

Stapleton and Park Hill Community Food Assessment



Completed by City Harvest with input, participation and leadership from those living and working in Park Hill and Stapleton, Staten Island, New York City.

2008-2009



Table of Contents

Acknowledgements.....	i
I. Executive Summary.....	1
Introduction.....	2
Major Findings.....	3
Recommendations.....	4
II. The Full Report.....	7
1. Purpose and Focus of the CFA.....	7
2. Methodology and Timeline.....	8
3. Findings.....	12
3.1 Overview of the Community and its Food Environment.....	12
3.1.1 Borough-wide Information.....	12
3.1.2 Geography and Key Demographics of the CFA Study Area.....	13
3.1.3 Neighborhood Characteristics.....	14
3.2 Environmental Barriers and Resources Affecting Healthy Food Consumption.....	18
3.2.1 The Food Retail Landscape.....	18
3.2.2 Transportation Issues.....	26
3.2.3 Affordability: Prices and Budgets.....	29
3.2.4 The Safety Net: Food Assistance Programs and Emergency Food.....	32
3.3 Community Perceptions, Habits, and Influences.....	35
3.3.1 How does the community define ‘healthy food’?.....	35
3.3.2 Eating and Shopping Behavior: The Culture Around Food.....	37
3.3.3 Eating Habits of Immigrant Groups.....	39
3.3.4 Cooking Knowledge.....	40
3.3.5 Youth Habits and Influences.....	41
3.3.6 The Community’s Seniors.....	44
3.4 Community Readiness and Community Solutions.....	45
3.4.1 Community Readiness.....	45
3.4.2 Community Solutions.....	45
4. Recommendations.....	47
III. Appendices.....	51

Acknowledgements

In particular we would like to thank and recognize the staff and members of the following organizations on Staten Island. Many graciously helped organize focus groups and administer surveys. Thank you all so much for your assistance, through late nights and wild weather:

African Refuge	Stapleton Community Center
College of Staten Island	Stapleton Houses (NYCHA)
Community Health Action	Stapleton Senior Center
Curtis High School	Stapleton UAME Church
Elizabeth Boyle Senior Homes	Staten Island Liberian Community Association
First Central Baptist Church	Trinity Lutheran Church
IS 49 Middle School	Urban Harvest Ministries
Our Lady of Good Counsel Church	Vision for Staten Island
Project Hospitality	Wagner College
Roza Promotions	YMCA New Immigrants Program
Saint George Food Co-Op	
Saint George Library	

Other support for the CFA was graciously provided by GreenThumb, Just Food, the Healthy Bodegas Initiative, Hot Bread Kitchen, and Citizens Committee for NYC.

This study was largely implemented by the dedicated efforts of the residents, gardeners, and activists of Staten Island. We wish to thank the residents of Stapleton and Park Hill who helped conduct surveys, focus groups, and participated in lively discussions about improvements to their neighborhood food landscape. We hope this information will inspire real community change in the coming years.

City Harvest staff managed this process, with the support of those mentioned above. The planning, facilitation, analysis, and writing was implemented by Jonna McKone, former Community Organizer, and supervised by Carla Kaiser, Senior Manager of Community Partnerships.

Other staff who assisted in the process include Jake Pfohl, former VP of Program Development; Kate MacKenzie, Director of Policy and Government Relations; Basil Reyes, Associate Director of Program Compliance; Kristen Mancinelli, Manager of Policy and Government Relations; and interns Manny Prieto and Kendra Tolbert.

This project was funded by the Staten Island Foundation, Richmond County Savings Foundation, The New York Community Trust, former New York City Council member Michael McMahan, and New York City Council member Ken Mitchell.

I. Executive Summary

Residents of the Stapleton and Park Hill neighborhoods of Staten Island face several unique challenges compared to similar low-income neighborhoods in other boroughs of the city. Poor access to healthier, lower cost retail food options due to poor transportation tops the list, compounded by competing priorities of new immigrants and traditional minorities, affordability of food in a degraded economy, high rates of violence, and limited public spaces and services. These and other challenges related to food and health are examined in this report.

The Community Food Assessment (CFA) study area included these two adjacent communities in Staten Island's North Shore within the broader boundaries of Community District 1. Four census tracts were selected as the core neighborhoods of the CFA study area: tracts 21, 27, 29, and 40, with a combined population of 21,588. Park Hill boasts the largest Liberian community outside of Africa, and it also hosts strong Latino, Russian, and other immigrant communities living astride existing African American communities. These neighborhoods have high poverty rates (about 31% vs. 18.9% citywide) and population density, high percentage of female-headed households¹, as well as a high population of recent immigrants. As in other low-income neighborhoods, the current poverty rates and declining employment clearly put limits on what families and individuals can do to make healthy choices. Sixty percent of survey respondents indicate problems with stretching their food budgets to reach the end of the month. Eighty-two percent of those surveyed eat less than three servings of produce per day, and 29% eat less than one item per day.

Among the consequences are increasing nutritional disease. More than one in five residents in these surveyed area of Staten Island (including Stapleton, Park Hill and St. George) are obese, putting them at increased risk for diseases including diabetes, hypertension, heart disease, and stroke. In Stapleton and St. George, 83% of adults do not meet the recommended level of physical activity of 30 minutes most days; 42% report not exercising at all. Anecdotal evidence suggests that nutritional illnesses are much higher among those accessing emergency food, with one food pantry director estimating that 65% of her clients are experiencing nutrition-related diseases. Despite these circumstances compromising residents' health, many residents and local organizations indicated that they want to help and be part of the solution, and they have demonstrated their skills in providing a basic safety net, goodwill, and a range of small-scale initiatives on which to build more systemic change.

In response to these alarming circumstances, City Harvest embarked on and completed a Community Food Assessment (CFA) between September 2008 and October 2009 in these communities to provide a basis and impetus for change. The purpose of the CFA was to discover the key factors contributing to problems as well as potential resources, to cultivate community

¹ Female-headed households are significantly more likely to enter into food insecurity and less likely to exit. They had the highest rates of food insecurity of any group examined in the study including stratification by education, ethnic group, and age according to: Ribar, David C and Karen S. Hamrick, "Dynamics of Poverty and Food Sufficiency," USDA: Food Assistance and Nutrition Research Report Number 36, September 2003, 1-29.

stakeholders to help identify problems and work towards solutions, and to produce recommendations embraced by the stakeholders. Three focus themes guided the work of the CFA:

- Discovering barriers, resources, and other factors that affect what people buy and eat, thus providing a clear picture of the food environment and its influences;
- Providing a clear picture of how residents perceive and utilize food and the food system, thus identifying how they make choices that affect their nutritional health; and
- Identifying solutions to inform planning and action that transforms both environmental and behavioral constraints and to build lasting change.

The methodology of the CFA included the following study components, implemented in a phased, overlapping basis from September 2008 through October 2009:

- **Pilot and formal surveys** – Gathered data on shopping habits and influences, food security, barriers to healthy food access, and preferences for food system changes;
- **Mapping, Secondary information** – Defined the geographic picture of food retail and access, local housing, green spaces, transport routes, and population demographics; and
- **Focus groups** – Gathered qualitative information via stories and personal reflections on themes such as perception and nutrition, local resources, food knowledge, shopping and eating habits, food insecurity, and changes preferred by the community;
- **Observational store assessments** – Investigated food type, quantity, quality, and prices, store appearance, presentation, storage, advertising, and social relations;
- **Occasional interviews and meetings** – Drew general information from community board sessions, public events, and discussions with staff of local organizations.

Introduction

In the Stapleton and Park Hill study area, nutritional health is compromised by the poor food environment, the economy, and by the choices residents make as a result. Chief among barriers to healthy food consumption is poor access to healthy and lower-cost food. There are only two supermarkets of reasonable quality and value to this specific community, and they are not walkable from the main subsidized housing establishments in the area. Limited public transport compounds the problem, making residents dependent on an abundance of convenient fast food outlets and small neighborhood stores stacked with limited varieties of poor quality daily staples at higher prices.

The CFA was able to look deeply within this broad reality to see how residents are affected and cope with these key barriers, along with a wider range of other factors that serve as both resources and constraints. Information pertaining to each of the study focus questions was triangulated; as a result, more factual observational and survey data was confirmed and enriched by qualitative information emerging from focus group discussions. Differences in such data often helped to clarify some issues, e.g., the use of fast food stores varied strongly between surveyed adults, who most frequently ate at home, and youth in focus groups, who were becoming more acculturated and often frequented the outlets during unstructured after-school hours.

CFAs are designed to mobilize for change rather than to deliver “extractive” research results. When the study worked through local organizations and utilized participatory methods, such as youth-led store observations and discussions where residents discovered and learned together, it was at its best. In future CFAs, a greater balance of such participatory activities versus conventional survey approaches will enhance the mobilization aspects of this work. That being said, the approach of the CFA evoked a strong local will to improve and change the food system, and left in place a sound set of findings for planning and taking action.

Major Findings

The food environment strongly limits accessibility to affordable, healthy food.

The food landscape represents many challenges to the local low-income residents and often forces them to buy lower quality and more expensive food. The only two supermarkets are located on the outer edge of the target area and are not considered walkable by planning standards. Buses are infrequent from both neighborhoods, and from Park Hill require transfers in order to get to one of the supermarkets. Shoppers have to cab home with their bags, adding to cost. According to the New York City Department of Planning, Stapleton and St. George have one of the greatest needs for supermarkets citywide. In practice, many residents shop for their daily staples at 39 stores including small bodega-type grocers, convenience stores, and specialty stores; and 37 fast food outlets comprising delis, pizza/Chinese, and bar/fast food services, which are convenient and walkable. Unfortunately, the store assessment demonstrated that corner stores usually carry only a few items of produce, mostly potatoes and bananas, and often lack skim and lower-fat milk. *See more on page 18.*

The affordability of food constrains the quality of food, but not the calories consumed.

The poverty rate for the study area is 30.92%, and census tract 21 has the lowest median household income in the target area (\$17, 019)—over three times lower than Staten Island’s median income. While an observational study indicated grocery prices are similar or even cheaper than some other parts of the city, 60% of survey respondents reported having trouble stretching their food budgets until the end of the month. Of these, 61% reported facing this problem every month or every other month, while 25% said this occurred several times in the past year. The food security safety net and economic subsidies are thus critical. Further, of the survey participants, 51% of respondents have used either a soup kitchen or food pantry. Current or past participation in food stamps/SNAP is reported by 45% of respondents. Given access to benefits and emergency food, people can afford to eat calories, but they are not eating what they want to and should eat. Tight budgets significantly constrain consumption of healthier, higher quality food, but there is still some room to maneuver in making healthier choices despite the dual realities of costs and rising unemployment. *See more on page 29.*

Perceptions, influences, behaviors, and culture are also strong factors.

