Trenton School District to show the direct connection between obesity rates and the role that schools play in the promotion of healthy lifestyle choices for students.

SECTION 1: THE DANGERS OF CHILDHOOD OBESITY

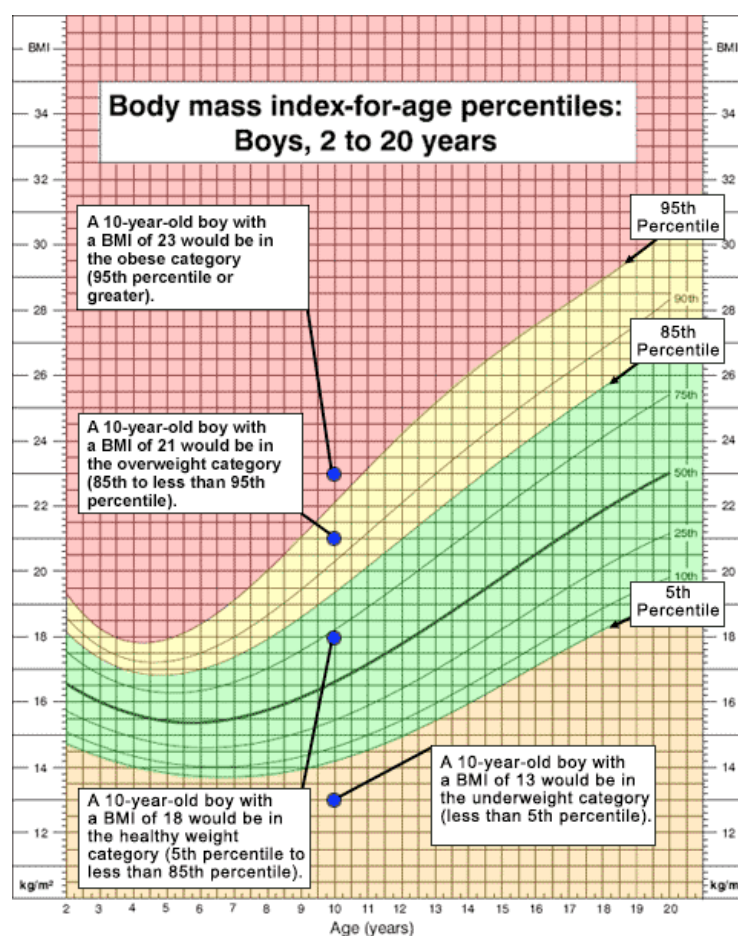
What is obesity?

There are many arguments for greater access to healthy food, but perhaps none is more eye opening than the alarming trend that has been prevalent in this country for the better part of three decades. Since 1980, childhood obesity has skyrocketed, tripling in 6 to 11 year olds – from 6.5 percent to 19.6 percent. The increase of obesity amongst adolescents aged 12 to 19 nearly quadrupled, from 5 percent in 1980 to 18.1 percent in 2008 (CDC 2011, 3). Despite this widespread problem, there remains much confusion surrounding the origins of the issue and even the meaning behind of the word “obese.”

The primary measurement for determining childhood obesity is the body mass index (BMI) of a child. The BMI is attained by measuring weight in relation to height; it is the most widely accepted form of calculating obesity in children and adolescents because height and weight numbers are relatively easy to obtain and totally non-invasive (CDC 2011, 1). It is important to remember, however, that while BMI is an accepted tool in screening for obesity, it is not a foolproof diagnostic measurement, as height and weight do not always correlate to body fatness. For example, BMI levels can vary between genders and across age ranges, because as children grow older their body types can change from one year to the next. Therefore, a child might have a higher BMI one year than in his previous years simply because he has not finished growing yet.

Nevertheless, BMI has become the national standard for measuring obesity in the past several decades, especially amongst children. For making such a determination, a child's BMI number is placed on the Centers for Disease Control's (CDC) growth charts and plotted against the corresponding BMI/age percentile. A child is overweight if he or she has a BMI between the 85th and 95th percentile. A child is *obese* if he or she places above the 95th percentile. According to the 2007-2008 National Health and Nutrition Examination Survey (NHANES), 16.9 percent of children ages 2-19 nationwide are obese (CDC 2011, 4).

Image 1: Example of CDC Growth Chart measuring BMI levels (CDC 2011, 1)



Health risks associated with obesity

Children who struggle with obesity must deal with much more than just the social stigma of their high weight, although on a psychological level, this in itself can be a very serious condition for any school aged child. There are many health problems associated with dramatic weight gain that only get worse as a child gets older. Predictably, obese children are at a higher risk for cardiovascular disease, including elevated cholesterol and blood pressure levels. According to a population sample compiled by the CDC, 70 percent of obese children ages 5-17 had at least one symptom of cardiovascular disease, and 39 percent demonstrated two or more symptoms of the disease (CDC 2011, 2).

Unfortunately, health risks associated with childhood obesity do not end with heart problems. Type 2 diabetes is rapidly becoming one of the most prevalent consequences to

childhood obesity. Once common in only adults, overweight children are now more susceptible than ever before to the disease, which carries many dangerous health risks. Some of those health risks include advanced cardiovascular disease and a precursor to renal failure. Treatment for Type 2 diabetes can not only be life-changing, but also very expensive, putting an economic strain on families that already might be struggling to provide good, quality food for their children. Nestle writes that, “Rates of obesity are now so high among American children that many exhibit metabolic abnormalities formerly sign only in adults. The high blood sugar due to “adult-onset” (insulin-resistant type 2) diabetes, the high blood cholesterol, and the high blood pressure now observed in younger and younger children constitute a national scandal. Such conditions increase the risk of coronary heart disease, cancer, stroke, and diabetes later in life” (Nestle 2007, 7).

In addition, other health risks that are the result of childhood obesity include sleep apnea, asthma, and hepatic steatosis (CDC 2011, 2). Sleep apnea is another disorder that was in the past most commonly associated with older people, but due to recent increases in childhood weight gain, children are now falling victim to the disorder. Characteristics of sleep apnea include difficulty breathing during sleep that could last up to ten seconds. During time, oxygen levels in the blood fall dramatically. One of the minor side effects of sleep apnea is loud snoring, but if the condition goes untreated then it can lead to more serious health problems in the future. Similarly, asthma is another disorder that leads to breathing difficulty, in which the airways in the lungs narrows or is blocked. Although less common, there have been several studies linking asthma to increased levels of childhood obesity. Hepatic steatosis is a rare condition in which a high concentration of liver enzymes causes fatty degeneration of the liver. Although not as common as other obesity-related health concerns, this danger is still very real and can cause serious health risks in young children struggling with obesity. Again, much like type 2 diabetes, this can become a serious condition that might alter the life of a young person forever.

Economic Costs

According to a 2009 report in *Health Affairs*, there is an “undeniable” link between medical costs and the rising obesity rate in the United States (Finkelstein et al 2009, w822). Through 2006, the obesity epidemic accounted for nearly \$40 billion in additional healthcare costs, including \$7 billion in Medicare prescription drug costs. It has been estimated that costs will rise 10 percent

each year, putting an undue strain on an already fragile economy.

The costs do not end there, however. Health problems associated with obesity create an individual economic burden that increases every year. In 2006, obese people were forced to pay an average \$1,429 more than normal-weight people (Finkelstein et al 2009, w825). These costs include diagnosis and treatment of illnesses including heart disease and diabetes.

How did we get here?

One might wonder how we as a society got to this point. In just the last few decades, over 16 percent of America's youth is struggling with obesity. It is becoming more likely that many of our nation's health concerns, including childhood obesity, relate to the type of food we eat on a consistent basis. Michael Pollan discusses the problem of a poor "Western diet" in his book, *In Defense of Food*. Pollan writes about a group of American doctors and medical workers who studied food culture overseas and compared it to the Western diet early in the twentieth century. The medical experts eventually came to the conclusion that the Western diet was directly correlated to a rise in Western illnesses – diabetes, cardiovascular disease, and cancer. These illnesses simply were not as prevalent overseas as they were becoming at home. According to Pollan, the Western diet is "lots of processed foods and meats, lots of added fat and sugar, lots everything – except vegetables, fruits, and whole grains (Pollan 2008, 11).

Indeed, the "Western diet," is so ingrained in our culture that it is almost impossible to imagine a world without the foods that can make us sick. On every street, opportunities to buy highly processed, mass-produced food exist from local fast food restaurants to gas station convenience stores. This food is readily accessible and easy to consume because it is fast, easily attained, and often very cheap, thereby making a low-income city like Trenton a prime location to sell such low-quality food. According to the CDC, one in seven low-income, preschool aged children are obese; it is certainly no coincidence that these children most likely do not have ready access to healthy food (CDC 2011, 4). Therefore, many efforts have been made to reach out to low-income communities and attempt to change the way people understand what they eat and how they can change their diet for the better. One such initiative has become immensely popular across the country, and deals directly with providing children with quality food in school: the nationwide school meals programs.

SECTION 2: SCHOOL MEALS PROGRAM

Historical Look

The United States Department of Agriculture (USDA) administers the National School Lunch and Breakfast Programs. A federally assisted meal program, the National School Lunch Program provides nutritionally balanced, low-cost or free lunches to more than 31 million school children each day (USDA 2010, 1). “School districts and independent schools that choose to take part in the lunch program get cash subsidies and donated commodities from the USDA for each meal they serve. In return, they must serve lunches that meet Federal requirements, and they must offer free or reduced price lunches to eligible children” (USDA 2010, 1).

The federal government’s role in school food began in the late 1920’s because of farm surpluses, not need. As the Depression took hold and unemployment skyrocketed, the government established the Federal Surplus Relief Corporation to purchase farm surpluses and distribute them to the needy and unemployed (Poppendieck 2010, 48). The 1935 amendments to the Agriculture Adjustment Act established the relationship between farm surpluses and schools. “In order to receive the donations, schools had to agree that they would not sell or exchange the commodities or discontinue or curtail their normal food purchases. Lunch programs had to be operated on a nonprofit basis, and meals had to be provided free to children too poor to pay for them. *The focus was on using the available food, not on a balanced diet*” (Poppendieck 2010, 49). President Truman signed the National School Lunch Act into law on June 4, 1946, stating, “No nation is any healthier than its children or more prosperous than its farmers” (Poppendieck 2010, 52). Furthermore, both the Roosevelt and Truman administrations believed that providing nutritious meals to students would improve national security by increasing the number of healthy men and women to serve in the armed forces.

Focus of school food shifted to need under the 1960’s War on Poverty, which brought a variety of changes to the National School Lunch Act. First, amendments authorized funding to reimburse schools in impoverished areas for meals served, and subsequently, educators lobbied for the inclusion of a school breakfast program. The Child Nutrition Act of 1966 authorized the extension of benefits to preschool children and a two-year school breakfast pilot program. Additionally, funds were authorized for the “nonfood assistance title that could be used for

equipment” (Poppendieck 2010, 57). The 1960’s and 1970’s brought dramatic increases in the number of participating schools in the National School Lunch Program, children receiving free or reduced meals, and the amount of cash payments by the federal government to schools. However, domestic spending policies changed during the Reagan administration; as a result, schools dropped out of the program and students’ eligibility requirements were altered, allowing fewer children to receive free meals. In an effort to combat students’ fat and calorie intake, and prevent food contamination, the 1990’s and 2000’s brought more regulation to the National School Lunch and National School Breakfast Programs.

In the past six decades, school food “has meant the difference between the distractions of hunger and the ability to concentrate for literally millions of American school children. It has served as a politically acceptable outlet for surplus agricultural commodities and thus a tool for managing the farm economy. It has provided family-friendly jobs for thousands of breadwinners, and it has offered a great convenience for millions of families stressed by increased work hours and complex lives” (Poppendieck 2010, 260). “The well-being of children has always had to compete with other agendas: the disposal of farm commodities or the maintenance of segregation or the reduction of the federal budget deficit. It is time to see what we can do if we put children first” (Poppendieck 2010, 260).