Currently, the majority of residents—82%—eat three or less servings of fruits and vegetables per day, which is less than the U.S. average of 3.41 servings, and far less than the five to nine servings per day recommended for adults. Nearly a third of respondents—29%—eat less than one fresh item a day. Study results also demonstrated that there is a fairly good knowledge of the foods that comprise a healthy diet, and the importance of diet for health. The difficulty lies in the practical

side. Area residents lack knowledge about how to cook foods such as produce, find it nearly impossible to manage their lean budgets and tight schedules to eat well, and struggle to sustain a healthy diet in an inconvenient and poorly supplied food environment.

Cultural roots create strong preferences but acculturation transforms emerging generations. Immigrants tend to eat more servings of fruits and vegetables than their U.S.-born neighbors. The area's blend of cultures is both a resource and a challenge. In these neighborhoods, large groups are able to maintain a cultural identity—in language, in behavior, in food—while living in a new country. Sometimes this clashes with the culture native to the area, especially around food behaviors and expectations about access to community resources. As immigrant populations get assimilated and start eating poorer quality foods, knowledge of cooking among the young competes with junk food. The survey suggests that adults cook and eat at least seven meals a week at home. Teenagers and children, however, tend to be drawn to the fast food shops and delis which are plentiful in the study communities, and are losing the ability to cook. *See more on page 37.*

Community Readiness and Preferences for Change

Communities indicated clear demand for healthier food access, a willingness to be part of the solution, and had their own suggestions for change. More affordable produce, help with budgeting and managing expenses, having a farmers' market or community garden close by, and having better quality fruits and vegetables in the neighborhood were key demands. Making supermarkets accessible in each neighborhood, arranging shuttle buses for easier shopping access, and creating supportive group activities for food sharing, cooking of meals, and childcare were among specific preferences. These community preferences, along with the rest of the study results, were taken into account in formulating the recommendations that follow. *See more on page 45.*

Recommendations

A combination of short-term and long-term actions are foreseen. City Harvest will continue as a catalyst and resource, working together to mobilize change with the residents and organizations who were involved in the CFA study.

Share the Study: City Harvest and its community partners should move the process forward by sharing the report with the local residents, leaders, and organizations that took part in the study and the larger community. Of key importance will also be sharing it with officials, electoral candidates, and funders who can impact decisions on food system initiatives in the area.

Take Early Action: Initiate small-scale actions to alleviate current conditions. This will help to create visibility, test potential schemes prior to larger-scale investments, and build political will for longer-term changes as well as provide immediate benefits. The community recommended short-term activities such as:

- Arranging shuttle bus services;
- Establishing fruit and vegetable markets run by youth;
- Supporting entrepreneurial initiatives through arrangement of credits and other forms of financing;
- Organizing cooking and childcare clubs;

- Establishing community gardens;
- Organizing cooking classes for youth and youth-run feeding programs; and
- Optimizing the amount of fresh product brought to kitchens and pantries in this area.

Plan for Long Term Solutions: The findings of the CFA should be used to develop a results-oriented plan for longer-term improvements to the community's food system, developed with buy-in from the major stakeholders at the community, funder, official, and political levels. The plan should include project options by which strategic goals can be measurably achieved.

Build and Strengthen Community Coalition and Build Skills: Help organize local food-related community based organizations (CBOs) and advocates into a strong and active voice for change. Increase community self-reliance by strengthening skill sets of community leaders, neighborhood activists, non-profit leaders, faith-based organizations, and those simply interested in community improvement. This can be done through community leadership and skill-building workshops.

Engage Youth in Community Project: This is a major population to consider when addressing culture and needs of different community members in the area, with many resources to share in community projects.

Organize, Lobby, and Leverage Official Support: Build local organizational strength through training and collaboration, utilizing existing resource organizations. Once participating organizations are working as a team, they can engage local leaders to lobby to bring larger scale food initiatives to Staten Island and the study area.

Promote and Operationalize the Strategic Plan as a Collaborative Undertaking: A clear written plan with wide support will help to bring about larger scale and systematic changes if political will and public support is marshaled. Major changes should include:

- One or more larger grocers/supermarkets and farmers' market(s) brought within walking distance of Stapleton and Park Hill housing complexes;
- Improvements of small corner stores and their food offerings;
- Improved public transportation, with more direct routes to food outlets or permanent shuttle buses;
- Development of a large-scale program that ensures that unharvested farm food is gleaned, rescued, or purchased in large quantities and made available; and
- Cross-subsidized programs such as purchasing clubs and food cooperatives.

Track Progress: The drivers of the plan and its implementation should work within a clear timetable and track outcomes over an agreed period of time. The extent to which the strategic objectives are being met should be documented and put forward in a public and visible manner. *See more on page 47.*

Conclusions:

Poor nutritional health in the North Shore communities of Stapleton and Park Hill are the result of both external environmental factors and internal constraints. In a context where economic

conditions degrade abilities to eat well and are hard to change, there are other barriers in the short- and longer-term future. These include creating better access to supermarkets and medium-scale grocers by improved transportation, locating such stores within walkable distance to housing clusters, and improving the offerings of smaller corner stores. Also, since local families depend heavily on social assistance and emergency food, increasing fresh, healthy food options at pantries and kitchens can be a significant short-term measure. Education activities should focus on practical application and mobilizing and sustaining behavior, rather than just knowledge transfer. Whatever external players do to change the food environment, unless the many local human and organizational resources discovered by this study are engaged in leadership and decision-making roles, the needed changes are unlikely to be sustained.

II. The Full Report

1. Purpose and Focus of the CFA

According to the Community Food Security Coalition, a Community Food Assessment (CFA) tells the story of food in a community and mobilizes efforts to improve the food system. “Through such assessments, diverse stakeholders work together to research their local food system, publicize their findings, and implement changes based on their findings.”²

City Harvest and its community partners embarked on and completed a Community Food Assessment (CFA) between September 2008 and October 2009 in Stapleton and Park Hill, two low-income communities in the North Shore of Staten Island. This CFA was conducted to mobilize and inform these two Staten Island neighborhoods where City Harvest has made a commitment to foster long-term and sustainable change due to need and demand for more and better food.

Purpose of the CFA

To best support these communities, City Harvest, its donors, and community partners sought to investigate the barriers and resources families face in accessing and consuming healthy food. The CFA then identified long-term solutions for change through an integrative approach that looks at systems that affect food through participatory research.³ Using a participatory approach, this work informs community-based programming and mobilizes residents in City Harvest’s Healthy Neighborhoods. City Harvest’s Healthy Neighborhoods strive to increase healthy food access in low-income communities in four neighborhoods in New York City (Stapleton in Staten Island; Melrose and Mount Hope neighborhoods in the South Bronx; and Bedford-Stuyvesant in Brooklyn).

The CFA process evolved from recommendations and experiences from previous studies. Overall, City Harvest and its community partners sought to identify ways to both improve the local food system while also enabling residents to make healthier use of it.

What is a community food system?

Food security for a household means there is access by all members at all times to nutritionally adequate, culturally appropriate, affordable, and safe food at all times in order to lead a healthy and active life. This exists in a social system where food production, processing, growing, distribution, and consumption are “integrated to enhance environmental, social, economic, and nutritional health of a place and its people.” The system encompasses where food comes from, distribution and points of purchase, how and why people buy food, and methods of preparation and consumption. The food system includes production and supply, demand and access, knowledge and nourishment. The CFA approaches these linkages, recognizing that the end consumer of food is an often overlooked part of the system.

² Community Food Security Coalition, “Community Food Assessment Program,” http://www.foodsecurity.org/cfa_home.html.

³ Siedenburg, Kai and Kami Pothukuchi, “A Guide to Community Food Assessment,” Community Food Security Coalition, 2002, <http://www.foodsecurity.org/pubs.html#books>.

First, this would require that the study develop a clear picture of basic demographics and health profiles. Secondly, the CFA would investigate the food environment and its consequences, including organizations responsible for addressing food needs and services; availability, price and quality of goods provided in stores; transit issues; social service organizations; emergency food suppliers; and any other food sources.

Thirdly, the study would also look at residents' perceptions and behaviors—linking perceptions, local food knowledge, food shopping, and consumption patterns to understand the consumers' role in the system. Examining both the environmental or supply side of the food system in the area, as well as the demand and consumer side, could better uncover a more complete picture of the system's gaps or weaknesses as well as potential strengths and assets to build upon. The CFA also sought to assess residents' readiness for change and identification of their preferences for changes to their food system. City Harvest plans to use the results of this study to build awareness—from the policy level to food organizations to residents—and use study results to serve as a springboard for specific improvements as embraced by the community, its organizations, funders, and other supporters.

CFA Scope and Focus Questions

The scope and focus of the CFA was designed to accommodate the purpose of the CFA, as described above. The scope included first a preparation of a demographic and social profile of targeted communities and a broad overview of their food system. In addition to this overview, three specific research questions were identified as the focus of study efforts and results in the project area:

The CFA focused on:

- Discovering barriers, resources, and other factors that affect what people buy and what they eat, thus providing a clear picture of the food environment and its influences;
- Providing a clear picture of how residents perceive and utilize food and the food system, thus identifying how they make choices that affect their nutritional health; and
- Identifying solutions to inform planning and action that transforms both environmental and behavioral constraints and builds lasting change.

2. Methodology and Timeline

Overall Approach of the CFA

A key principle of the CFA best practice is to arrange the CFA so that it is conducted of, by, and for the community. Community members and local organizations were engaged in all major steps of the study and influenced its outcome. Volunteers, and others receiving a small stipend, conducted outreach for focus groups and events, participated in field research, and made recommendations on the progress of the study and activities undertaken as part of the CFA.

Among the various organizations involved in this study, religious groups were found to be essential pieces of the social landscape in these neighborhoods. Churches participated in surveys, data collection, and community meetings. Schools, community-based organizations, social service

providers, and tenants' associations in Stapleton, Park Hill, and St. George also participated in the CFA. Please see acknowledgements, page i, for a list of organizations involved in the CFA.

Range of Methods Utilized

By combining a range of both quantitative and qualitative methods, greater insights supporting the findings were obtained and data could be triangulated across the methods.

Methods combined:

- Use of secondary data;
- Pilot and 251 formal surveys of residents;
- Mapping, Geographic Information System (GIS) and MapPoint;
- 15 focus groups of 171 residents;
- Observation of the food environment by conducting store assessments; and
- Twenty informal interviews, discussions, and attendance at local community board meetings and events.

For analysis of data, surveys were analyzed using Survey Monkey, GIS and MapPoint mapping to document the environment, and focus group responses were coded and quantified. Data from all individual methods was then synthesized in response to the focus questions of the study.

CFA Timeline

These methods were employed over the 13 months of the project as outlined in a table in Appendix A. A summary of the methods and how they were undertaken are provided here:

Study Parameters

In the first two months, through November 2008, the parameters of the study area were identified and secondary data investigations helped complete the community profile. This included the use of federal census data, health and food system data from the Department of Health and Mental Hygiene (DOHMH), and other demographic data. In addition, inventories of local food organizations and outlets were prepared using existing data, to the extent possible.

Survey Pilots

During this period, surveys were piloted and refined. A pilot survey was developed and conducted at City Harvest's Mobile Market⁴ by staff members, New York City Housing Authority (NYCHA) residents, and regular Mobile Market volunteers. Five community members in Park Hill and City Harvest staff conducted another round of approximately 40 pilot surveys facilitated by the Staten Island Liberian Community Association (SILCA) and clients of a soup kitchen run by Community Health Action in St. George. Surveys were expanded and clarified based on community input and a meeting with volunteers. Community members and staff also strategized as to where and how to recruit people to take surveys, particularly during colder months. It was determined that community events, bus stops, and supermarkets were good places to either pass out surveys or conduct oral interviews. One hundred surveys were conducted and changes were made for the

⁴ Mobile Market: An activity whereby City Harvest provides fresh produce twice monthly at selected NYCHA housing sites free of charge directly to qualifying local residents.

final set of “food systems surveys” (see Appendix B for survey). Additionally, about 30 students from a “Food, Self, and Society” course at the College of Staten Island (CIS) conducted 50 surveys in the field on three separate occasions. City Harvest developed tools for the interviewers to use when administering the surveys (see Appendix C and Appendix D).

Formal Surveys

By April 2009, 251 formal surveys were completed with residents over 18 years of age. See Appendix E for information on the demographics of the survey participants. Many surveys were self-administered by clients at food pantries, soup kitchens, and community events. One-on-one surveys were conducted orally by community volunteers, City Harvest staff, and staff at partner agencies. Additionally, active mobilization of the community advanced.

Mapping

Mapping activities were also undertaken in this period. The CFA attempted to develop a clear picture of the food resources and stores in and around the study area, which resulted in GIS maps designed with the College of Staten Island. The maps analyzed where people live, accessible food resources, population demographics, green spaces for public use, as well as mobility in the community. Data on food retail was compiled from a number of different sources including the New York City Coalition Against Hunger, New York MarketMaker, data from New York State Office of Temporary and Disability Assistance⁵, as well as ReferenceUSA. Maps also show locations of gardens, emergency food resources, public housing developments, and other sites of community interest. City Harvest also used MapPoint to prepare summary maps of data collected on the target population centers, food retail outlets, and restaurants/fast food outlets in the study area.

Focus Groups

City Harvest advertised through flyers distributed throughout the area to recruit for focus groups (see Appendix F for samples). Focus group discussions were then organized and completed through March 2009 as well.

The outline for the focus group discussions (see Appendix G) was created based on interviews with staff at emergency food providers, CFA research questions, resident discussions, other CFAs from around the country, as well as previous City Harvest studies in the Bronx. In particular, the nonprofit Vision for Staten Island and a local City Harvest agency, Project Hospitality, provided much insight into focus group structure and questions. The focus groups were conducted based on the following themes:

- Perceptions of community and community nutrition;
- Awareness of nutrition and food resources;
- Knowledge of food, food resources, and nutrition;
- Shopping habits and opinions about food retail;
- Eating habits and external and personal barriers to healthy food access;
- Emergency food usage and food insecurity; and
- Changes the community would like to see.

⁵ Data of food stores by zip code that accept EBT (SNAP) supplied by the Center for Employment and Temporary Support.

Fifteen focus groups were conducted over the course of four months, from December 2008 through the end of March 2009. One hundred seventy-one residents participated in the discussions, with from six to thirty five participants at a time.

The focus groups aimed to be inclusive of all populations. Focus groups included:

- One with Spanish-speaking adults;
- One with native Russian speakers who were seniors;
- Three with Park Hill's West African population (one with youth, two with adults);
- Six with children and teenagers (two in St. George, two in Stapleton with kids, two in Park Hill);
- Three with adults from Stapleton; and
- One with seniors from Stapleton.

See Appendix H for details on the number of participants, age group, population characteristics, recruitment method and major themes discussed in each focus group. See Appendix I for the coding schema used to analyze the transcriptions of the focus groups.

Store Assessments

By May 2009, a store assessment was also completed in the area (see Appendix J for the instrument). Surveys were administered at 12 stores to assess the quantity, cost, variety, and quality of fresh produce and milk sold in each store at that point in time. Focusing on fresh foods offered in stores reflects the focus that City Harvest has for healthy foods. The findings from this effort can be reviewed in Appendix K.

Analysis and Report Preparation

Analysis of the work began in months nine through thirteen, including additional store assessment and secondary data collection to fill any gaps in the field work. The final report was written, edited, and completed in November 2009.

3. Findings

3.1 Overview of the Community and its Food Environment

3.1.1 Borough-wide Information

Staten Island is a quickly changing borough. Its population growth rate far outpaces the other boroughs. (See Table 1.)⁸ The population of documented immigrants, largely Mexican, has also increased by 56% since 2000.⁹ The Latino population started growing in large numbers around 1994 and after 2001 started rooting themselves as a community, concentrating first in Port Richmond, then branching into West Brighton, New Brighton, Tompkinsville, Stapleton, and also down to the South Shore. Stapleton is home to a number of Latino-owned food stores. Additionally, public housing units make up 2.9% of Staten Island’s housing, well below the citywide average of 5.7%. There are only 11 public housing developments on Staten Island, even though in 2002 23.8% of households in Staten Island were paying more than 50% of income in rent.

Location	1990-2000	Since 2000
NYC	+9.4%	
Manhattan	+3.3%	+5.7%
Bronx	+10.7%	+3.9%
Brooklyn	+7.2%	+3.0%
Queens	+14.2%	+2.2%
Staten Island	+17.1% ⁶	+8.8% ⁷

Due to its unique geography, population density, and other characteristics, programming and initiatives that might apply to other boroughs are rarely extended to Staten Island despite the many areas that are highly underserved. Indeed, poverty has risen by 48% in the borough since 1990.¹⁰ For example, a recent report noted that the city may provide some financial incentives for the development of new grocery stores, including in the Stapleton community. However, unlike other parts of the city, zoning incentives were ruled out under the rationale that the borough as a whole is seen as “car-centric”, and encouragement of large buildings may not be appropriate.

Several health studies and city surveys have shown that residents living north of the Staten Island Expressway have high rates of diabetes and obesity and limited access to fresh fruits and vegetables. In 2004, a Health Department study revealed that more than 15% of North Shore residents had not eaten any fruit or vegetables in the 24 hours before they were surveyed. A City Limits study that year found Staten Island had fewer grocery stores, farmers’ markets, and community supported agriculture programs per capita than any other borough, while 138,283 Staten Islanders had more McDonald’s than grocery stores in their ZIP codes. The disparity is even greater in the borough’s impoverished neighborhoods.

⁶ New York City Department of City Planning, “Population Growth and Race/Hispanic Composition,” Summer 2001, www.nyc.gov/html/dcp/pdf/census/nyc20001.pdf.

⁷ New York City Department of City Planning, Current Population Estimates, <http://www.nyc.gov/html/dcp/html/census/popcur.shtml>.

⁸ Peters, Jonathan R. and Michael E. Kress, “Traffic Flow Modeling: Operational Issues on Staten Island,” Special Report for the Borough President of Staten Island, February 11, 2006.

⁹ Kramer, Sarah, From “New York Soil: The Taste of Home”, *New York Times*, September 29, 2009.

¹⁰ New York State Assembly Housing Committee, “Affordable Housing on Staten Island.” Pratt Center for Community Development, June 3, 2005, <http://prattcenter.net/test-mgstateassembly.php>.

3.1.2 Geography and Key Demographics of the CFA Study Area

Map 1: Zip Codes and the Area of Study



The CFA study area includes two adjacent communities in Staten Island's North Shore within the broader boundaries of Community District 1 and zip codes 10304 and 10305. Twenty-six percent of the population in Community District 1, which totals 162,264 people, receives some income support, such as public assistance, supplemental security income, or Medicaid.¹¹ Four census tracts functioned as the core neighborhoods of the study area: 21, 27, 29, and 40. The population of these tracts is 21,588. These neighborhoods were targeted due to City Harvest's prior working experience in the area, high poverty rates and population density, high percentage of female-headed households, as well as a high population of recent immigrants. Census tract 21 has the lowest median household income in the target area (\$17, 019) - over three times lower than Staten Island's median income.

According to a study addressing factors that contribute to food insufficiency and insecurity, female-headed households with no husband present were found to be an indicator of food insecurity. This demographic is significantly more likely to enter into food insecurity and less likely to exit. They had the highest rates of food insecurity of any group examined in the study including stratification by education, ethnic group, and age.¹² The proportion of female-headed households is near 30% in both Stapleton and Park Hill. One study found that 33% of female-headed families living in four U.S. cities working and on welfare are food insecure with no hunger and 15.3% are food insecure with hunger.¹³ According to 2005 data, 64,000 of Staten Island's approximately 500,000 residents are served by emergency food providers (EFPs). Twenty-four percent of EFP clients have jobs and of those, 67% have full-time jobs¹⁴, indicating that working families on the island face food insecurity. More than half of residents at risk for hunger, 31,097, live in community district 1.

This neighborhood was also targeted because rates of diet-related disease and heart-disease-related death rates and hospitalizations are higher in Stapleton and St. George (the neighborhood to Stapleton's north) than the borough's average and citywide. Twenty-three percent of residents have high blood pressure and 22% have high cholesterol. (The actual rates of these diseases may be higher, as this figure only includes individuals who have been diagnosed.)¹⁵ Also, as per the DOHMH health profile, one in six adults report being in poor or fair health, and one in five do not have health insurance.