Nutrition

School meals must meet the nutrition recommendations within the USDA’s “Dietary Guidelines for Americans.” Such recommendations include “no more than 30 percent of an individual’s calories come from fat, and less than 10 percent from saturated fat” (USDA 2010, 1), and standards for protein, Vitamin A, Vitamin C, iron, calcium and calories. While these requirements set the baseline for school meals, “decisions about what specific foods to serve and how they are prepared are made by local school food authorities” (USDA 2010, 1). As discretion is left to local authorities, most schools in the United States have no comprehensive nutrition policy specifying what kinds of food and drink are considered healthy or appropriate to be sold on their premises” (Okie 2005, 191).

Societal changes related to food directly affect the items served and sold in schools. Processed, portable foods such as frozen pizza, French fries, and chicken nuggets are the most


prevalent foods along a school lunch line. Not only are these the types of food children across the country recognize and are comfortable eating, “single-serving items save time on distribution as well as preparation” (Poppendieck 2010, 99). Changes in family structure, parental labor market participation, and the amount of activities participate in have resulted in dramatic shifts in eating patterns. Portable foods and those that are prepared quickly are more prominent in average American households. Furthermore, processed foods with ingredients such as high fructose corn syrup, soybean oils, or artificial sweeteners are less expensive than fresh foods (Poppendieck 2010).

Competitive foods sold in vending machines, such as chips, cookies, or soda pose another obstacle for school meals. As competitive food sales are revenue driven, often to the benefit of the school or student organizations, students are willing to spend their lunch money on brand name foods they recognize. Another revenue generating meal option for schools is the adoption of a la carte sales. To offset costs lost by the exodus of full-price students, schools expanded their menus to include branded foods similar to what students purchase outside of school, for example Taco Bell or Burger King (Poppendieck 2010, 89). According to Poppendieck, “A la carte items today are available in three-fourths of elementary schools and nine out of ten secondary schools” (Poppendieck 2010, 89).

School officials in some health-conscious districts have successfully lowered the fat content in school lunches and breakfasts. For example, in Rocky Boy's, Montana, tribal leaders on the Chippewa Cree reservation worked with a dietitian to revamp the school menu in an effort to combat high rates of obesity and diabetes among American Indian children there. Dietitian Tracy Burns got rid of premade pizzas and sugary cereals. She persuaded the school bakers to switch from white to whole wheat flour. She eliminated 2 percent milk (instead offering only 1 percent), instituted a daily salad bar, and increased schools' purchases of fresh fruits and vegetables. She asked school cooks to mix the higher-fat ground beef provided by the USDA subsidy with leaner ground beef or buffalo meat that the food service purchased locally. And students were no longer allowed seconds at meals except for fruits and vegetables. (Okie 2005, 194).

The Healthy, Hunger-Free Kids Act of 2010 authorizes funding for federal school meal and child nutrition programs and increases access to healthy food for low-income children. In an effort to combat the growing problem of childhood obesity, the Act gives the USDA the authority to set nutrition standards for all foods regularly sold in schools during the school day; these include vending machines, the “a la carte” lunch lines, and school stores. Further it provides additional funding to schools that meet updated nutritional standards (Let’s Move 2010, 1). The Act also provides for the expansion of access to drinking water, nutrition requirements for milk aligned with the most recent Dietary Guidelines for Americans, and the creation of an organic food pilot program which will establish networks between farms and schools and create school gardens (US Congress 2010).

Image 2: Healthy, Hunger-Free Kids Act of 2010 Sample Menu



HEALTHY, HUNGER-FREE KIDS ACT OF 2010
Before/After Elementary School Lunch Menu

Monday	Tuesday	Wednesday	Thursday	Friday
<p><u>BEFORE</u></p> <p>Bean and cheese burrito (5.3 oz) with mozzarella cheese (1 oz) Applesauce (1/4 cup) Orange Juice (4 oz) 2% Milk (8 oz)</p> <p><u>AFTER</u></p> <p>Submarine Sandwich (1 oz turkey, .5 oz low-fat cheese) on Whole Wheat Roll Refried Beans (1/2 cup) Jicama (1/4 cup) Green Pepper Strips (1/4 cup) Cantaloupe wedges, raw (1/2 cup) Skim Milk (8oz) Mustard (9 grams) Reduced fat mayonnaise (1oz) Low Fat Ranch Dip (1 oz)</p>	<p><u>BEFORE</u></p> <p>Hot dog on bun (3 oz) with ketchup (4 T) Canned Pears (1/4 cup) Raw Celery and Carrots (1/8 cup each) with ranch dressing (1.75 T) Low-fat (1%) Chocolate Milk (8 oz)</p> <p><u>AFTER</u></p> <p>Whole Wheat Spaghetti with Meat Sauce (1/2 cup) and Whole Wheat Roll Green Beans, cooked (1/2 cup) Broccoli (1/2 cup) Cauliflower (1/2 cup) Kiwi Halves, raw (1/2 cup) Low-fat (1%) Milk (8 oz) Low Fat Ranch Dip (1 oz) Soft Margarine (5 g)</p>	<p><u>BEFORE</u></p> <p>Pizza sticks (3.8 oz) with marinara sauce (1.4 cup) Banana Raisins (1 oz) Whole Milk (8 oz)</p> <p><u>AFTER</u></p> <p>Chef Salad (1 cup romaine, .5 oz low-fat mozzarella, 1.5 oz grilled chicken) with Whole Wheat Soft Pretzel (2.5 oz) Corn, cooked (1/2 cup) Baby Carrots, raw (1/4 cup) Banana Skim Chocolate Milk (8 oz) Low Fat Ranch Dressing (1.5 oz) Low Fat Italian Dressing (1.5 oz)</p>	<p><u>BEFORE</u></p> <p>Breaded beef patty (4 oz) with ketchup (2 T) Wheat roll (2 oz) Frozen Fruit Juice Bar (2.4 oz) 2% Milk (8 oz)</p> <p><u>AFTER</u></p> <p>Oven-Baked Fish nuggets (2 oz) with Whole Wheat Roll Mashed Potatoes (1/2 cup) Steamed Broccoli (1/2 cup) Peaches (canned, packed in juice - 1/2 cup) Skim Milk (8 oz) Tartar Sauce (1.5 oz) Soft Margarine (5 g)</p>	<p><u>BEFORE</u></p> <p>Cheese pizza (4.8 oz) Canned Pineapple (1/4 cup) Tater Tots (1/2 cup) with ketchup (2 T) Low-fat (1%) Chocolate Milk (8 oz)</p> <p><u>AFTER</u></p> <p>Whole Wheat Cheese Pizza (1 slice) Baked Sweet Potato Fries (1/2 cup) Grape tomatoes, raw (1/4 cup) Applesauce (1/2 cup) Low-fat (1%) Milk (8 oz) Low Fat Ranch Dip (1 oz)</p>

Comparison of Current NSLP Elementary Meals vs. Proposed Elementary Meals

Qualification and Participation

Children attending a school participating in the National School Lunch Program or the School Breakfast Program are welcome to purchase a meal. Yet, “children from families with incomes at or below 130 percent of the poverty level are eligible for free meals, while those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, for which students are charged no more than 40 cents” (USDA 2010, 2). In fiscal year 2009, over 31.3 million children were served lunch through the program, and 11.1 million were served breakfast (USDA 2010).

Discrepancies arise between the number of children eligible, those served, and meals consumed. “Participation declines with age and school level, is higher for males than females, and is higher for students who receive free and reduced price meals than for students who do not – more than four times as high” (Poppendieck 2010, 137). Factors that contribute to low participation rates include if children like the food served in schools, time constraints on lunch periods, cafeteria environments, and the availability of alternative food sources (Poppendieck 2010). Stigma is another contributing factor to low participation rates among students in secondary schools. Stigma occurs as a deterrent to families applying for meals and to children from taking part once they are a part of the program. “The food is disparaged precisely because the poor kids, the kids who are not cool, eat it” (Poppendieck 2010, 194).

Reimbursements

The main form of monetary support the USDA provides to schools participating in the National School Lunch and School Breakfast Program is in the form of cash reimbursements (USDA 2010, 2). For the 2010-2011 reimbursements are as follows:

Table 1: USDA Reimbursement Rates

Free Lunch	Reduced-price Lunch	Paid Lunch
\$2.72	\$2.32	\$0.26
Free Breakfast	Reduced-price Breakfast	Paid Breakfast
\$1.48	\$1.18	\$0.26

Such cash reimbursements are provided to cover the cost of food and labor to prepare meals. Rates are slightly higher in Alaska and Hawaii, however they do not account for cost of living differences among regions in the continental United States. The quality of food served in schools is reflected by the low reimbursement rates by the USDA. For one student served a free breakfast and lunch, the school receives a total of \$4.20 from the federal government, hardly enough to cover the price of a well-balanced meal for one serving, let alone two. In some cases, schools are offered equipment grants to cover costs associated with the installation or upgrade of kitchen facilities. The operating costs of such equipment is yet another factor one must take into account when looking at the amount of money a school is reimbursed to provide a meal. One shining light associated with reimbursement rates is that schools may qualify for higher reimbursements if 40 percent of their lunches are served free or at a reduced price in two consecutive years, such reimbursements are known as “severe need” (USDA 2010, 2). The USDA states, “Severe need payments are up to 28 cents higher than the normal reimbursements for free and reduced-price breakfasts” (USDA 2010, 2).

SECTION 3: THE NEW JERSEY CHILDHOOD OBESITY SURVEY DATA

In the summer of 2010, the Rutgers Center for State Health Policy, supported by the Robert Wood Johnson Foundation, published *The New Jersey Childhood Obesity Study*, which surveyed 1700 families in five major cities throughout the state. These five cities were Camden, Newark, New Brunswick, Trenton, and Vineland. Utilizing data attained from household surveys, existing statistics related to the food environment in these cities, and height and weight measurements recorded in schools, the researchers found that The City of Trenton has the highest percentage of overweight and obese children at 47.3 percent. According to the National Health and Nutrition Examination Survey, the national average for overweight and obese children is 31.7 percent -- a startling 16 percentage points below the Trenton average.

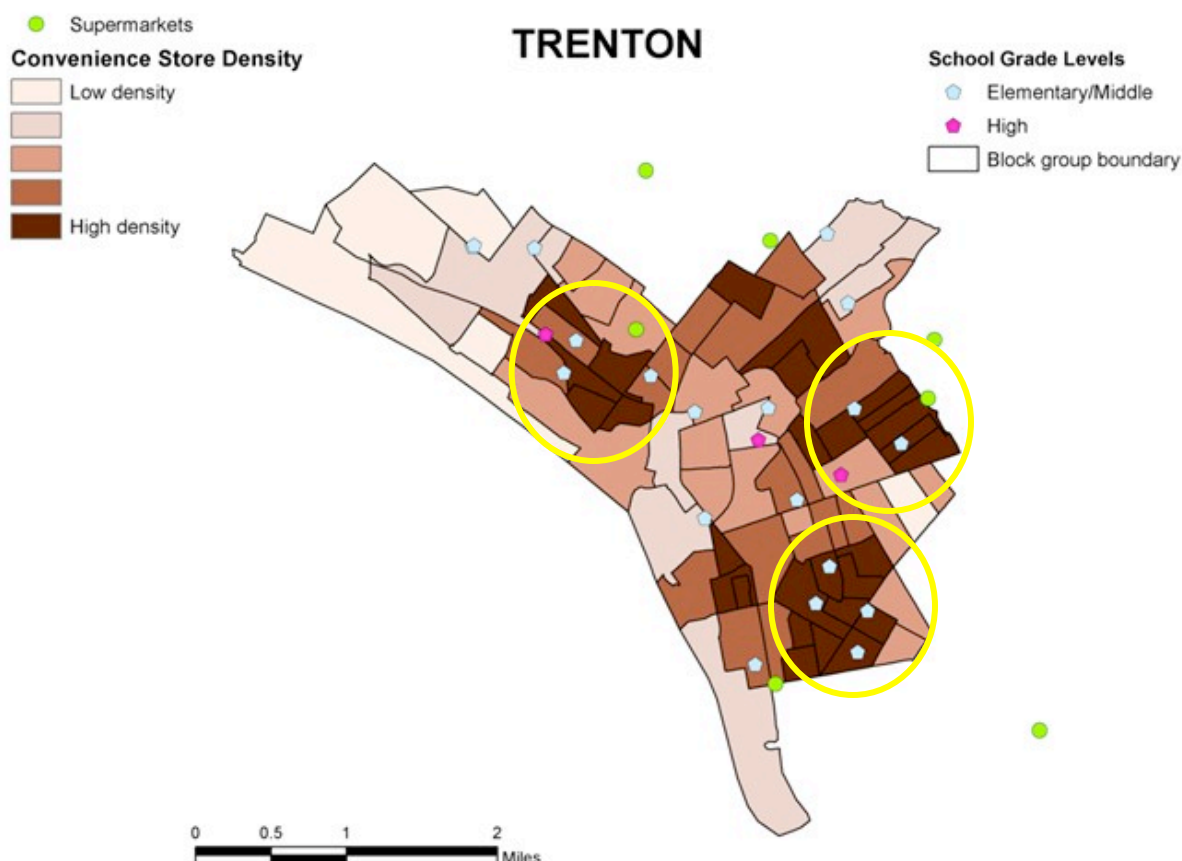
**Prevalence of Childhood Overweight and Obesity
In Five New Jersey Cities**

		Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
City (Ages 3-19)	Camden	39.8%	23.3%	17.3%
	Newark	44.2%	25.2%	18.3%
	New Brunswick	46.4%	26.7%	19.9%
	Trenton	47.3%	28.0%	21.0%
	Vineland	43.6%	25.3%	18.5%
NHANES (Ages 2-19)	All	31.7%	16.9%	11.9%
	Non-Hisp Black	35.9%	20.0%	14.9%
	Mexican Am	38.9%	20.8%	14.9%
	Hispanic	38.2%	20.9%	15.2%
	Non-Hisp White	29.3%	15.3%	10.5%

Sources:
CSHP 2010, BMI data from public schools in 5 NJ cities, 2008-2009
NHANES 2007-2008 data

RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

Why is the childhood obesity rate in Trenton so high? One of the main reasons could very well have to do with the availability and accessibility of quality, nutritious food. The following map shows a graphical representation of the number of convenience stores located throughout Trenton, compared to the locations of the few supermarkets in the city, as well as the locations of elementary, middle schools, and high schools. Supermarkets are the green dots, and Trenton schools are represented by the blue and purple dots. The darker shade of red represents a higher concentration of convenience stores that sell mass-produced, highly processed foods that are low in nutritional value and high in sugars and fats.

Map 1: Supermarkets, Schools by Grade Level and Mean Convenience Store Density

As illustrated in Map 1, nearly half of the schools are located within or nearby the areas most densely populated with convenience stores (as indicated by the yellow circles). These stores are the main sources of food for children as they travel to and from school each day. The New Jersey Childhood Obesity study reported that one-third of food shoppers in Trenton regularly have difficulty finding fresh produce and low-fat items in even the few supermarkets around the city – never mind the convenience stores. This food environment, one that makes establishing healthy eating habits nearly impossible, is a major contributing factor to the skyrocketing childhood obesity rate in Trenton. If the only food source available outside of school is bad for you, then how can you expect a child to make healthy food decisions?

Ideally, school meal programs should provide a source of healthy, well-balanced options for kids who do not have access to nutritious food outside of school, while also teaching kids the merits of making healthy eating decisions. The data, however, suggest otherwise. 48 percent of

children ages 3-5 are struggling with weight issues and are obese and overweight before they even enter school. As they progress through grade school, however, these numbers remain stubbornly high. The food served in school does not lower the high percentage of students who are obese and overweight.

Trenton
Prevalence of Childhood Overweight & Obesity
 By Age Group

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
3-5 yrs	(n=455)	51.4%	48.6%	26.2%	19.3%
6-11 yrs	(n=4,682)	52.3%	47.7%	28.5%	21.7%
12-19 yrs	(n=2,956)	53.6%	46.4%	27.4%	20.1%
Total	(n=8,093)	52.7%	47.3%	28.0%	21.0%

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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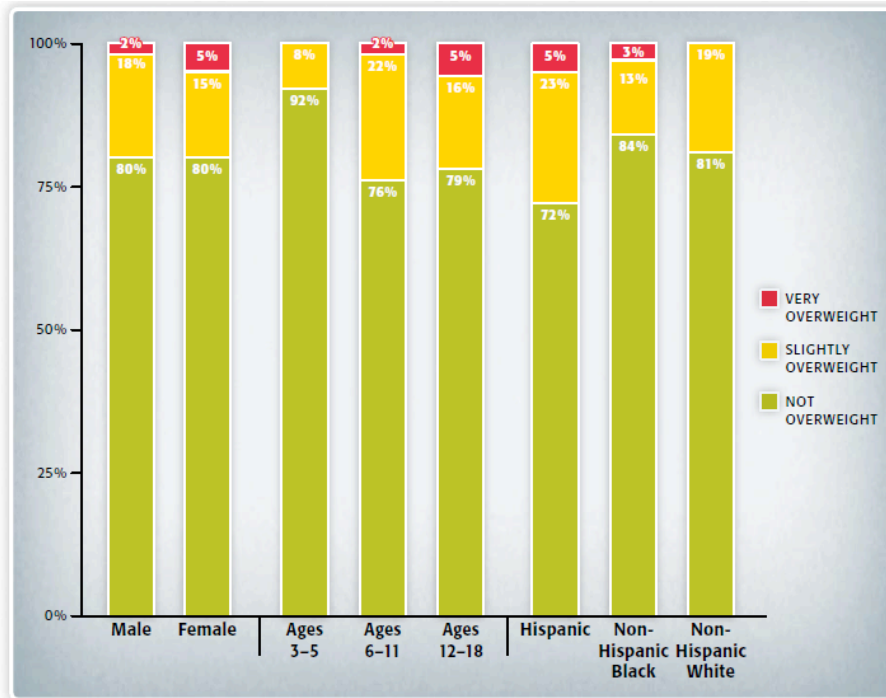
Upon entering middle school and up through high school, the number of obese and overweight students dips slightly, but not a significant amount; 46 percent of students are obese and overweight. These formative years are when children should be learning, in addition to multiplication tables and grammar lessons, how to make healthy lifestyle choices. The food they are served in school should exist as a positive example of how to live a healthier lifestyle. Unfortunately, the breakfasts and lunches being served in the cafeteria is often no different from what you would typically find at a corner convenience store.

Parents' perception of obesity

While food served in schools strongly impacts obesity rates among children, societal and family perceptions strongly encourage their eating habits. According to the New Jersey Childhood Obesity Survey, “despite the high prevalence of overweight and obesity among children attending

Trenton public schools, when asked about their child’s weight status in the survey, a vast majority of parents of Trenton children do not think their children are overweight or obese” (Rutgers 2010, 9).

Graph 1: Parent’s Perception of Child’s Weight Status

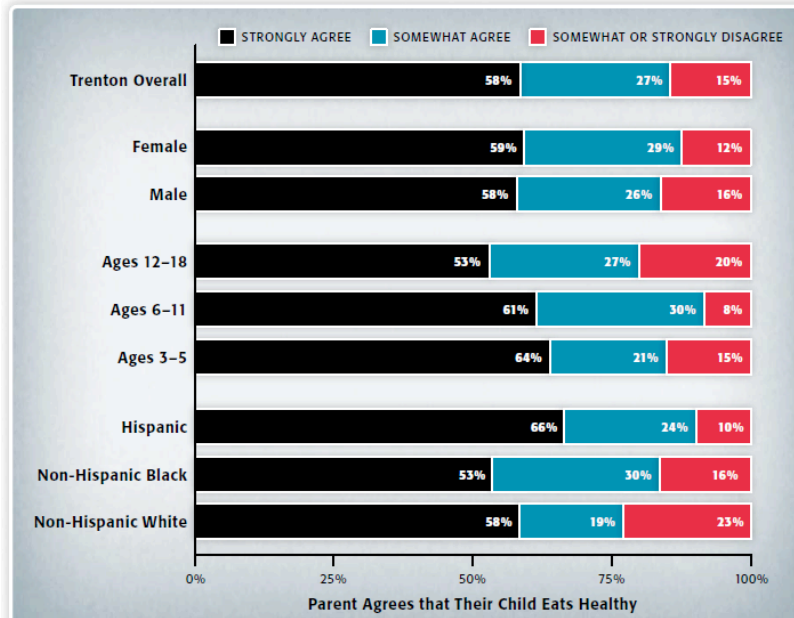


Trenton parents overall are likely to say that their children are not overweight, while “parents of Hispanic children are more likely to say their children are overweight (28 percent) than parents of non-Hispanic black (16 percent) and white (19 percent) children (Rutgers 2010, 9). This trend is startling because “Hispanic children in Trenton are about 1.5 times as likely to be obese compared to Hispanic children nationally,” and they are more likely to be obese and overweight than non-Hispanic black and white children in the city (Rutgers 2010, 8).

Graph 2: Childhood Weight Status by Race/Ethnicity: Trenton Public Schools v. U.S.

NOTE: This chart presents data from Trenton public schools (2008–2009), NOT survey data. National data (NHANES, 2007–2008) are based on 2–18 year-olds, while the Trenton data are based on 3–18 year-olds. Bar totals may not equal 100% due to rounding.

In addition to parental perceptions in terms of obesity, Trenton parents believe that their children are practicing healthy eating habits. “Overall, 85 percent of parents strongly agree or somewhat agree that, in general, their child eats healthy” (Rutgers 2010, 22). Again, parents of Hispanic children are more apt to think that their child is eating healthy, with rates of 90 percent compared to 84 percent for non-Hispanic black and 77 percent for white children.

Graph 3: Parents Think Their Children Eat Healthy

NOTE: Bar totals may not equal 100% due to rounding.

SECTION 4: TRENTON SCHOOL DISTRICT

School Meal Participation

Home to nineteen operating schools, the Trenton school district's population consists of approximately 11,000 students. The district is comprised of three high schools, one middle school and fifteen elementary schools. Currently, 72 percent (about 8,000 students) of the district's population is eligible for free and reduced school meals. The schools with the highest percentage of students eligible for free and reduced school meals, Parker Elementary (86 percent), Woodrow Wilson Elementary (87 percent), and Washington Elementary (89 percent) are located in the section of Trenton in which more than 50 percent of households are below the federal poverty level, as determined by the New Jersey Childhood Obesity Study.

As a universal breakfast district, every student is eligible to participate in the School Breakfast Program administered by the USDA; however, only 17 percent of students received this meal on an average school day in February. The main obstacle to participation is the timing of the program; students do not arrive to school early enough to be able to receive the meal. Two schools are currently running a pilot program called Breakfast in the Classroom, which serves the meal during homeroom. If this pilot program is successful, it will be expanded next school year.

Breakfast improves student outcomes in school. It allows them to focus on schoolwork and decreases behavior problems. Among schools with breakfast in the classroom programs, principals and teachers "surveyed believed that the program had been successful in increasing concentration and alertness during the morning hours and in reducing tardiness, morning visits to the nurse's office, and morning disciplinary actions" (Poppendieck 2010, 36). Trenton school principals have the choice to participate in Breakfast in the Classroom. Despite research supporting improved educational outcomes, fewer behavioral disruptions, and health benefits for students, Breakfast in the Classroom programs are seen as problematic in Trenton schools because of the threat of pests appearing in classrooms, and the potential of a higher volumes of messes throughout the building.

During the academic year of 2010-2011, 72 percent of students in the Trenton School District qualified for free and reduced meals through the National School Lunch Program. In the month of February 2011, only 68 percent of approximately 8,000 students received such a meal on any given day. Rates of participation among elementary and middle school students range from 62

percent to 83 percent while high school participation rates are much lower, 43 percent at Trenton Central High School. These numbers confirm national trends discussed earlier in which the stigma of school meals for children as they age.