¹¹ New York City Department of City Planning, "Staten Island Community District One," Department of Planning Community Data Portal, 2009, http://www.nyc.gov/html/dcp/html/neigh_info/si01_info.shtml.

¹² Ribar, David C and Karen S. Hamrick, "Dynamics of Poverty and Food Sufficiency," USDA: Food Assistance and Nutrition Research Report Number 36, September 2003, 1-29.

¹³ Polit, Denise F., Andrew S. London and John M. Martinez, "Food Security and Hunger in Poor, Mother-Headed Families in Four U.S. Cities," *The Project on Devolution and Urban Change*, May 2000.

¹⁴ Slepian, Stephanie, "Food Pantries on Staten Island Need Donations," *SI Advance*, February 11, 2008.

¹⁵ Oslon, EC, Van Wye G, Kerker B, Thorpe L, Frieden TR, "Take Care Stapleton and St. George," NYC Community Health Profiles, Second Edition; 2006; 40 (42); 1-16.

More than one in five residents in Stapleton and St. George is obese, which is slightly higher than the average for New York City. Obesity is defined by the Centers for Disease Control and Prevention as a body mass index (BMI) of 30 or greater and puts individuals at increased risk for diseases including diabetes, hypertension, heart disease, and stroke. In Stapleton and St. George, 83% of adults do not meet the recommended level of physical activity of 30 minutes most days; 42% report not exercising at all. Additionally, regular physical exercise lowers the risk of heart disease, obesity, and diabetes and can improve glucose control for those with diabetes, as advocated by the American Diabetes Association. Eight percent of residents have diabetes in the North Shore and in 2003 there were 940 diabetes-related hospitalizations in Staten Island; 33.9% of those hospitalizations were Stapleton and St. George residents.¹⁶

If health data were available for the main study focus areas and lower income populations of Stapleton and Park Hill, anecdotal information would suggest these rates would be significantly higher. Director of Food and Nutrition at Project Hospitality and Park Hill resident Teisha Diallo coordinated the completion of surveys with pantry clients and participated in an interview. Ms. Diallo mentioned the low availability of fruits and vegetables in local stores and high prices as a barrier to consuming healthful food. Ms. Diallo estimates 65% of the residents who use the emergency food pantry services at Project Hospitality have some form of diet-related disease such as malnutrition, heart disease, obesity, or diabetes.

In addition to relevant data highlighting the North Shore as an area of need and food insecurity, boundaries were initially based on City Harvest's Mobile Market which has been operating in Stapleton since 2004. The market supplies residents of the largest public housing development on Staten Island, Stapleton Houses' 1,703 residents and 584 families, with free fresh fruits and vegetables twice a month. Seasonal nutrition education programming and recipes are offered on-site. Food for the market is obtained from regional farmers and food distributors. The allotment of food is determined by family size; an average of 100 to 150 households participate in each market.



View of Stapleton Houses and Community Center

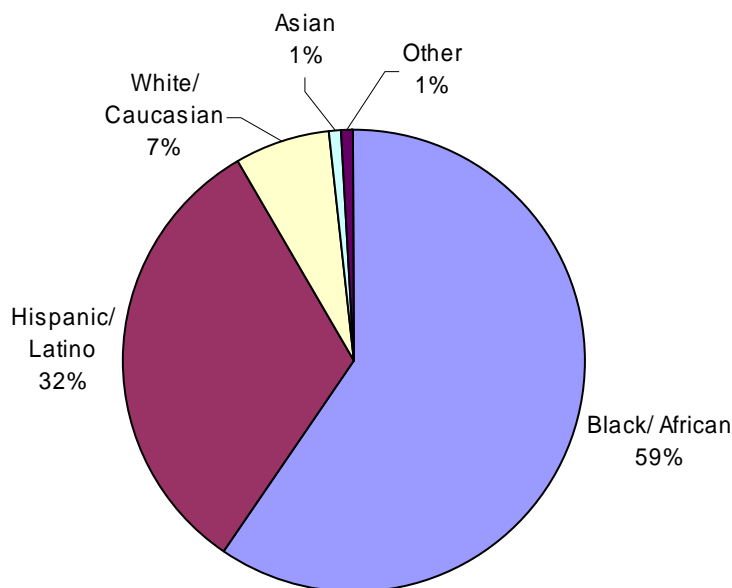
3.1.3 Neighborhood Characteristics

Stapleton and Park Hill have some of the island's most ethnically diverse populations, oldest infrastructure, and densest housing. Despite the towering high rise buildings and reputations of violent, unsafe neighborhoods, Stapleton and Park Hill have a closely knit neighborhood atmosphere. Bay Street parallels the coast and functions as the center of retail in Stapleton where Canal Street intersects. However, one will find a number of empty storefronts, and others that are in disrepair.

¹⁶ New York City Department of Health and Mental Hygiene, "Diabetes in New York City: Public Health Burden and Disparities," http://www.nyc.gov/html/doh/downloads/pdf/epi/diabetes_chart_book.pdf.

Due to its proximity to the water, the area has been the site of a number of development projects. Most recently, an old park was restored as part of a \$1.7 million investment plan to revitalize the area, but it is too small to support the needs of the area.¹⁷ However, many factors contribute to the poor reputation of the neighborhood, including the dense network of subsidized houses, the area demographics, as well as a history of drug-related and gang violence. These neighborhoods are within the jurisdiction of the NYPD's 120th Precinct, which has the highest rates of violent crimes and theft in the borough. Levels of crime and perceived levels of violence directly influence physical activity in the neighborhood, the public sphere, and overall civic engagement. Residents have noted the increased presence of police in recent years, but also aim to take back their own streets. One resident born and raised in Park Hill started a non-profit for youth called *Shoot Hoops Not Guns*, in response to the gang violence battling Park Hill and Stapleton.

Figure 1: Stapleton Houses (NYCHA) families by ethnicity as of January, 2009



The New York City Housing Authority (NYCHA) provided data in January 2009 on the Stapleton Houses, which comprise a large part of Stapleton's population. The development is home to about 1,700 residents and 584 families; there are 693 apartments, yet about 100 apartments are vacant. NYCHA data demonstrates eligibility for Supplemental Nutrition Assistance Program (SNAP) and School Lunch programs. Those who fall within this category will also meet WIC income requirements though the WIC income eligibility, set at 185% the poverty line. Therefore, minors comprise 42.1% of the population; 46% families are single-mother households; 52.2% of households have at least one employed member; and 18.8% of the families receive social welfare assistance. The average family size is 2.9 and average income per family is \$22,178, which is approximately \$5,000 below 130% of the poverty line for 2009.

¹⁷ New York City Department of Parks and Recreation. "Commencing Renovations at Tappen Park," *The Daily Plant*, January 28, 2009, <http://www.nycgovparks.org/parks/R028/dailyplant/20212>.

NYCHA is currently building a senior development within the complex and at least 35 new families moved to the development during May 2009, leaving opportunity for more outreach around City Harvest's Mobile Markets. The public housing development is surrounded by a number of buildings with subsidized units.

Compared to other neighborhoods in New York City, Stapleton and Park Hill lack meeting spaces, parks, and a strong network of community-based organizations. Also, according to two interviews with community leaders, there is a lack of faith in the ability of community-based organizations and social service providers to solve neighborhood problems. Further discussion of this issue revealed that no single organization has been able to take charge of the major concerns in the neighborhood. Instead, a number of smaller organizations compete for funding and a presence in the neighborhoods. Anecdotal accounts by community leaders also reveal a history of competition for resources and programs between Park Hill and Stapleton groups. One resident stated during a focus group: *"a lot of people come through here and give people ideas but we never see them again."* Although these neighborhoods face similar issues and concerns, they rarely share the same resources, such as emergency food and recreational activities. Additionally there is a history of gang violence between these two communities.

Park Hill and Clifton house the largest population of Liberians in any city outside of Africa with an estimated 7,000 direct immigrants who came between the early 1990s to early 2000s during Liberia's civil war. Liberians are estimated to comprise 50% of the Park Hill population.¹⁸ Many have been granted Temporary Protective Status (TPS), which has been continually extended over the years. Park Hill is also home to Nigerians and other West Africans, Latinos, and Arab immigrants.

There are five food pantries, one mobile pantry through Catholic Charities, and the City Harvest Mobile Market all serving the area and a number of local organizations working with the Liberian community, including the Staten Island Voice Project, YMCA New Immigrants Program, Roza Promotions, African Refuge, and the Staten Island Liberian Community Association (SILCA). Furthermore, African Refuge and SILCA offer emergency food programs for their members where they see the need. Community needs manifest themselves in other manners as well. The chairman of SILCA, Telee Brown, estimated that there are 1,000-2,000 youth on the island with little to do in their free time. According to residents, Africans as well as non-Africans have the need for after-school programs and work focused on community empowerment.

Although residents have deep concerns about the community in Staten Island's North Shore, the CFA revealed a strong willingness on the part of residents to implement change. There are a number of identifiable neighborhood assets and resources that could be mobilized towards the success of a community-led food project. The neighborhoods lack walkable supermarkets and diverse food options, and people have access to only a small number of social services. At the same time, assets in the community include many emergency food agencies serving the community's immediate needs, community knowledge of culinary traditions and gardening techniques, vacant land that could function as community gardens, and a strong network of

¹⁸ Brown, Telee, Field interview with City Harvest staff, October 2009.

religious leadership and involvement of churches. (See Appendix L for a list of garden and market resources on Staten Island.) The community seems to clearly recognize the needs and concerns around food, and has displayed a desire to move towards community change. Middle-class neighbors in the area are also ready to help support change.

Fitness and Recreation

Recreational and fitness resources are limited particularly when compared to resources in New York's other boroughs. "Shape Up New York", a free fitness program offered by New York City Department of Health and Mental Hygiene (NYCDOH) and the Department of Parks & Recreation, is not offered in Staten Island but is available in Manhattan, the Bronx, and Brooklyn.¹⁹ There is only one Parks & Recreation center, which is due to be closed for renovation, and a few smaller parks in the target area where equipment is limited or non-existent.

Schools

Schools in the target area are middle school IS 49 and elementary school PS 14, which neighbor the Stapleton Houses; and PS 57, an elementary school in Park Hill. IS 49 and PS 14 have full kitchens equipped with ovens and stoves. Connections were also made with Curtis High School and McKee Career and Technical Education High School in St. George, which many of the area's high school students attend. Curtis High School is diverse due to its location and inclusion of students from different neighborhoods in Staten Island. Further, there are plans for a new charter school to open in 2010, the Barack Obama Community Charter School, which will serve kindergarten through eighth grade.