Food Provider

The Trenton School District contracts with Aramark to provide school meals. Aramark provides schools with monthly menus, which are posted in the classroom and students are encouraged to take copies home. Aramark's website states that school districts partnered with them "consistently experience greater student participation in school lunch programs, improved quality and service, boost student satisfaction, and achieve cost reductions" (Aramark 2011). Furthermore, their website promotes their commitment to nutrition and wellness, claiming to provide meals that meet or exceed the Child Nutrition Program nutrient standards. This is provided through fresh vegetables, salads, and fruit options; low-fat meals and low-and nonfat dairy options; whole grains for increased fiber; elimination of added trans-fat; reduction of processed foods, added fats, sugar, and salt; organic choices; and baked, rather than fried, items (Aramark 2011). Aramark currently provides Trenton students with incentives to participate in school breakfast. Cards are stamped each day they receive a meal and at the end of the year, the student with the best attendance will receive a Nintendo. Finally, in addition to providing school meals, Aramark supplies schools in Trenton with snack foods after lunch period, consisting of cookies, chips, and cakes. Examples of February 2011 Aramark menus for meals served for breakfast and lunch are included at the end of this section.

School Curriculum

Physical education requirements vary for elementary schools and secondary schools in the Trenton School District. At one elementary school, students partake in physical education classes one to three times per week, dependent on grade and marking period. Each class period runs for forty minutes and activities fluctuate as the seasons change. This school uses the President's Challenge Program as its physical education curriculum. The Physical Fitness Test of this program recognizes students for their level of physical fitness in five activities, curl-ups, shuttle run, endurance run/walk, pull-ups, and v-sit reach (The President's Challenge 2011). Generally, students need improvement across the board in terms of their physical fitness. While the Physical Fitness

Test is often the national standard for physical education curriculums, it is not a district wide standard in the City of Trenton.

Recess is yet another area in which the Trenton School District does not have a consistent policy. Some schools have a dedicated recess time that counts towards the physical education requirement. In schools that do not have recess, some teachers chose to take their students outdoors to give them an opportunity to play outside during their lunch period. However, the combined recess and lunch period total only 40 minutes. It is often the case nationwide, that children wish to spend more of this period playing; therefore they may skip the lunch line, or rush through their food and not eat a complete, nutritious meal, even if that is what they were served.

The Trenton Board of Education currently has a contract with the Rutgers Cooperative Extension, through the New Jersey Agricultural Experiment Station, to provide nutrition education in all schools.

“Schools Have a Very Important Role to Play.”

We interviewed school employees of the Trenton Board of Education who believe that schools play a critical role in encouraging healthy lifestyle choices for students. Unfortunately, the lack of funding and a greater emphasis on testing result in significant cuts in time and resources to physical education. Students across the board are negatively affected in terms of their health outcomes. In one school, the physical education program incorporates a diverse range of activities that students can learn, enjoy, and carry with them through life. Healthy lifestyle choices are also built into this curriculum. Lessons for older students include anti-smoking and drug use. Schools teach younger students about healthy eating through laminated cards with pictures of different foods. For example, in February, Heart Healthy Month, students created a game called “Cholesterol Tag.” The taggers consisted of food items that represented refined sugar, processed carbohydrates, and saturated fats. After a specified number of tags by cholesterol, students had a heart attack and had to wait for another group of students to take them to the hospital. Students in the hospital had to participate in heart health activities like jumping rope, jumping jacks, or jogging in order to be heart healthy again and return to the game.

While school employees recognize their important roles in teaching healthy and nutritious eating habits to their students, they live in a false reality. When asked for her view on the School Breakfast Program, one principal stated that she believed most of her students participated in the

program and that it was successful. However, according to information received from the Trenton Board of Education regarding participation rates for the month of February, the breakfast participation rate of the school in question was a mere 23 percent, even though 100 percent of students qualified. Additionally, this principal noted that hungry students receive food from the school nurse. Rather than making efforts to extend the breakfast program to ensure that all students participate and receive a meal if they are hungry, this method demonstrates a problem in the system. When asked what she believes the role of schools in encouraging healthy lifestyles for students, this principal responded,

“Schools have a paramount role in encouraging healthy lifestyles. Sometimes we see the kids more than their parents do. Students are not allowed to bring sodas, sweet juices, or candy from home. If teachers see these items, we instruct them to take it away. I also talk to parents. Many resist the rules and say they feed their kids what they know the kids will eat. Fortunately, many kids [here] eat a school lunch, not many bring lunch from home. Bake sales and other competitive foods must be sold after the lunch periods are over, that is a district rule. There is only one soda machine in the school. It is in the teachers’ lounge, students do not have access.”

Again, a disconnect is present as in this school, 89 percent of students qualify for free and reduced lunches, however, only 71 percent of them were served during the month of February.

Image 2: Trenton Public Schools Breakfast Menu, February 2011

Trenton Public Schools

Elementary School Breakfast Menu

February 2011





**Made with healthy
Whole Grains**



**Local ingredients are
used when in season**

<div style="border: 1px solid black; height: 80px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> featured sides </div>	<div style="border: 1px solid black; padding: 5px;"> 1 French Toast Sticks <hr/> featured sides Or Assorted Cereal Applesauce Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 2 Open Face Cheese Sandwich <hr/> featured sides Or Assorted Cereal Mixed Fruit Medley or Fresh Apple Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 3 Sausage Bagel Sandwich <hr/> featured sides Or Assorted Cereal Sliced Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 4 Homemade Blueberry Muffin <hr/> featured sides Or Assorted Cereal Orange Slices or Apple Sauce Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 7 Cinnamon Raisin Bagel <hr/> featured sides Or Assorted Cereal Chilled Pears Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 8 Turkey Sausage & Cheese Biscuit <hr/> featured sides Or Assorted Cereal Fresh Apple or Mixed Fruit Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 9 Wheat Bread & Hard Cooked Egg <hr/> featured sides Or Assorted Cereal Chilled Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 10 Homemade Cherry Muffin <hr/> featured sides Or Assorted Cereal Sliced Oranges or Chilled Pears Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 11 Stacked Pancakes w/Maple Syrup <hr/> featured sides Or Assorted Cereal Cinnamon Apple Sauce Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 14 Homemade Corn Muffin <hr/> featured sides Or Assorted Cereal Cinnamon Apple Sauce Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 15 English Muffins & Turkey Sausage <hr/> featured sides Or Assorted Cereal Chilled Pears Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 16 Raisin Oatmeal Cereal <hr/> featured sides Or Assorted Cereal Fresh Banana or Chilled Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 17 Sausage & Cheese Bagel <hr/> featured sides Or Assorted Cereal Mixed Fruit Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 18 French Toast Sticks w/Syrup <hr/> featured sides Or Assorted Cereal Fresh Apple or Chilled Peaches Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px; text-align: center;"> 21 SCHOOLS CLOSED </div>	<div style="border: 1px solid black; padding: 5px;"> 22 French Toast Sticks w/Syrup <hr/> featured sides Or Oatmeal Chilled Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 23 Wheat Bread & Hard Cooked Egg <hr/> featured sides Or Assorted Cereal Mixed Fruit Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 24 Toasted Cheese Sandwich <hr/> featured sides Or Assorted Cereal Chilled Apple Sauce Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 25 Pancakes w/Sausage <hr/> featured sides Or Assorted Cereal Sliced Orange or Chilled Peaches Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 28 Assorted Fruit Yogurt <hr/> featured sides Or Assorted Cereal Fresh Apple or Chilled Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; height: 80px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> featured sides </div>	<div style="border: 1px solid black; height: 80px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> featured sides </div>	<div style="border: 1px solid black; height: 80px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> featured sides </div>	<div style="border: 1px solid black; height: 80px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> featured sides </div>

Information and Contact

Lunch Prices: Paid: \$1.75 Reduced: \$.40

***New this year the Parent Hotline: 1.800.378.5348 extension 2999**

Any Questions or Concerns regarding the food menu can be directed to

ARAMARK's Parent Hot Line.

In accordance with Federal law and U.S. Department of Agriculture policy,
this institution is prohibited from discriminating on the basis of
race, color, national origin, sex, age or disability.



Image 3: Trenton Public Schools Lunch Menu, February 2011

Trenton Public Schools

Elementary Lunch Menu

February 2011

Daily Bread Basket Offered





**Made with healthy
Whole Grains**



**Local ingredients are
used when in season**

<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; padding: 5px;"> 1 Cheeseburger on Bun Turkey Ham & Cheese Wrap Chef Salad <hr/> <i>featured sides</i> <hr/> Potato Tots Mixed Fruit or Cherries Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 2 Meatballs in Brown Sauce on Wheat Bread Tuna Sandwich Caesar Salad <hr/> <i>featured sides</i> <hr/> Savory Rice & Sliced Carrots Chilled Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 3 Baked Ziti w/Garlic Toast Turkey Ham on Wheat Garden Salad <hr/> <i>featured sides</i> <hr/> Mixed Vegetables Fresh Apple or Chilled Pears Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 7 Chicken Parmesan on Bun Turkey & Cheese Sandwich Tuna over Lettuce <hr/> <i>featured sides</i> <hr/> Peas & Carrots Mixed Fruit or Diced Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 8 Salisbury Steak w/Brown Gravy & Wheat Bread Turkey Ham & Cheese Wrap Chef Salad <hr/> <i>featured sides</i> <hr/> Seasoned Corn Orange Wedge or Diced Pears Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 9 Turkey Frank on Bun Tuna Sandwich Caesar Salad <hr/> <i>featured sides</i> <hr/> Vegetarian Beans Fresh Apple or Mixed Fruit Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 10 Spaghetti & Meatballs with Wheat Bread Turkey Ham on Wheat Garden Salad <hr/> <i>featured sides</i> <hr/> Green Beans Chilled Peaches or Cherries Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 14 BBQ Chicken Patty on Bun Turkey & Cheese Sandwich Tuna over Lettuce <hr/> <i>featured sides</i> <hr/> Glazed Carrots & Seasoned Rice Chilled Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 15 General Tso's Chicken with Wheat Bread Turkey Ham & Cheese Wrap Chef Salad <hr/> <i>featured sides</i> <hr/> Brown Rice Applesauce Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 16 Beef Taco on Soft Shell w/ Lettuce & Cheese Tuna Sandwich Caesar Salad <hr/> <i>featured sides</i> <hr/> Mexican Style Corn Fresh Apple or Chilled Pears Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 17 Meatball Parmesan with Roll Turkey Ham on Wheat Garden Salad <hr/> <i>featured sides</i> <hr/> Green Beans Orange Wedges or Chilled Peaches Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 21 <div style="text-align: center; padding: 20px;"> School Closed </div> </div>	<div style="border: 1px solid black; padding: 5px;"> 22 Cheeseburger on Bun w/Lettuce & Tomatoes Turkey Ham & Cheese Wrap Chef Salad <hr/> <i>featured sides</i> <hr/> Potato Wedges Orange Wedges or Chilled Pears Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 23 Turkey Franks on Bun Tuna Sandwich Caesar Salad <hr/> <i>featured sides</i> <hr/> BBQ Beans Sliced Peaches Choice of low fat Milk </div>	<div style="border: 1px solid black; padding: 5px;"> 24 Spaghetti & Meatballs with Garlic Toast Turkey Ham on Wheat Garden Salad <hr/> <i>featured sides</i> <hr/> Mixed Vegetables Fresh Apple or Sliced Peaches Choice of low fat Milk </div>
<div style="border: 1px solid black; padding: 5px;"> 28 Cheese Pizza Turkey & Cheese Wrap Tuna over Lettuce <hr/> <i>featured sides</i> <hr/> Sliced Carrots Mixed Fruit or Cherries Choice of low fat Milk </div>	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>

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POLICY RECOMMENDATIONS

Government Recommendations

Revitalize the Community

Childhood obesity is attributed to not only poor eating habits, but also to a lack in consistent physical activity. Children are faced with constant distractions indoors, ranging from the Internet to videogames, and are therefore less likely to go outside and play now more than ever. In addition, cities like Trenton that suffer from high crime rates often do not offer safe, reliable places outdoors for children to play. A community revitalization plan, one that would include the refurbishment of parks and public places, would make great strides toward encouraging children to go outside and take part in regular physical activity. Good habits created in schools must be fostered at home, which is why an irregular gym class or twenty minutes per day for recess is not nearly enough time for a child to get the necessary amount of exercise.

Increase Staff Capacity for Public Assistance Programs

Public assistance initiatives like Supplemental Nutrition Assistance Program (SNAP) are vital in low-income communities because they allow people greater access to food as a basic necessity. Millions of people across the country participate in SNAP every month, with a greater emphasis being put on similar programs to the faltering economy in recent years. However, SNAP and other programs often suffer from low staffing and unreliable support from local communities. Increasing participation within SNAP and other programs and creating volunteer outreach initiatives would expand outreach and allow people to rely on these programs on a more consistent basis. Access to healthy food is important, but people being able to afford food for basic nutrition and sustenance should be a priority first and foremost.

Community Recommendations

Nutritional Education

Education about food is often just as important as the food itself when it comes to curbing the burgeoning obesity rates in Trenton. Many parents of overweight and obese children simply do not understand the dangers associated with obesity, or even what it means to be obese. According to our previously presented data, 85 percent of parents “strongly agree or somewhat agree that, in general, their child eats healthy.” Also, when asked about their children’s weight in the survey, a majority of parents did not consider their own kids to be overweight. Unfortunately, this simply is not true, as enumerated with concrete statistics indicating that Trenton has the highest prevalence of overweight and obese children in New Jersey.

Community organizations such as Isles have a unique opportunity to counter this problem by establishing nutritional education programs throughout the city. NJPHK-Trenton will soon begin implementation of a community-driven plan for reducing childhood obesity. Organization workers can host free information sessions intended to help parents become more aware of the growing obesity epidemic and how to recognize danger signs in their own children. Some parents may be aware that their children might have a problem, but do not know how to properly help them. In this case, providing healthy cooking lessons is another fun way to keep parents engaged and involved in providing better nutritional options for their children at home.

Help from Local Vendors

Combating obesity is a community-wide issue and therefore members of the community should be expected to help. In order to expand community outreach, Isles might be able to request assistance from local food vendors in creating educational programs for residents. Vendors would supply kitchen facilities and the expertise of professional food handlers, and in return would receive recognition and notoriety for trying to foster a healthy eating community in Trenton. Involving local vendors would also encourage other food providers to make an effort in expanding healthy food access throughout the city. Cooperation from parents, community organizations, and food providers would go a long way in establishing an improved eating culture in Trenton.

School Recommendations

Expand Breakfast in the Classroom

Currently three of the City of Trenton's nineteen schools participate in the Breakfast in the Classroom program. Trenton is a Universal Breakfast District, meaning that every student is eligible to receive free breakfast; however, the average participation rate is only 17 percent. Further adoption of this program would increase participation rates throughout the district. Nationwide, Breakfast in the Classroom programs work to improve classroom performance, increase children's concentration levels, increase attendance, and decrease behavioral problems, nurses visits, and tardiness. One concern surrounding Breakfast in the Classroom is that it will take away from instructional time. Teachers, however, believe that such a program increases instructional time as it reduces disruptions throughout the morning. The program often occurs during announcements, attendance, or when children are settling in at the beginning of the day. Implementation of Breakfast in the Classroom would not only see educational and behavioral benefits for students, but nutritional ones as well.

Promote National School Lunch Program

Stigma is highly associated with participation in free meal programs in schools across the nation. Such stigma holds true in Trenton schools, with participation rates dropping heavily as children age. In order to ensure that its students are receiving nutritional meals every day, the Trenton School District must promote meal participation in conjunction with Aramark, the contracted food provider, to all students, regardless of grade level. Advertisements for healthy, delicious foods served in schools would encourage students to participate and receive their free or reduced meal. Combined with education, providing students with nutritional information about the meals they are served would inspire them to make healthier choices

Work With Aramark and Local Farmers to Serve Healthier Meals

Data shows Trenton students entering school at obesity levels higher than the national average and maintaining this level throughout their years in school. In order to address the growing obesity epidemic in the City of Trenton, the Board of Education must work with Aramark in order to provide students with healthier, more nutritious meal options at both breakfast and lunch. Additionally, the Board of Education should develop relationships with local farms and produce cooperatives to bring fresh foods into schools. Additionally, Trenton schools qualify for the Department of Defense Fresh Fruit and Vegetable Program, which offers schools a wider variety of fresh produce than what may be offered through the USDA meal programs. Trenton schools will benefit from increased funding for this program in the 2011-2012 school year.

Enhance School Curriculum to Promote Healthy Lifestyle Choices

Physical fitness is critical in working to reduce obesity rates among children. Students in Trenton are not given ample time for recess, should they receive it at all. Because more attention is given to test scores, and due to budget constraints, physical education requirements are often overlooked as well. A uniform curriculum should be developed throughout the Trenton Public School system in order to provide students with necessary fitness routines to enhance their physical health.

Further, despite its agreement with the Rutgers Cooperative Extension to provide nutrition education to all students, it is evident by the data that students do not practice healthy eating, leading one to believe this education is not working. The Board of Education should work with local doctors and nutritionists to develop a curriculum that teaches healthy eating, physical fitness, the dangers of fatty foods, and how to prepare simple meals afterschool.

Expand Send Hunger Packing Program

Mercer Street Friends, a leading community organization in Mercer County, established the Send Hunger Packing program in the Ewing Township school district. On Friday afternoons, children who live in food insecure households, as identified by school counselors, are provided with backpacks filled with kid-friendly, easy-to-open and nutritionally sound food. This ensures that children have food to eat over the weekend and return to school not hungry and ready to learn. Guidance counselors from participating schools report behavioral and academic children involved in the program. A program similar to this would greatly benefit schoolchildren in Trenton. With 72 percent of its student population qualified to receive free or reduced school meals, it is likely that these children are going home to food insecure households and may not have enough food to eat over the weekend.

STRONG COMMUNITIES

ACTION 3

INTRODUCTION

According to Whole Measures, a food system that builds strong and resilient communities:

- Improves equity through building community capacity for and control of food resources and assets;
 - Contributes to healthy neighborhoods through promoting shared work and space around enjoyable and accessible food production and distribution;
 - Builds diverse and collaborative relationships by cultivating an open, flexible learning community of food system advocates and community members;
 - Supports civic participation, political empowerment, and local leadership (Whole Measures).
-

This section of the report explores opportunities and models for promoting such community awareness, cohesiveness, and activism through two key communal food activities – urban agriculture and farmers markets.

The primary purpose of this section is to explore opportunities for the state of New Jersey and municipalities such as Trenton to develop, expand and better manage urban agriculture. It begins with an overview of urban agriculture and its inter-related social, environmental, economic and health benefits. It proceeds to establish the need for a policy framework for managing urban agriculture and presents various models and case studies of policy, zoning, and planning frameworks that can guide efforts in New Jersey.

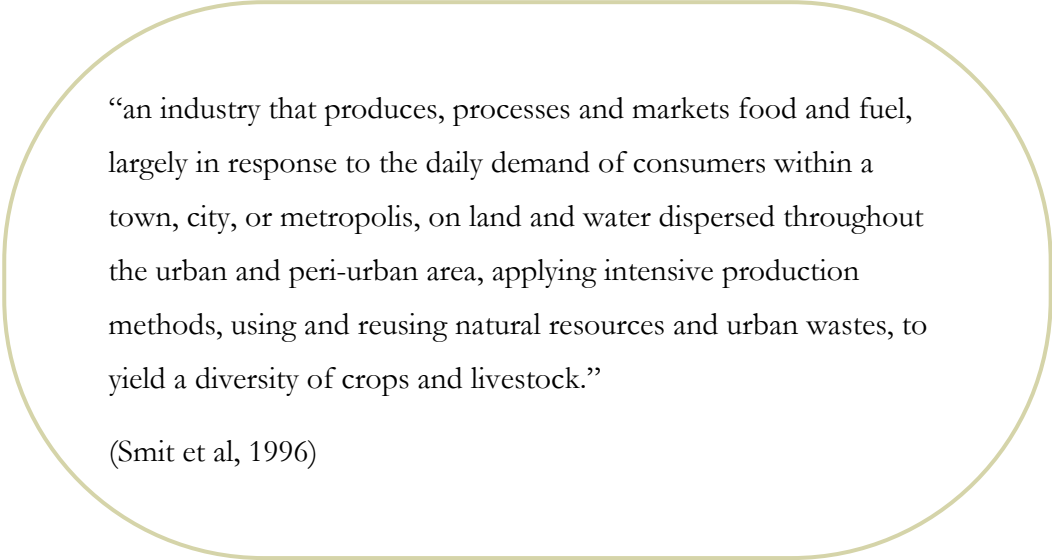
This section also explores the possibility of increasing community food awareness through farmers markets. Physical access is explored through a map analysis of farmers markets and community gardens in and around Trenton with respect to their proximity to low-income areas of

the city. The ability to use community-based initiatives to address the integrated issues of fresh food access, nutritional education, and empowerment are highlighted through a case-study of the ambitious goals of the New Brunswick Community Farmers Market.

SECTION 1: URBAN AGRICULTURE: POLICY IDEAS FOR TRENTON

Many cities encourage agriculture within their borders. They do this by increasing the amount of available land and through various programs; they also help increase agriculture by making it part of their Master Plans. In this section, we discuss these policies as well as recent state legislation that could help Trenton increase its agricultural production.

First, a definition of urban agriculture is necessary:



“an industry that produces, processes and markets food and fuel, largely in response to the daily demand of consumers within a town, city, or metropolis, on land and water dispersed throughout the urban and peri-urban area, applying intensive production methods, using and reusing natural resources and urban wastes, to yield a diversity of crops and livestock.”

(Smit et al, 1996)

Urban agriculture may include growing fruits, vegetables, raising chickens, keeping bees, composting and it may be located outdoors, in open space, vacant lots, or in hoop houses, greenhouses, and other indoor facilities. The activities actually permitted differ from city to city. For example, residents of Portland can raise livestock, while Chicagoans may only raise chickens; at the same time, Boston residents cannot keep any livestock.

First, we need to understand the types of urban agriculture, and the benefits it can provide to city residents and the environment.

Types of Urban Agriculture

Community gardens are important types of urban agriculture. This is generally a shared open space, used by a group of city residents who cultivate individual plots. Gardeners raise crops, consuming them or sharing them with friends and family. Another common type of urban agriculture is an urban farm, or commercial garden. In this model, crops are raised and sold for profit. School gardens are an important form of urban agriculture, as they promote healthy habits in earlier stages of human development. Backyard gardeners use private space to engage in urban agricultural activities. There is a range of groups involved in urban agriculture: block clubs, religious organizations, schools, municipalities, and non-profits are common supporting entities.

How Families Benefit from Urban Agriculture

One of the greater aims of this report is to promote food security in Trenton. A commonly used definition of community food security is: “Community food security is a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.” This definition emphasizes fair and consistent access to healthy, clean food for all communities.

Urban agriculture directly addresses food security. It promotes awareness of healthy foods and more nutritious eating habits. Also, if cities permit use of urban land for cultivation fruits and vegetables, and allow for produce to be sold at farm stands or farmers’ markets, there is an opportunity for increased food access (Design for Health, 2007; Vitiello et al., 2010). Along with reducing food insecurity, urban agriculture has social, economic, health, and environmental benefits.

Social benefits include the experience of working with neighbors and building community networks as well as increasing self-reliance. Also, urban agriculture involves stewardship and beautification of open spaces, thus increasing physical attractiveness and decreasing crime rates. Additionally, urban agriculture can be used for educational purposes, such as in school gardens, for nutrition education, and for youth and adult job-training programs.

Economic benefits include income from sales of produce through farmers' markets, community-supported agriculture programs, as well as jobs created by organizations that promote urban agriculture in cities. It has also been shown that community gardens have increased surrounding property values.

Health benefits include better diets, increased physical activity and mental health, positive social interaction, and lower rates of childhood obesity.

Environmental benefits stem from urban agriculture as well: "The practice of cultivation improves the urban physical environments as measured by air quality, range of bio-diversity, and soil quality." Urban gardeners, who grow plants and compost, increase the amount of foliage in cities, contributing to better air quality, and naturally enrich soils through inexpensive recycling practices.

Why We Need a Policy Framework for Urban Agriculture

Trenton should focus on each element of urban agriculture that may potentially make it a nuisance, a health hazard, or an infraction of the law. As more city residents begin to farm, garden, or raise livestock in the city, conflicts may arise and firmly established policy can resolve or even prevent such issues. For example, compost piles, if not contained properly, may attract rodents and produce odors. Livestock can also smell if not properly taken care of, and can violate noise pollution laws. Both composting and livestock are valuable to urban agriculture, but given higher density in urban areas, they need to be carefully monitored as not to produce disturbances and provoke complaints from neighbors.