The National School Lunch and School Breakfast Programs serve as a safety net for many low-income children. However, in New York City, schools can have breakfast served to all students free of charge, regardless of income, but it is up to the individual. In 2009, children from families with incomes below 130% of the poverty line, or \$27,560 for a family of four, are eligible for free meals, and those with incomes up to 185% of the poverty line, or \$39,220 for a family of four, can receive reduced-price meals.

Schools in Stapleton and Park Hill have high numbers of students eligible for free and reduced-price lunch. During the 2007-2008 school year at IS 49, 71% of students were eligible for free lunch and 11% for reduced-price lunch. Thus, more than four out of five of these students receive meals free or nearly free due to their inability to pay even the small cost of \$1.50 for a school lunch. At Curtis High School 46 % of the students were eligible for free lunch and 5% for reduced lunch for 2007-2008. At one of the elementary schools in the area, PS 14, 87% of students meet the free meal eligibility level and 8% meet reduced-price eligibility; nearly the entire school (95%) receives subsidized meals. Statistics were similar for PS 57, the elementary school in Park Hill, with a free lunch eligibility rate of 87 % and 3% for reduced-price (2005-2006 data).²⁰ This trend is alarming, as it's unlikely that these younger students' families will be lifted out of poverty before they enter middle school; thus, if these are the same students that in time will enter the area middle and high schools, the rates of free and reduced-price meal eligibility in these schools is likely to increase in future years.

¹⁹ http://www.nycgovparks.org/sub_things_to_do/programs/shape_up_ny/shape_up_ny.html.

²⁰ New York State Education Department, "The New York State School Report Card."

Mapping work conducted as part of the CFA illustrates the key elements of the food retail landscape in the Stapleton and Park Hill study area. (See previous page.) The food retail in the core of Park Hill and Stapleton (the densest areas are where subsidized apartment buildings are clustered) is comprised of small grocers/bodegas, fast food, and corner stores. There are 39 small grocers/bodega -type, convenience, corner, and specialty stores, and 37 fast food outlets comprising delis, pizza/Chinese, and bar/fast food services. They are mostly walkable, i.e., within one-quarter mile of key residential clusters, whereas the supermarkets are not. These small grocers/bodegas are the primary retailers directly surrounding the largest developments. A store assessment demonstrated that only a handful of the smaller stores have decent variety and quality of healthy food choices, but the diversity of smaller stores could be an asset to future work in the neighborhood. Right now, they represent the crux of the problem.

The only two supermarkets, Waldbaum's and Western Beef, are located on the outer edge of the target area, indicated by the largest dots. From the Stapleton housing projects, the supermarkets are 0.8 miles (Western Beef) and about 0.7 miles away (Waldbaum's). For residents of Park Hill's section 8 houses, Waldbaum's is 0.8 miles away and Western Beef is 0.9 miles away. There is a strong need for supermarkets within walking distance of these communities. According to the New York City Department of City Planning's recent report, "Going to Market: New York City's Neighborhood Grocery Store and Supermarket Shortage," Stapleton and St. George have one of the greatest needs for supermarkets citywide.

The "**Supermarket Need Index**" was created by the New York City Department of City Planning to determine areas with the highest levels of diet-related diseases and large populations that have limited opportunities to purchase fresh foods. The index measures need for supermarkets based on high population density, low rates of car access, low-income populations, high rates of diabetes and obesity, and low consumption of fresh fruits and vegetables. St. George and Stapleton were the only neighborhoods in Staten Island mentioned in the study. Although Park Hill was not mentioned, this neighborhood is in need of access to affordable and diverse food retail as there are only a handful of food stores in the community.

This environment encourages the pattern of frequently shopping at the many convenient but higher-priced corner stores for items such as milk, juice, eggs, snacks, deli meats, and soda. Corner stores usually carry only a few items of produce, mostly potatoes and bananas, and can lack skim and lower-fat milk and other fresh produce items. Largely, participants go to the inconveniently located supermarkets a few times per month for major grocery shopping, where they have access to a wider range of healthier offerings at cheaper prices. Residents rated convenience and bargains as the main criteria by which they choose where to shop.

Being a mixed African American and immigrant community, perceptions about food environment is often determined by expectations. American-born residents complain about the food landscape and its inadequacies, while the immigrant communities, coming from places that have shaped their perspective about what a community can offer, are generally more satisfied.

Comparing with landscapes observed in the CFAs in the Melrose and Mount Hope sections of the Bronx, healthy food access is much more severely limited in the Staten Island CFA study area.

Food Availability – Variety and Quality

In the observational store assessment, 12 stores were assessed, including three supermarkets and nine smaller neighborhood corner stores. All but one store (93%) surveyed accepted EBT/food stamps and 71% accepted WIC.



A family shops at Western Beef in Stapleton

Supermarket Retail

Based on observation of products at the supermarkets, wide varieties of produce (white, orange, green, yellow, red, and blue/purple) were available, as well as all types of milk, other dairy, and meats. Overall, residents had only consistent minor complaints about availability and quality in the two neighborhood supermarkets.

Most people complained more about a lack of selection at Waldbaum's and the difficulty in getting there. At Western Beef, a number of residents did not trust the meat and fish selections and said the grocery stores are constantly crowded with long lines at the cash register. However most find them cheaper than local corner stores: *"I get more for my money at Western Beef."* Focus groups and survey responses revealed mixed feelings about Western Beef but felt it has greater variety of cultural food products than Waldbaum's:

In my neighborhood if you want to get Caribbean food, you have to go usually to Western Beef, which is the only one that really carries all that. The other ones carry either very few or very little.

Smaller Neighborhood Stores

Many of the smaller grocers do not stock an acceptable variety or quality of produce items, but do stock a few items of produce. The most prevalent produce types available are potatoes and bananas at the smaller stores. At the time of the store survey completion in April 2009, nine of the stores did not have skim milk; four did not have two percent milk; and two did not have one percent milk. Two of the stores surveyed had no milk available. Seven small storeowners were asked if they sell locally grown produce and if they would be willing to sell locally grown

produce. Two of the seven stores currently carry local produce; the other five would be willing to sell locally grown produce if the price was within their budgets. One owner in particular voiced his concern that he would like to purchase more local foods, but that the market prices are “volatile” as they change often, making some products not efficient to purchase.

Residents also complained about the high prices of all food and quality of the produce available in the smaller yet more accessible corner stores. The observational assessment confirmed this opinion as much of the produce was ranked “fair” or “poor.” Produce was rated on appearance, discoloration, and ripeness. A bruised, overripe, wilted, decaying, or otherwise unappealing produce item was scored “poor.” Produce that was fresh with appropriate color and ripeness received higher ratings. (Note: rating was left to the discretion of the surveyor.) There was an average of seven refrigeration units per store (excluding supermarkets), which were typically well-stocked with sodas and other beverages laced with sugar, alcohol, dairy or deli items, frozen foods, and occasionally fruits and vegetables.

Produce Placement and Display in Small Stores

Nine of the smaller stores were assessed in detail. Potatoes and onions were left on the floor in a box or crate in four out of the nine corner stores and independent grocery stores surveyed. Bananas were displayed this way in five out of nine stores. In one store the bananas were obscured from view by a soda display. The display of produce competes with attractive commercial displays located at eye level.

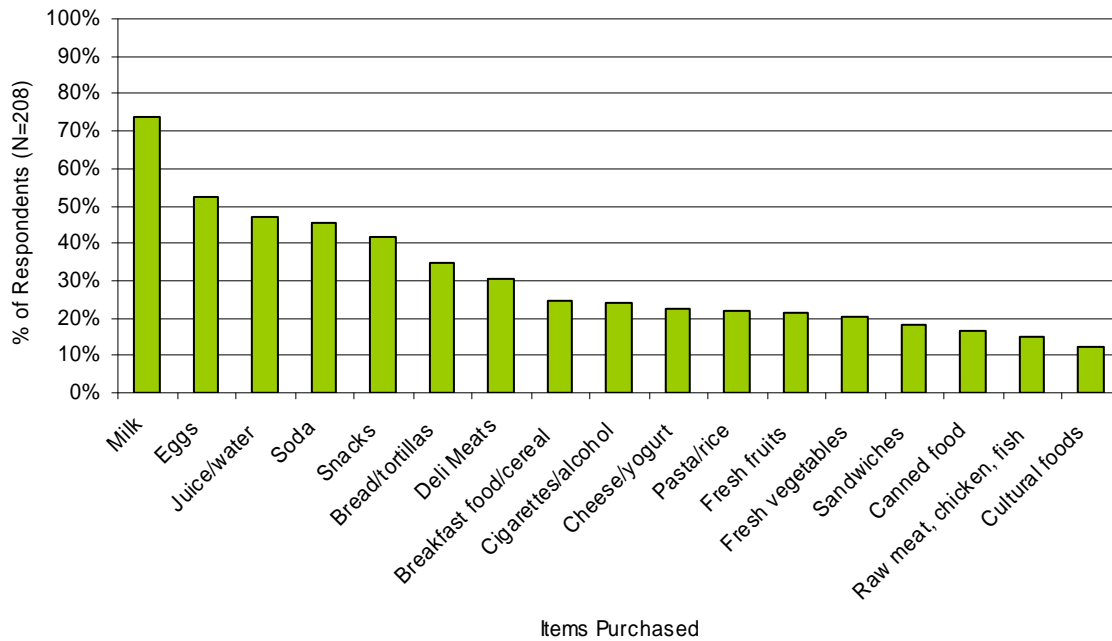
Produce prices were not consistently displayed and often shoppers had to ask a store employee for the price. There were times during the survey when the cashier did not know the price and would have to ask the storeowner. Because an extra step must be taken to learn the price of food, customers are inconvenienced and may find this to be a barrier to purchasing fresh food. Residents may also be skeptical of the prices if they are not clearly displayed.

How Availability is Perceived

The survey revealed that there are many differing opinions on what foods are really available in the community. When 144 residents were asked if they are able to easily find fresh fruits and vegetables in their neighborhood, 59.7% said “yes.” Surveys found that residents most often buy milk from their local stores, though juice drinks, eggs, and soda are also purchased there. It seems that neighborhood stores are not frequented for major grocery shopping but rather for specific daily food staples such as these.

Focus group discussions confirmed this very mixed assessment: some found their neighborhood stores unacceptable and others found there to be decent variety. Generally, focus group data shows that recent immigrants are less concerned with pricing and availability in local stores since they had lower expectations of what to expect from the community than non-immigrants.