Besides composting and livestock regulations, policies may control lot sizes for urban agriculture uses, types of structures that are allowed, where in cities agriculture is permitted (through zoning language), and whether or not sales or commercial activity can occur from urban agriculture sites. Below are examples of how each element is incorporated into policy in various U.S. cities.

Examples: Livestock

The City of Boston does not encourage livestock, but does permit aquaculture. The city is very densely settled, and there is less vacant land available for such types of activities to take place and not create conflicts. Portland OR, on the other hand, allows residents to keep chickens and other small animals without permit, and other livestock by permit only (<http://www.portlandonline.com/auditor/index.cfm?a=185339&c=28228>). Chicago and Seattle permit small livestock, like chickens and bees, and limit the number of animals or hives that may be kept (Mukherji, 2009; Seattle.gov).

Examples: Size of urban agriculture properties

The current urban agricultural zoning proposal for the City of Chicago would impose size limits on one of two uses to be introduced into the zoning code. The two uses are community gardens and commercial gardens. There is to be no limit on the size of commercial gardens, but community gardens can be no larger than 18,750 square feet. The Chicago Advocates for Urban Agriculture (AUA), who were also involved in drafting the zoning amendment proposal, explained the size limitation:

“The city based the proposed size limit on the amount of a residential block the largest community garden could occupy “by right” (about 6 contiguous standard parcels). They decided that residential blocks should not contain a larger proportion of gardens to houses without seeking approval.”

Thus, the city proposes that community gardens should be officially allowed in residential areas, but that a certain residential character should be maintained. In contrast, Seattle has size restrictions on Horticulture and Urban Farm land uses, but not on community gardens .

Examples- Structures and Height Limitations

Chicago and Seattle, as well as other cities, have limits on structures allowed on urban agricultural property. The reason for this is to prevent residents from using land for purposes it is not zoned for, such as residential or commercial uses. Also, height limitations and aesthetic controls are sometimes imposed on structures and fences. In Seattle, the total floor area of structures in a community garden cannot surpass 1000 square feet, while structures cannot be more than 10 feet tall. Each structure can have no more than 120 square feet floor area without a building permit, and is subject to the development standards of the zone the garden is located in. In the Chicago proposal, accessory structures can occupy no more than 10% of the area of the garden, or 100 square feet. However, hoop houses, which are semi-permanent growing tunnels, are permitted as they can be easily removed.

Examples- Zoning

Many cities have included or proposed to incorporate urban agriculture into zoning language. Officially adopting urban agriculture into zoning codes makes it clear for residents and authorities as to what land uses are permitted in the municipality. Cleveland created “Urban Garden District” into the zoning code, while in other municipalities such as Boston and Portland, community gardens are zoned under open space and recreation codes. Cities also sometimes permit urban agriculture in overlay* districts. Mukherji points out that “In Boston, there is a smart growth overlay district which permits activities, such as intensive urban agriculture, that would not normally be permitted in the underlying districts.” Some cities, such as Seattle, also encourage food production in rooftop greenhouses in some higher density zones, and have given a 15-foot height exemption for these structures.

*Overlay district: “Overlay zoning is a regulatory tool that creates a special zoning district, placed over an existing base zone(s), which identified special provisions in addition to those in the underlying base zone. The overlay district can share common boundaries with the base zone or cut across base zone boundaries. Regulations or incentives are attached to the overlay district to protect a specific resource or guide development within a special area”

Examples- Sales

Sales of vegetables, fruits, eggs, or value-added products from urban agriculture projects can provide economic benefit to the vendors, as well as healthier choices and easier access to fresh food for customers. In Seattle, the 2010 ordinance Council Bill 116907 allows residents to sell food grown in their gardens, increasing chances for city dwellers to purchase fresh produce. The proposed San Francisco code change allows for residential sales to take place between 6:00 AM and 8:00 PM, though gardeners cannot change their homes to look more like storefronts, and cannot sell value added products. In Chicago, sales have never been allowed in districts zoned residential, and the proposed zoning changes continue to prohibit such activity in community gardens, though not in commercial gardens .

Policies, Programs, Funding, and Ideas for How New Jersey Can Support Urban Agriculture

Cities have encouraged urban agriculture through three types of policies, or a combination of these policies:

- Comprehensive Plan or the General Plan
- Open Space Plan
- Zoning Code

Or, cities have supported urban agriculture projects through programs that help with acquisition of land, funding, and management of gardening projects.

Washington D.C. has worked language regarding urban agriculture into its comprehensive plan. Seattle has also had urban agriculture built into the comprehensive plan for some time, and as mentioned above, more recently has incorporated urban agriculture into zoning code. California requires that municipalities and counties have a General Plan, similar to New Jersey, which requires a Master Plan for each municipality. To take advantage of this requirement, San Francisco (pending zoning changes here as well), Oakland, and Berkeley have addressed urban agriculture in their General Plans. By including urban agriculture in the Comprehensive and General Plans, these cities

have shown city residents that they have an open stance towards agricultural land use and activities.

Cities can also include urban agriculture in their open space plans. Chicago's 1997 plan emphasizes green spaces in the city. Finally, by detailing land use regulations and zoning for urban agriculture, cities can define exactly which types of agricultural land uses are permitted, and which related activities are acceptable.

Programmatic support is a key pillar of urban agriculture in various U.S. cities, and non-profits often play a major role in managing or co-managing these efforts. Chicago has a unique model: NeighborSpace is a non-profit land trust for community gardens, founded and funded by the Forest Preserve District of Cook County, the Chicago Park District, and the City of Chicago. NeighborSpace's board is comprised of officers from the three parent entities, and it acquires land from public and private owners, so it can be cultivated and managed by community groups. The Chicago Park District, Chicago Housing Authority, and the City also support and manage community gardens. In Boston, the Department of Neighborhood Development, Boston Housing Authority, and the Parks Department, as well as non-profit land trusts support and manage close to 200 gardens. In Seattle, P-Patch Community Gardening Program is part of the Seattle Department of Neighborhoods and oversees 73 community gardens. It is supported by the P-Patch Trust, a non-profit organization, and has been in existence for close to 40 years. This public-private partnership has been successful in supporting urban agriculture for decades.

Funding

City and non-profit programs in Chicago, Boston, and Seattle also assist with material resources and funding. In many cities across the country, urban soils are contaminated with various metals and other organic pollutants. While soil tests are relatively inexpensive, soil remediation is costly. Garden start-up expenses often include large loads of clean compost, as well as materials to build raised beds so food can be grown and consumed safely. Soil costs and water bills are some of the major expenses in urban agriculture project budgets. Programs in Portland and Chicago often assist with these bills, while Boston offers discounted agriculture rates for water. When planning for urban agriculture in cities, government needs to work with residents to lower operational costs. In weighing policy options, individual municipalities must work to evaluate these costs as well as the benefits of urban agriculture.

Urban Agriculture in Trenton and Other New Jersey Municipalities

Each city discussed takes actions to support urban agriculture according to the specific qualities of the city. Trenton and other New Jersey municipalities should do the same. Trenton has key opportunities to take advantage of other models and encourage an already-active urban agriculture scene. Like Chicago, Trenton has a plethora of vacant lots, which the city can make available to interested community groups. The New Jersey Department of Environmental Protection keeps a list of known contaminated sites that should be used, in addition to soil testing, to determine whether the vacant lots in Trenton are suitable for urban agricultural purposes.

Trenton is fortunate to have strong programmatic support from the community development corporation, Isles. Through its community garden initiative, Isles supports 30 community gardens in Trenton, and provides technical and material assistance for garden groups. City officials and Isles can work together to handle tasks associated with encouraging urban agriculture. Isles has urban agriculture know-how, contact with community members, and a network of gardens, while the City outlines permitted land uses and uses and has the capability to provide space for urban agriculture. Working together, the two entities can address food security, community development, economic, and environmental issues in Trenton.

State legislation, Assembly Bill 2859, was recently passed into legislation. The bill proposes two important opportunities for increased urban agriculture:

“...the lease and sale of certain property not needed for public purposes to certain nonprofits to encourage and facilitate urban farming and gardening, and providing a property tax exemption for land leased or sold for urban farms.” (A2859 p. 2)

“Any lease entered into pursuant to subsection (l) with a non-profit corporation or association may permit the non-profit corporation or association to sell fresh fruits and vegetables on the leased land, off the leased land, or both, provided, that the sales are related and incidental to the non-profit purposes of the corporation or association and the net proceeds received by the non-profit corporation or association are used to further the non-profit purposes of the corporation or association. Property leased pursuant to subsection (l) of this section shall be exempt from property taxation.” (A2859 p. 5)

The first item suggests that under this bill, municipalities could sell or lease land to groups for urban agriculture purposes, and that those groups would not have to pay property tax on the land. The bill's justifications for supporting urban agriculture in this way are summarized:

There is a quantity of unused land in some municipalities, which sometimes presents problems like crime, lower surrounding property values, etc. Urban areas often include high densities of low-income population, and municipalities are often unable to provide proper recreational facilities. Also, there is often little opportunity to purchase fresh food in urban areas. Shortage of fresh food contributes to high rates of childhood obesity and other health issues for city residents. Enlisting help of nonprofits to cultivate this land would increase access to fresh food, and recreational and educational public activities. (A2859)

The second key item ensures the access to fresh food by condoning its sale to the public, as long as the proceeds from such sales go back into the organization's operating budget. By allowing for the sale of food from the garden, the bill promotes urban agriculture by ensuring that any sale will benefit the organization overseeing the garden. There can then be a source of funding for nonprofits to sustainably manage urban agriculture projects and contribute to the stream of fresh fruits and vegetables in urban areas of New Jersey.

To support urban agriculture, municipal governments can take advantage of the provisions of this law. Municipalities and non-profit organizations should use this legislative tool to lower the cost of urban agriculture projects by making public land available, tax-free.

A fourth platform for encouraging urban agriculture is the Master Plan, which is required for all municipalities in the state of New Jersey. Recently, provision was made for a Sustainability Element, an additional section, which municipalities can include in their plan if they choose to do so. Including a Sustainability Element, and creating discussions or committees based around food systems issues and urban agriculture is a creative way to begin a discourse around the subject. Addressing urban agriculture through the Sustainability Element may also be a way to introduce the idea into municipalities and communities that have little or no prior experience in urban agriculture.

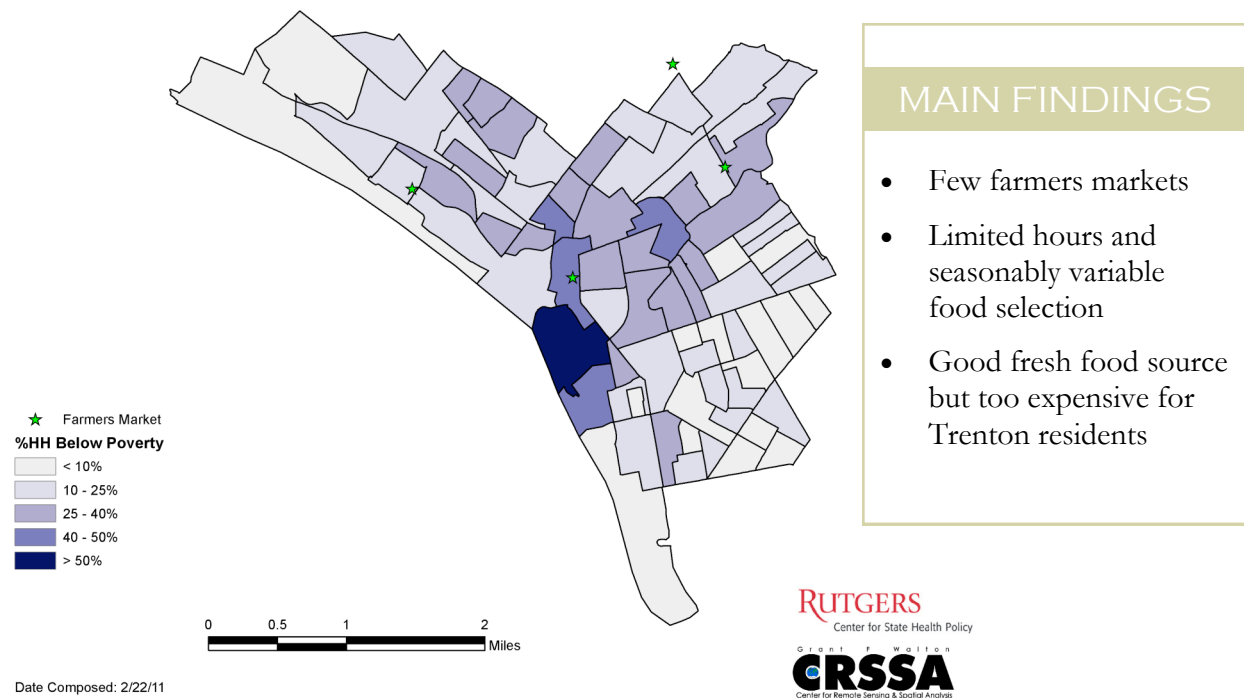
Again, it is helpful to remember the benefits to community development associated with urban agriculture. The interactive nature of thriving urban agriculture projects builds relationships amongst urban stakeholders. City government, local organizations, and community members that

have positive working relationships can work together towards mutually beneficial goals related to all aspects of community development.

SECTION 2: ALTERNATIVE FOOD OUTLET MAPPING ANALYSIS

Similar to the mapping analysis conducted for traditional food retailers in the Justice and Fairness Section, the following analysis assesses access to farmers markets and community gardens for lower-income residents of Trenton. The shading on the maps distinguishes neighborhoods by average income levels, with the darker areas representing poorer neighborhoods.

Map 1: Farmers Markets

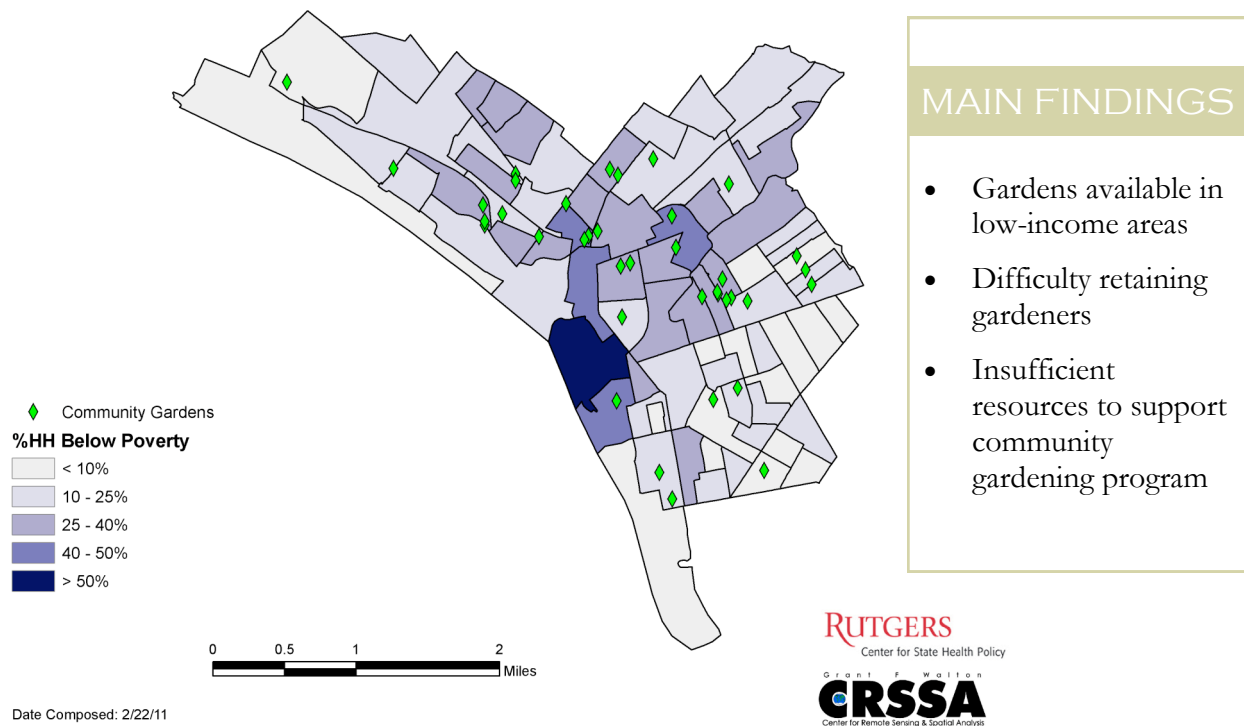


As shown in Map 1, there are four farmers markets located in the Trenton region. Farmers markets are generally considered a good source for fresh and local food products. Farmers markets are also unique in their capacity to help empower the local food system. Many products sold at farmers markets are locally grown, produced, and distributed. Furthermore, farmers markets can be a good place for community members and local food providers to interact with one another.

Unfortunately, Trenton has a limited number of these outlets. Given the short New Jersey growing season, the selection of food naturally varies by season. The Trenton Farmer's Market, located in Trenton's business district, is a well-established, year-round market with over 40 vendors, including nine farms that bring local fruits and vegetables. However, the market primarily serves the daytime state employees in Trenton. Another smaller market run by a local church is better able to serve the local community.

Overall, Trenton residents generally do not shop at farmers market, particularly the main one located in the center of the city. In a survey conducted by Mercer Street Friends, the majority of low-income participants stated that farmers markets are too expensive, especially when compared to nearby supermarkets. Price is a major influence in people's purchasing decisions, and unfortunately farmers markets are not affordable for many low income residents. Ultimately, Trenton's farmers markets appear to cater more to government and other employees in Trenton's business district or residents from the surrounding suburbs (Daminger, 2010, 9).

Map 2: Community Gardens



The accompanying map of 36 of Isles' currently operating community gardens shows that the gardens are well-represented in the poorer neighborhoods of Trenton. These gardens range in size and scope, including from small plots cultivated by a few individuals, larger gardens used by 10 – 12 families, and 11 school gardens. The gardens provide an opportunity for Trenton residents to learn about food and nutrition, access fresh produce and build relationships with their neighbors. However, Isles' community gardens program is constrained by numerous challenges. Primarily, the organization has limited financial and human resources to market and physically maintain the gardens or to provide training and other support to community gardeners. A survey of the existing sites indicated a need for consistent and updated signage and contact information to raise community awareness about the gardening program. Another significant problem has been retaining community gardeners over the long-term. Many of the older gardeners who had been maintaining the gardens for years are unable to continue the labor-intensive activity and younger gardeners are not getting involved in significant numbers. Therefore, the main problem in Trenton is not the lack of space for community gardens, but the lack of material and human resources to fully utilize the existing gardens spaces. More human resources to help recruit, train, and support potential gardeners may partially help address this problem.

SECTION 3: CASE STUDY OF NEW BRUNSWICK COMMUNITY FARMERS MARKET & YOUTH GARDENERS PROGRAM

The New Brunswick Community Farmers Market (NBCFM) and Youth Gardeners Program is a promising initiative that provides many of the functions necessary for building strong communities around food systems – access to fresh, locally sourced produce; a venue for a mutually informative interaction between communities and farmers; culturally appropriate food selection and events; information about health and food assistance programs; and an opportunity for youth to learn about healthy nutrition by growing their own food in community gardens.

The Farmers Market:

After numerous adjustments based on community feedback since it first began in 2009, the farmers market now operates from June to October in an area that includes a covered pavilion and is serviced by a quick loop bus and a NJ Transit bus. In addition to vendors that provide fresh produce, numerous tables are set up to provide information in English and Spanish about Food Assistance programs such as WIC and SNAP; health screenings; healthy nutrition and recipes; and related sustainability issues such as GreenFaith's demonstration of energy efficient light bulbs.

The market also provides a venue to interact with neighbors, professionals, and farmers. The farmers, in addition to providing information to local residents, have learned about new types of produce and new ways of using common produce for food and medicine from the South American and Hispanic community members. The program also strives to engage the community by hosting culturally appropriate events such as the 2010 celebration of Mexico's bicentennial anniversary of national independence, complete with traditional music, food, jewelry and a parade through New Brunswick to the market.

The market allows customers to redeem government food assistance vouchers from WIC (Women, Infants, And Children Supplemental Nutrition Program) and FMNP (Farmers Market Nutrition Program). Data indicates that about a quarter of the receipts from the market's second season, in 2010, came from these vouchers. Therefore, the program appears to be successful in reducing food insecurity for low-income residents.

The Youth Gardeners Program:

Starting with the 2011 season, space behind the farmers market will be used for a Youth Gardeners Program involving public and private after school programs and the local 4-H program. The program also engages Rutgers students in the local community, with landscape architecture students designing gardens that meet the needs of the community, such as the inclusion of raised beds of multiple heights to assist senior citizens. Students from the Mason Gross School are providing art pieces, a gardening element familiar to Latin American community members, and a decorative fence.

Key Factors for Effectiveness:

Strong partnerships and support from key community stakeholders and attention to the unique demographic and cultural character of the community helped create and now sustain the initiative. These factors include:

Institutional Support: The Rutgers University Cooperative Extension provides administrative resources, technical assistance, research capacity, and access to the services of faculty and students. The commitment of key individuals, including the directors of the Ecology Department and Cooperative Extension was crucial in spearheading the program.

Corporate Support: Johnson and Johnson's commitment to revitalizing its host community and monetary support provide ongoing financial security for the initiative.

Community Partners: Active and committed community organizations, churches, and networks – including Elijah's Promise Soup Kitchen and the New Brunswick Food Alliance – assist the program in connecting with and catering to the needs of the community.

Organizational Structure: A Community Advisory Board comprised of the various community, business, and institutional stakeholders helps guide the program on appropriate decisions regarding location, public transit access, hours, and vendor specifications.

Marketing: Awareness about the market was facilitated by a rigorous marketing campaign including signage, flyers, postcards, banners, balloons, t-shirts, press releases, media coverage, door tags, and ads on buses.

Cultural Appropriateness: The program strives to engage the community through services and events that meet the needs of the community, including events coinciding with traditional Latin American celebrations. The farmers have also responded to demand and try to provide specialty produce commonly used in South American cuisine.

Next Steps:

The program plans to improve and expand in multiple ways:

Farmers Market Expansion and Improvement: The NBCFM is attempting to create an on-site outdoor kitchen with refrigeration. Amongst other things, this will allow local restaurants to bring food samples. They are also attempting to set up a WIC coupon processing system for the entire Farmers Market in addition to the permission granted to individual vendors.

Statewide Expansion: Once the New Brunswick program is able to sustain itself through community and business partners, the Cooperative Extension hopes to initiate similar programs in other major cities in New Jersey, including Camden, Newark, and Trenton.

Research: Work is also underway on an accompanying multi-year research project, funded by Johnson and Johnson, to survey food consumption behaviors, access, and barriers to access in the greater New Brunswick area. The results will be presented in the Food and Security Survey Report.

Resources:

More information about the New Brunswick Community Farmers Market is available at <http://www.nbcfarmersmarket.com/default.asp>. For further information about this and future initiatives by the Rutgers Cooperative Extension, contact::

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POLICY RECOMMENDATIONS

Recommendations for Building an Active Agriculture Scene in Trenton

Each actor has an important role to play:

Trenton can:

- 1) Develop a publicly available inventory of vacant land in Trenton
- 2) Incorporate urban agriculture uses into zoning code
- 3) Include urban agriculture in Master Plan for Trenton
- 4) Write a sustainability element into the Master Plan

Local Organizations can:

- 1) Encourage city officials to actively support urban agriculture by working with them to develop a land inventory and zoning language
- 2) Organize residents to advocate for urban agriculture in the Master Plan, and for a Sustainability Element
- 3) Organize information sessions or meetings to discuss approaches to urban agriculture, where residents and city officials can interact and begin to form working relationships

Community members can:

- 1) Call or write to city officials in planning to encourage them to take active measures to support urban agriculture
- 2) Contact local organizations to look for additional support in starting urban agriculture products
- 3) Form groups through neighborhood, family, or church associations and introduce the ideas, benefits, and opportunities behind urban agriculture

Recommendations for Improving Farmers Market Access

Multiple Stakeholder Coalition

The first step for instituting a farmers market program explicitly designed to increase food security may be gathering a coalition of community, corporate, institutional, and political partners to financially support, design and guide an effort that caters to the specific needs of Trenton residents. Such partners can include community development organizations, faith-based organizations, corporate funders, universities, and government officials and departments.