Figure 2: What participants buy when shopping at bodegas or corner stores



Opinions from non-immigrants of Park Hill and Stapleton reveal a deeper dissatisfaction with neighborhood stores of the same community:

Local food stores sell a lot of junk and it is overpriced. People say it's cheap, but it is not that cheap to go in there and get the food. We need more stores around here to sell vegetables. We need the oranges, the apples...when you go to Brooklyn you go to any corner and they have a big fruit store. Whatever you need it is right there. That is what we need right here.

Residents travel to other locations in search of food that is unavailable, but also found variety of specific products lacking:

One of the things that is missing is cultural variety. What I mean by that is a lot of people use fresh thyme leaves. And you can't find fresh thyme leaves, you can't find fresh rosemary, you can't find fresh lamb, you can't find fresh goat. There are a lot of fresh products that pantries don't provide and supermarkets don't provide. That one factor alone contributes to people being in the rut of getting tired of cooking the same things, the same spices over and over again. So then they buy the junk food because the junk food offers you more variety than anything else in any community.

The traditional foods of Liberia are hard to come by in the states, and this often results in poor dietary habits. In the neighborhoods, the Liberian community reports very poor access to fresh fruits and vegetables, when many of them were raised with a garden right outside their door. But a few women have banded together to come up with their own solution. Several times over the growing season, women pile into cars or taxis and share costs to drive over the bridge to a New

Jersey self-pick farm in search of what they term “*better quality, fresher and cheaper produce.*” Most of the products are common items in West Africa, which this New Jersey farm has begun to grow and now attracts many different African immigrants. The women in Staten Island either sell the foods to their neighbors or store and freeze the food for their own use. Specific products that are sold on the street from the farm or are processed by the women include potato leaves, peppers, palm tree oil, sesame seeds, bitter ball, kiteli, and dried chicken.

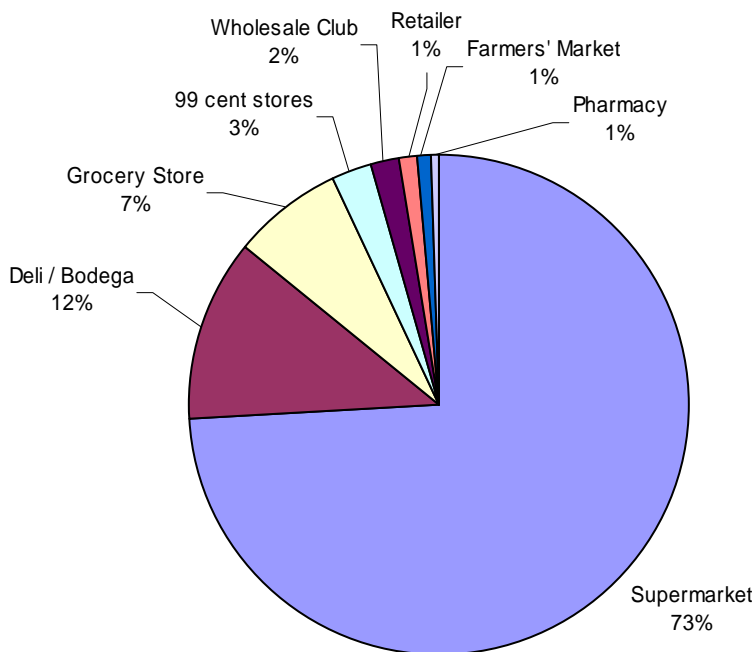
Another comment addresses not simply a lack of food but a lack of representation of local cultures and a negative perception of the community. Again the idea of community ownership is a concern:

We need more healthy foods to eat. We need more cultural things brought into our community that our children can relate to... When you go to Spanish neighborhoods, they have [those foods] for their children, but our children don't have it. We have to go across the water to get people to come over here and teach our kids about our culture. We don't have anything. And when they do try to set up shop out here, it doesn't last... There's something wrong with that picture.

Where People Shop and Why

In the survey, residents were asked, “What are the three stores where you do the majority of your food shopping?” Figure 3 below shows eight categories of stores that people most frequented for food shopping. A “retailer” is defined as large retailers of various merchandise such as Target, Wal-Mart and K-Mart that also sell groceries. In regards to supermarkets, most residents shop at Western Beef and Pathmark. Despite being in the neighborhood, Waldbaum’s was not frequented as regularly, while ShopRite was but is even farther away.

Figure 3 Type of stores where people food shop



Survey participants were asked to provide their reasons for shopping at each store as part of the survey question above. Most frequent responses were:

- sales/bargains/specials/weekly sales including sales of canned goods and meat, cereal, milk
- close by, accessible, convenient, bus accessible
- affordable prices
- has certain cultural foods
- bulk
- variety: freshness, fresh meat, fresh fruits and vegetables
- cleanliness

Overall sales and location were the most prominent reasons residents chose to shop at one store over another. Importantly, there was not a uniform view as to whether supermarkets have better variety, quality, and prices than neighborhood stores. Again this may be due to personal preference. Residents repeatedly explained that they go to these stores in search of sales and rotate where they shop and what they buy, always to find good deals.

How often and when do you shop for groceries?

Survey data revealed that residents do their grocery shopping around one to two times a month at the shopping outlets mentioned in surveys. This frequency might not be often enough to satisfy fresh food needs. Most residents shop for certain foods every few days or once a week, meaning they use neighborhood stores for groceries. According to surveys, 41% of residents said they faced some sort of difficulty in getting to the grocery store or stores where they do the majority of their food shopping.

To get a better sense of how bus routes and public transportation might be improved, 152 residents were also asked what time of day is most convenient to do their food shopping. The highest number of residents said the middle of the day and afternoons are most convenient. Unfortunately, this is when bus service is the worst. A high proportion also found evenings to be best. Overall there was no consistent time people preferred.

Retail Relationships with community

Some food service staff shared a perception that residents were not interested in fruits and vegetables, that they do not request or purchase produce. However, there are some storeowners who believe customers do want fruits and vegetables. One storeowner believed stores have low produce sales because they do not offer enough fruits and vegetables: *“The only items that don’t sell are the ones you don’t stock.”* This statement implies community members’ reasons for not buying and eating fruits and vegetables is because they are not widely available.

Store employees and the community appear to have a good relationship according to the assessment, but as focus groups showed, many residents distrust storeowners and show frustration because of the lack of ownership the community has over the food environment. In the focus groups there were 337 comments on food retail overall, and 162 comments on retail with cultural references. Residents linked store environments to their overall perception of storeowners. A politically active community member, during a one-on-one interview asked, *“Who is feeding our*

community?” referencing the fact that non African-Americans tend to own or work in the neighborhood stores. Echoing this concern a focus group participant said:

The problem is when they do have restaurants and stuff out here open; it's not pertaining to our culture that is living in [Stapleton]. It's other cultures that don't even live here that's getting the property and buying it up and opening a liquor store. Their people are not running in there buying the liquor -- it's our people running in there buying the liquor ...and those of us who have the ability, it's time for them to let us take over our own community. Simple.

When representatives of this project were in stores during the observation activity, employees and patrons were usually polite to one another. However, storeowners are generally not representative of the population they serve. Six of the stores were owned by Latinos, two by Middle Eastern owners, and only two had African or African American owners. One African American storeowner noticed the lack of other African American owners, “*I'm the only one in Staten Island.*” His observation is not isolated, as similar sentiments were expressed by many others.

On two occasions during assessments, patrons gave stores praise. At a store across the street from the Stapleton Houses, a customer called the store the “Stapleton Walmart”, referring to the variety and well-stocked shelves. The owner takes pride in having everything residents need: “*Gotta have everything, it's not good when a customer comes in and you don't have it.*” At Top Tomato, an independent grocer, the manager took a surveyor around the store and a couple commended the manager for ordering meat they could not get elsewhere. All storeowners said they accepted customer requests. When owners or managers were available, they were asked how they determine to stock certain products. Five responded that they listen to customer recommendations, and six rely on sales history.

Appearance of Stores

The external and internal appearances of stores influence people's shopping behavior. Also, food stores are usually found in high-traffic areas, and represent physically the self-image of the community. Many studies have been done on the impact that the environment will have on people's behavior, in particular around consumer issues. Studies have found that when the environment around a store (or any property on a streetscape) is lost to vandalism, litter, or other problems, those problems tend to multiply. This is described fully in the “Broken Windows” theory²¹:

Consider a building with a few broken windows. If the windows are not repaired, the tendency is for vandals to break a few more windows... Or consider a sidewalk. Some litter accumulates. Soon, more litter accumulates. Eventually, people even start leaving bags of trash from take-out restaurants there or breaking into cars.

Discussions in this study included the area supermarkets, but were primarily centered on neighborhood corner stores, and the environment around them.

²¹ Kelling, James Q. and George L. Wilson, “Broken Windows,” *The Atlantic Monthly*, March 1982.

The stores in the area were fairly unappealing. Some had odors, leaky ceilings, and dim lighting. Litter surrounded the front of many stores and some had cluttered windows filled with ads. Stores were often drab, grey cement buildings with little or no paint. Stores were given an average of 6 on a scale of 1-10 for quality of appearance inside and outside the store. Supermarkets ranked higher, and although were much more crowded, appeared to be cleaner and better stocked than smaller stores.

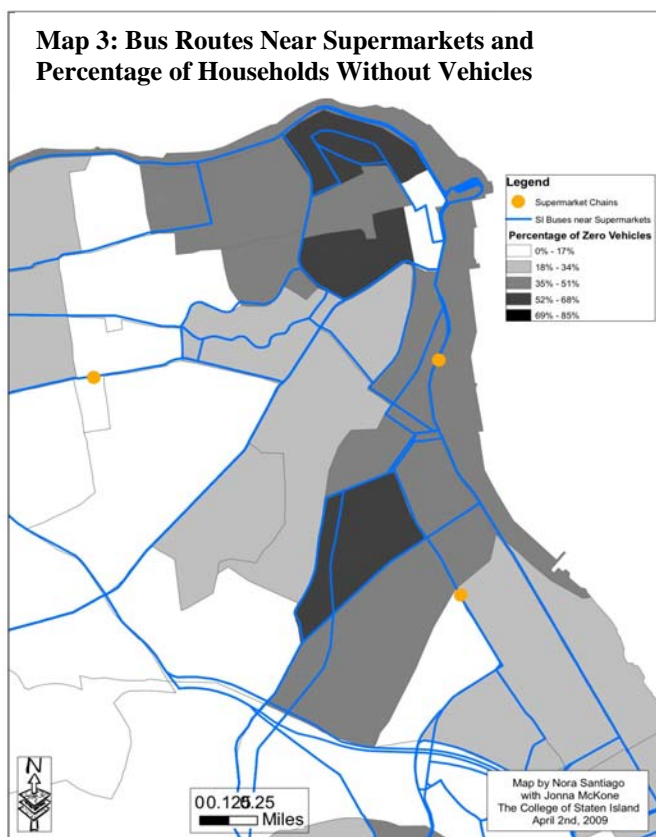
A Liberian respondent perceived a lack of attention to stores' cleanliness which he associates with the owners of local bodegas: *“And the problem I have is that the people who sell in the grocery store, I don't think they really give good care to the place.”* Another reference to store owners in Park Hill centered on sanitary conditions as well as cultural stereotyping:

At the stores over here? I don't really go to these stores because they're too expensive ...they're outrageous over there. The meat is no good. In the summertime you see flies flying in there... I don't bother with that. I want fresh meat. I don't want nothing that no fly flew on, you know, god forbid you dropped it on the floor, you rinsed it off, put it back. I don't want that.