Information Gathering and Responsiveness

Once an interested and committed group is organized, it should use multiple means to solicit information about community interest, needs, and potential barriers. Such information can help guide decisions about location, hours, transportation needs, vendor and product selection, and additional services. Once a program is initiated, channels of communication should be kept open to continuously receive feedback and modify or improve the effort to meet the specific needs and interests of the community.

Marketing

A well-planned and creative marketing campaign utilizing multiple promotional materials, media coverage, and advertisements can increase community participation as well as general awareness about the importance of healthy nutrition.

Recommendations for Improving Existing Community Gardening Program

Increased Financial Support

A crucial step for increasing the reach of the existing community gardens may be finding financial resources to allow Isles' or other interested organizations to provide better material and technical support, training, and mentoring for potential community gardeners. More human resources would also allow Isles' to increase marketing and coordination with other interested entities.

Building Partnerships

The capacity of the program could also be improved by building partnerships with other organizations. This may include entities that can recruit or provide regular gardeners, such as youth programs, community organizations, and churches or other faith communities. Other partners could include colleges or university cooperative extension offices that can provide technical, research, and administrative resources, as well as access to faculty and student volunteers.

Marketing

Awareness about and participation in the existing gardening program may increase through marketing efforts. This can include creating and distributing creative promotional and information material. Recognition and "branding" of the program could also be increased through consistent and prominent signage at the gardens, with accurate and updated contact information.

APPENDIX

FOOD ASSISTANCE PROGRAM RESOURCES

Financial Assistance Programs:

Program: The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

Purpose: Preventive nutrition for low-income pregnant, breast-feeding and postpartum women, infants and children under 5 years old at nutritional risk in low income families

Guidelines: Federal Income Eligibility Guidelines (185%). WIC is administered by State agencies. Not an entitlement program—limited by available funds.

Activities: Provides vouchers to be used for supplemental food packages at authorized stores. Restricted products intended to meet certain micronutrient needs (calcium, iron, protein, vitamins A and C). Supports distribution of supplemental foods, health care referrals, and nutrition education

Trenton Stats: In 2009 there were 46 WIC authorized stores and 137,890 WIC redemptions at authorized stores in Mercer County (Food Atlas data) A pilot program launched in August 2009 enables farmers to use wireless equipment required to process EBT transactions. One location in Mercer County participating: Capital City Farmers Market, Asprocolas Acres, East State St. between Warren & Broad Sts., Trenton

National Stats: For FY 2010, 9.2 million participants per month, \$41.55 food cost per person, \$6.8 billion total expenditures

Resources: <http://www.nj211.org/foodnutrition092.cfm>; USDA Household Food Security 2009 Report (31); Barrett, 2002, 38-39; Food Assistance Landscape Report FY2010

Program: WIC Farmers' Market Nutrition Program (FMNP)

Purpose: To increase access to fresh, unprepared fruits and vegetables through farmer's markets for WIC participants

Guidelines: WIC Income Eligibility Guidelines (185%). FMNP is administered by State agencies.

Activities: Each participant receives \$20.00 to purchase from authorized farmers. Farmers submit redeemed FMNP coupons to bank or State agency for reimbursement. FMNP coupons are issued once for the season along with regular benefits and are accompanied by nutrition education information.

Trenton Stats: N/A

Resources: <http://www.fns.usda.gov/wic/WIC-FMNP-Fact-Sheet.pdf>; <http://www.state.nj.us/health/fhs/wic/farmermktpart.shtml>

Program: WIC Senior Farmers' Market Nutrition Program (SFMNP)

Purpose: Provides eligible low-income seniors with coupons to purchase fresh fruits and vegetables from authorized vendors

Guidelines: WIC Income Eligibility Guidelines (185%). Participants must be 60 years of age or older. Program is administered by County Offices on Aging.

Activities: Six \$5 checks issued along with regular WIC benefits.

Trenton Stats: N/A

Resources: <http://www.nj.gov/health/fhs/wic/farmermktseior.shtml>

Program: Supplemental Nutrition Assistance Program (SNAP), previously the Food Stamp Program

Purpose: To increase access to food for eligible low-income households

Guidelines: Income Eligibility Guidelines (185%). Increased from 130% in 2009-2010, as well as waiving the asset test and face-to-face interview at application and extending the recertification periods from 6 to 12 months (12 to 24 months for seniors). These changes added an estimated 35,000 beneficiaries to the program, as well as lowering intake process costs for applicants. Administered by State agencies.

Activities: Provides monthly benefits to purchase approved foods at authorized stores. Usually in the form of issued EBT cards.

Trenton Stats: In 2009 there were 248 SNAP authorized stores and 132,133 SNAP redemptions at authorized stores in Mercer County (Food Atlas data). Food stamps in New Jersey are administered at the county level. 7% of the County population (about 26,000) receives food stamps; this is a 23.4% increase between May 2009 and May 2010. In 2010, there were 622,022 people participating in the food stamp program in New Jersey. The average food stamp benefit amount per person is \$138.03 per month.

National Stats: For FY 2010, 40.3 million participants per month, \$133.79 average benefit per person, \$68.2 billion total expenditures

Resources: Food Assistance Landscape Report FY2010; <http://www.njahc.org/>; <http://www.state.nj.us/humanservices/dfd/programs/foodstamps/>

Program: New Jersey Hunger Prevention and Nutrition Assistance Program under Temporary Aid to Needy Families (TANF) [a/k/a WorkFirst NJ]

Purpose: Provides temporary cash assistance to needy families; specifically, the Hunger Prevention and Nutrition Assistance Program is meant to improve the nutritional status of needy families with children products by providing foods normally unavailable through food banks including meat and dairy

Guidelines: Limited to 4 months in 12 months [5 years for TANF benefits]. 250% FPL

Activities: N/A

Trenton Stats: N/A

Resources: <http://www.state.nj.us/humanservices/dfd/programs/workfirstnj/>; TANF State Plan

Program: Emergency Assistance under Temporary Aid to Needy Families (TANF) [a/k/a Work-First NJ]

Purpose: Provides temporary cash assistance to needy families for emergency food, clothing, and shelter

Guidelines: TANF-eligibles as needed

Activities: N/A

Trenton Stats: N/A

Resources: <http://www.state.nj.us/humanservices/dfd/programs/workfirstnj/>; TANF State Plan

Nutrition Programs

Program: National School Lunch Program

Resources: <http://www.nj.gov/agriculture/divisions/fn/childadult/school.html>; (see Section on Healthy People for further discussion)

Program: Fresh Fruit and Vegetable Program

Purpose: Provides fruits and vegetables to students during the school day

Guidelines: Schools must have 50 percent or more of the students eligible for free or reduced price meals.

Resources: <http://www.nj.gov/agriculture/divisions/fn/childadult/fruitandvegetable.html>

Program: Child and Adult Care Food Program

Purpose: Serves nutritious meals and snacks to eligible participants at participating day care centers

Resources: <http://www.nj.gov/agriculture/divisions/fn/childadult/food.html>

Program: Farm to School Program

Purpose: Partnership with Jersey Fresh for sourcing fresh fruits and vegetables. Also can include school garden activities.

Resources: http://www.nj.gov/agriculture/divisions/fn/childadult/farm_to_school.html

Program: USDA Summer Food Service Program

Purpose: Provides free meals and snacks to children in low income areas during the summer

Guidelines: Children 18 and younger. Enrolled sites must have 50 percent or more of the students eligible for free or reduced price meals.

Resources: <http://feedingamerica.org/how-we-fight-hunger/programs-and-services/public-assistance-programs/summer-food-service-program.aspx>

Program: USDA Recipe Booklet (2000)

Purpose: Literature issued by the USDA Center for Nutrition Policy and Promotion. Provides tips on basic food safety and healthy cooking, tips for shopping and meal planning on a limited budget, sample menus, and 40 recipes that conform to the US Dietary Guidelines and Food Guide Pyramid.

Guidelines: N/A

Activities: N/A

Trenton Stats: N/A

Resources: <http://www.cnpp.usda.gov/publications/foodplans/miscpubs/foodplansrecipebook.pdf>

Program: USDA National Agricultural Library Consumer Corner

Purpose: Website maintained by the USDA. Offers healthy recipes, cooking tips, and ingredient substitutions. Includes links to external sites with more specific guidance, as well a recipe finder database that allows searches by ingredients, various themes, cooking equipment, and cost.

Guidelines: N/A

Activities: N/A

Trenton Stats: N/A

Resources: http://fnic.nal.usda.gov/nal_display/in-dex.phpinfo_center=4&tax_level=3&tax_subject=358&topic_id=1610&level3_id=5940&level4_id=0&level5_id=0&placement_default=0

Program: Faithfully Fit

Purpose: Nutrition education program designed to work with houses of worship and other faith-based organizations to educate community members. Not very hands-on, New Jersey based.

Guidelines: N/A

Activities: Provide hand-outs for food pantry food packages, including monthly one-page fact sheets on selected nutrition topics, hand-outs on how to apply for benefits, nutrition-themed posters, and 'Temple Talks' linking healthy food behaviors to Christian Bible verses.

Trenton Stats: N/A

Resources: <http://www.njsnap-ed.org/fit/>

Program: Community Food Project Competitive Grants Program

Purpose: Multipurpose, designed for the development of community food projects that promote community self-sufficiency and build long-term food security capacity.

Guidelines: Projects are funded from \$10,000-\$300,000, and from 1 to 3 years. They are one-time dollar-for-dollar matching grants to eligible private non-profits.

Resources: http://www.csrees.usda.gov/nea/food/in_focus/hunger_if_competitive.html

Program: Federal State Marketing Improvement Program

Purpose: For states to explore marketing opportunities for food and encourage research into improving the market system

Guidelines: Matching grant; 25 to 35 grants each year averaging \$50,000 per grant.

Resources: <http://www.nj.gov/agriculture/grants/fsmip.html>

Program: National Farmers' Market Promotion Program

Purpose: To finance community-supported agriculture, farmers' markets, roadside food stands, and other direct producer to consumer markets

Guidelines: Eligible entities are farmers, non-profits, governmental or organizational authorities; grants administered by USDA's Agricultural Marketing Service (AMS)

Resources: <http://sustainableagriculture.net/publications/grassrootsguide/local-food-systems-rural-development/farmers-market-promotion-program/>

Program: Specialty Crop Block Grant Program

Purpose: To "enhance the competitiveness" of specialty crops through marketing, improved production and distribution systems, development, education, nutrition, and other research

Guidelines: application through NJ Department of Agriculture and USDA

Resources: <http://www.nj.gov/agriculture/grants/specialtycropblockgrants.html>

Distribution Programs

Program: State Food Purchase Program (SFPP)

Purpose: Distributes funds for EFOs to purchase food to be distributed at food pantries and by other community food assistance providers.

Guidelines: N/A

Resources: <http://www.nj.gov/agriculture/divisions/fn/>

Program: The Emergency Food Assistance Program (TEFAP)

Purpose: Provides free federally donated food to be distributed by the State to EFOs. Primary outlet for government stock.

Guidelines: Individuals receiving food from TEFAP distributors must be enrolled in TANF, SNAP, Supplemental Security Income (SSI), WIC, Medicaid, or have a total household income less than 185% FPL

Resources: <http://www.nj.gov/agriculture/divisions/fn/>

Program: School Lunch Commodity Distribution

Purpose: Distributes food commodities to over 700 participating school districts, child and adult day care centers, summer feeding programs, camps and charitable institutions.

Guidelines: Has an administrative fee of \$2.35 per case if shipped through their warehouse system. Allocated by agency caseload, need, and capacity; items selected from the “Food Allocation and Pick-Up Notice” issued about once a month

Resources: <http://www.nj.gov/agriculture/divisions/fn/>

Program: (Food programs for elderly New Jersey residents)

Purpose: Many senior clubs and centers offer food programs. The County Offices on Aging provide meals in group settings at locations in each county. They also deliver meals to homebound individuals. These programs are provided to persons age 62 or older without regard to income.

Guidelines: N/A

Resources: <http://www.nj211.org/foodnutrition093.cfm>

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