Four out of nine of small stores had cigarette ads in the window front. None of the stores surveyed had alcoholic beverage advertisements in the storefront. However, seven (50%) had alcohol, cigarette, or lottery advertisements placed inside the store. Two stores had ads endorsing healthful behaviors and choices. One had a “Mooove to 1% Milk” posted, as part of the Healthy Bodegas Initiative of DOH to encourage the purchasing of low-fat milk.²² Another store had a “NY Quits” ad.²³ Both demonstrate a concern for health promotion. Meat packages, store specials and sales, ATM, and NY State Lotto ads were also observed.

3.2.2 Transportation Issues

In summary, it can be concluded that poor public transport service coupled with a lack of walkable supermarkets are among the top barriers to accessing healthy food for the majority of residents in the study area. That fact and the easier access to small grocers, convenience stores, bodegas, and fast food



²² New York City Department of Health and Mental Hygiene, Healthy Bodegas Initiative. http://www.nyc.gov/html/doh/html/cdp/cdp_pan_hbi.shtml.

²³ New York State Department of Health, “New York State Smokers Quitline,” http://www.health.state.ny.us/prevention/tobacco_control/quitline.htm

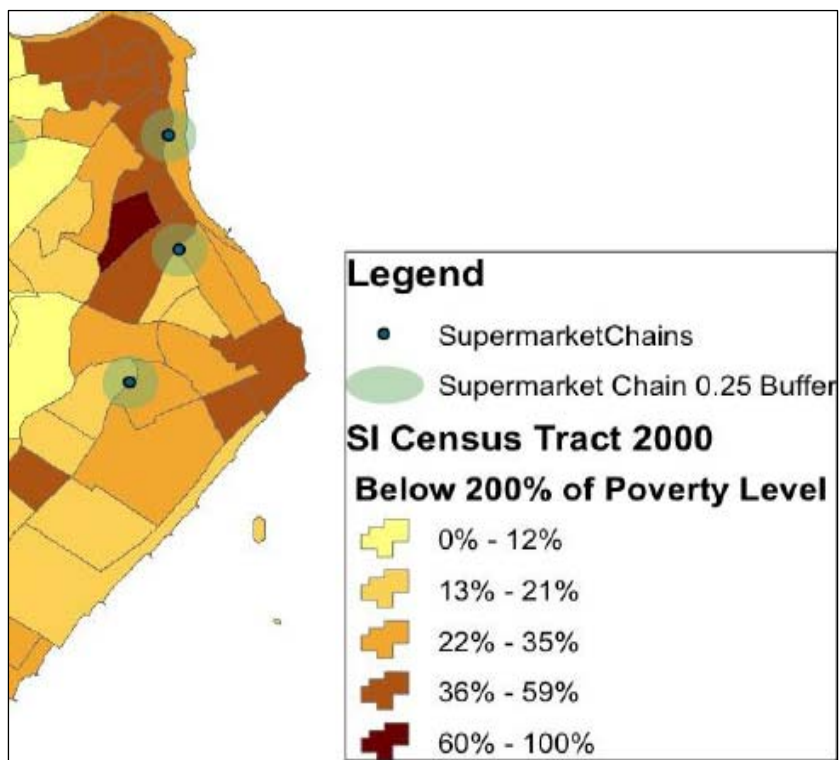
sources are a strong negative influence on consumption of healthier food options.

Limited Public Transport

Mapping and secondary information revealed a number of problems regarding transport. A map of supermarkets (stores larger than 25,000 square feet, and consisting of three or more chain stores) as well as bus routes in the North Shore show public transport is very limited. From Stapleton, bus S74 plies to Western Beef and bus S52 to Waldbaum's, but at low frequencies. From Park Hill, bus S76 plies to Western Beef but there is no direct bus service to Waldbaum's. "Headway," the time between a bus leaving and arriving, is in general far higher in Staten Island than the other boroughs.

Noontime average headway on the local bus system is 19.4 minutes; 261% longer than Manhattan (7.4 minutes) and 49% longer than Queens, (the next longest at 12.98 minutes.)²⁴ Many residents, including youth and seniors, inconveniently take several buses to get to a supermarket, and then take an expensive cab ride home with their purchases.

Map 4: Low-Income Communities and Access to Supermarkets



According to the 2000 census, 45.7% of households in Stapleton and 48% in Park Hill do not have cars. Supermarkets and full-service grocery stores are not walkable for the majority of residents in Stapleton and Park Hill, especially those without cars. The map, left, illustrates supermarkets with a 0.25 mile buffer zone in the study area and neighboring communities, which functions as a baseline indicator for accessibility to large grocery stores, in relation to those who fall below 200% of the poverty rate.²⁵ According to Walkable Communities—an organization that promotes planning based on design of

public spaces and transportation to improve sustainability, civic environment, and physical fitness—services one quarter of a mile of actual walked distance from people are deemed accessible. As can be seen by the map, Stapleton and Park Hill can be identified by their higher

²⁴ Gordon, Cameron and Jonathan Peters, "Present Problems and Future Solutions for Staten Island's Transportation System," College of Staten Island, *Staten Island Project*, 2004, 2, <http://www.sipindicators.com/transportation/>.

²⁵ As of 2009, a family of four living in poverty earns \$22,050 annually. 200% of that is \$44,100 annually. Source: <http://aspe.hhs.gov/poverty/09poverty.shtml>.

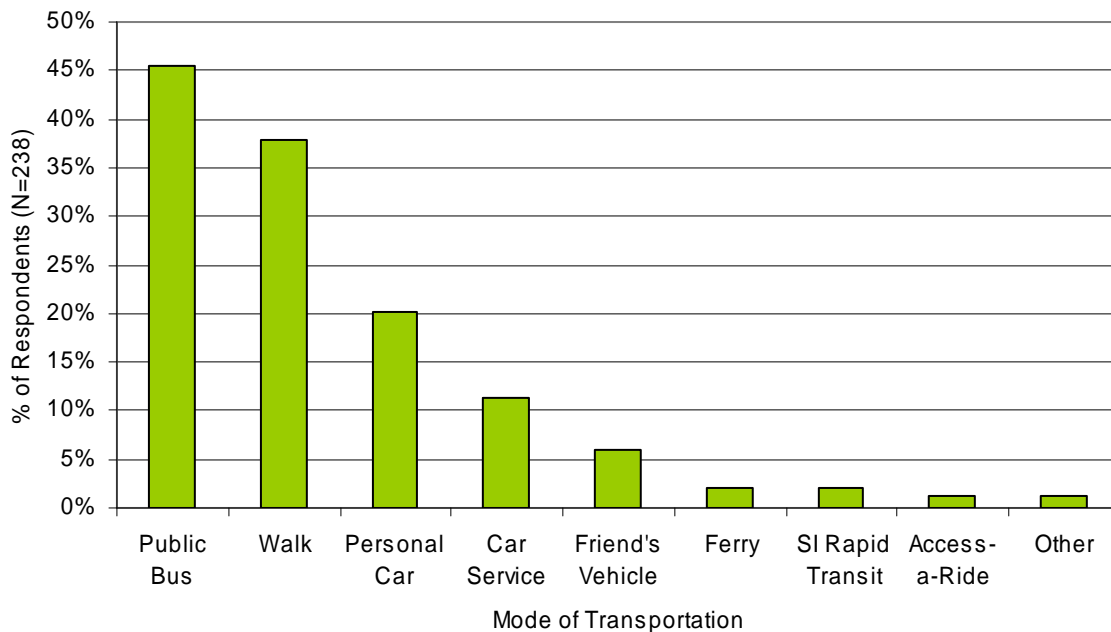
levels of poverty, and the majority of these residents in the study area fall outside accessible buffer zones. There are only two supermarkets in the area and both are around a mile walk from Stapleton and Park Hill housing.

Transportation and Shopping Habits

Based on the field survey, residents clarified that they do not often leave their immediate area to shop for food, use social services, or attend community events. The use of buses and lack of personal cars in the surveyed community is a significant influence on shopping habits and a barrier to grocery store access. Due to the cost and inconvenience of bus travel, particularly during non-peak hours and winter months, residents are limited in the frequency of shopping at supermarkets, which often have a greater variety of fresh items at a lower cost. This also means that for regular purchases they will rely more on small grocers, convenience stores, and bodegas, whose food is predominantly unhealthy.

According to the field surveys, 45% of residents take the bus to shop for groceries and 38% walk, meaning 83% of residents would likely deal with inconveniences to get to the grocery store during inclement weather. A high proportion uses private cabs for the return trip, adding yet more to food costs. One participant summed up the transit barrier: *“When you take a cab, you are actually paying more for your groceries.”*

Figure 4 Transportation to Shop for Groceries



Local transit significantly affects access to healthier food resources. As one resident explained: *“And the farmers’ markets are great, too. The only problem is for a lot of people it is hard for them to get there. Too far away--we need them more localized in the area.”* Survey responses confirmed this statement in that: only 27% of residents in Stapleton have ever gone to the Council

of the Environment New York City (CENYC)-managed Greenmarket or farmers' market; and 19% have never heard of the market even though it's just over a mile away.

Focus groups asked residents to describe where they do their food shopping and whether supermarkets are accessible. Qualitative data reiterated the difficulty in getting to stores illustrated in the surveys (n=48). A Stapleton resident explained: *"So there's the Western Beef and a Waldbaum's, but if you live in the projects proper that would be very difficult to lug your stuff. There's not even great transit to Waldbaum's."*

3.2.3 Affordability: Prices and Budgets

Food Prices and Inflation

Several factors need to be kept in mind when considering affordability. The federal Consumer Price Index (CPI) for the cost of food rose 5.1% from February 2007 to February 2008. The price of Thrifty Food Plan, the mix of food that poor families depend on, increased in price even faster, by 6.5%.²⁶ Last April, the New York *Post* reported that food prices were rising at the fastest rate in 17 years, rising at 4% in 2007 compared with an annual average increase of 2.5% in the previous 15 years. Since then, inflation has abated due to the economic crisis, but the overall inflation rate declined only about 1.5%, as the table indicates, for the last 12 months ending in August 2009. Overall food inflation still grew 0.4%, but food at home slightly declined by 1.6% over the same period. Even that rate, however, leveled out in August and food prices overall are beginning to rise again.

Meanwhile, unemployment rates continue to rise, with the August 2009 NYC rate at 10.3%. Thus while food prices are beginning to increase available family wages are not.

²⁶ Weill, J., "The Impact of Rising Food Prices on Hunger in America," Presentation at the House Hunger Caucus Briefing. Food Research and Action Center, CA, April 16, 2008.

Price Observations

Prices in Staten Island appear to be in line with prices elsewhere in NYC. A store assessment conducted by community youth uncovered some basic information on food prices in the study area.

Table 2 Food Price Comparisons in Three Boroughs

Type of Food	BRONX		STATEN ISLAND		BROOKLYN	
	weight/unit	average	weight/unit	average	weight/unit	average
Fruit, Fresh						
Bananas	per pound	0.69	per pound	0.69	per pound	0.715
Apples	per item	0.54	per pound	0.79	per item	0.625
Oranges	per item	0.415	per item	0.7	per item	0.415
Tomatoes	per pound	1.64	per pound	1.99	per pound	1.24
Vegetables, fresh						
Potatoes	per pound	2.49	per pound	0.595	per pound	0.74
Onions	per pound	1.19	per pound	1.19	per pound	0.74
Breads, Cereals, Grains						
Bread, white, enriched	per item	2.59	per item	1.14	per item	1.49
Bread, whole wheat/ grain	per item	3.39	per item	1.39	per item	2.185
Dairy, Fresh						
Milk, 1% low fat	per gallon	3.64	per gallon	3.05	per gallon	3.49
Milk, whole	per gallon	3.64	per gallon	3.14	per gallon	3.49
Eggs	per dozen	2.34	per dozen	1.54	per dozen	1.94
Meat						
Ground Beef, raw packaged	per pound	1.79	per pound	2.09	per pound	2.89
Chicken, raw breast meat	per pound	1.59	per pound	2.49	per pound	3.14

Prices in the CFA study area were compared with prices in comparable neighborhoods in the Bronx and Brooklyn, with data included from two stores in each of the three boroughs. The new data for other boroughs was collected in October 2009. This data provides only a quick snapshot, but suggests that prices in Staten Island are either similar to other NYC boroughs, or, especially for meat, milk, and eggs, significantly less costly. (Note: carrot prices collected for different stores were not for the same quantities.)

Previous CFA studies illustrate that prices in the Melrose and Mount Hope communities of the Bronx fell within federal TFP guidelines, and since prices in Staten Island appear to be similar or cheaper, it is likely that prices are also within such guidelines. However, the federal standards are not considered fully appropriate for NYC, particularly due to much higher housing costs. Barring work to develop an affordability standard for NYC, other components of the CFA shed additional light on this issue.

Survey Results

Sixty percent of respondents reported having trouble stretching their food budgets until the end of the month. Of these, 61% reported facing this problem every month or every other month, while 25% said this occurred several times in the past year. This data might be somewhat skewed, since 40% of the surveys were conducted at emergency food providers. However, the same questions

were asked at all locations. Of the survey participants, 51% of respondents have used either a soup kitchen or food pantry. Current or past participation in food stamps/SNAP is reported by 45% of respondents.

People with fixed incomes ate slightly more fruits and vegetables per day than those who were employed. This could partly be due to lack of time for food preparation among employed individuals and the fact that 29% of the population on fixed incomes was retired, leaving them with more time and perhaps incentive to eat fresh produce. Additionally, food security and consumption are not necessarily related to receiving social benefits or being employed. Employed people are also struggling to meet their food needs as one woman stated, *“So just because you're working don't mean you've got it like that. As a matter fact it's the working people that sometime got it worse...”* Overall, it is clear that the majority of the population eats between one and three fruits and vegetables a day.

Nevertheless, the majority of residents who participated in the surveys felt they were not eating enough fruits and vegetables because they are too expensive – see Figure 6, next page. Cheaper produce (24%) and help with managing budgets and expenses (15%) were most commonly cited as means to alleviate this situation.

Table 3 How to Make Fruit and Vegetable Consumption "Easier" for Population

Questionnaire Option	% of Respondents
Cheaper fruits and vegetables	24%
Help with budgeting and managing expenses	15%
Having a farmers market or community garden where I live	15%
Having better quality fruits and vegetables at the stores in my neighborhood	13%
Having more fruits and vegetables at food pantries and soup kitchens	10%
Knowing that my family will eat these items	7%
Knowing more about the nutritional benefits of fresh food	7%
More skills on how to cook and prepare food	5%
Other	4%

Focus groups’ insights revealed that foods that are considered “healthy” are often seen as a luxury by low income residents because of their prohibitive prices. High calorie processed foods are usually cheaper, which affects residents’ relationship to healthy foods. Focus group data revealed that other expenses such as rent, medicine, transportation, and the cost of raising a family are prioritized over food. Residents with fixed incomes especially felt limited in their ability to afford and choose certain foods. The decision to use additional food resources to supplement income seems to alleviate some of this tension. However, individuals often commented that their incomes were not enough to purchase foods they considered healthy so, instead, they buy foods that are perceived as more economical that will last longer. Much of this kind of behavior around food shopping is based on the perception of healthy foods rather than the reality.

There were 157 comments related to affordability, and 45 related both to affordability and retail presence in the neighborhood. People do not perceive fresh foods to be a budgeting priority:

“Well, if you look at the economy and you look at the food it’s like the amount of money you’re gonna pay to get stuff fresh -- it’s more! You might not want to pay that.” A teenager from Park Hill commented:

The stores around here, the corner stores, they bring these things [healthy foods] and they’re not getting sold out so it’s a waste for them. They’re bringing them in our community and we’re not paying for them because we can’t afford it.

One mother from Stapleton referred to the affordability of nutritious foods in relation to how long the food lasts in her household, indicating that she relies on lower cost foods, which she perceives as more economical. Her comments also indicate that her food purchases fluctuate depending on what she is able to afford:

I would get grapes and bananas for the week and that was gone in two days... Now it’s like, ‘we can have candy left over from Halloween.’ [My kids] end up adapting to not being able to have the fruits and vegetables every single day.

A senior citizen from Stapleton commented:

I think that vegetables and fruits are very necessary. Here, especially in Staten Island, fruits and vegetables are very expensive. You go and buy them in the supermarket and what not -- the prices are ridiculous... It’s very hard for us [senior citizens] to keep a diet of fruits and they tell you to eat three portions a day.

Rufus Arkoi, director and founder of Roza Promotions, a non-profit that runs a variety of services for immigrants in Park Hill, summarized the issue during a focus group:

You know if I hear that question [referring to a question on the availability of fruits and vegetables] in this area, what do you think runs through my mind? Budget. People get enough money to provide food for their family. So, fruits are a luxury. This is luxury. You see how long it’s sitting on the table [refers to tangerines]; they’re not used to it.

3.2.4 The Safety Net: Food Assistance Programs and Emergency Food

Food Assistance Programs

As per New York City data for 2007, approximately 66.34% of the households of poverty utilize food stamps in the community board in which the study area is located, about 16% of the total population, versus 15.5% citywide. Forty-five percent of survey respondents reported past participation in food stamps and the Supplemental Nutrition Assistance Program (SNAP), which allows families to buy nutritious food that they would otherwise be unable to afford. SNAP eligibility is set at 130% of the poverty line. There is only one SNAP office in Staten Island compared to seven in Manhattan, seven in Brooklyn, four in the Bronx, and three in Queens. The Staten Island office is located in Tompkinsville, two miles from the Park Hill apartments and one mile from the Stapleton Houses.

The nearest WIC site is over three miles from the study area, and the borough is relatively underserved. There are only two WIC clinics in all of Staten Island, serving about 241,427 persons per clinic, compared with Brooklyn (149,361:1) and the Bronx (114,472:1).

The Farmers' Market Nutrition Program (FMNP) provides \$2 checks, specifically for the purchase of local produce at farmers' markets to mothers enrolled in the WIC program, as well as seniors sixty years and older living below 185% of the poverty line. WIC mothers can receive \$24 in vouchers each season from Staten Island University Hospital (SIUH) and St. Vincent's Hospital. New York State accepts proof of participation or enrollment in another means-tested program, such as the Commodity Supplemental Food Program or SNAP to determine eligibility.²⁷ In 2007, 16,236 vouchers were distributed at SIUH; 67% were redeemed, just above the national average redemption rate of 55%-65%. At St. Vincent's Hospital, about 28,000 checks were issued and about 54% of those were redeemed. Additionally, 6,000 checks were issued to seniors at about an 80% redemption rate, which is consistent with the national average of seniors' redemption rates. It is important to note that as of 2009, Staten Island has two farmers' markets where FMNP checks are redeemable, yet has similar redemption rates to the other boroughs that have many more farmers' markets. This trend indicates a demand and preference for fresh produce.

The State's Hunger Prevention and Nutrition Assistance Program (HPNAP) provides funds for a CSA sponsored by United Way and Just Food. The CSA provides fresh produce to Project Hospitality, an emergency food program with a pantry on Bay Street. There is also local involvement from the Castleton Hill Moravian Church which operates a garden cultivated by church members. In exchange for growing food on one "square" of property, participants are required to grow vegetables on another and donate the goods to Project Hospitality's food pantry. Last year the small church garden donated 1,092 pounds of fresh food from sixteen plots.

Emergency Food Assistance

There is a fairly well developed safety net of seven emergency food providers in the immediate study area, with many more providers in adjacent neighborhoods. Residents believe there are enough providers, and that they usually have enough food to eat, but not always the kind of food they desire. Residents complain of canned, moldy, and post-dated food, and a lack of fresh food. Twenty-one percent of survey respondents said they would eat more fruits and vegetables if they had more available in the soup kitchens and pantries.

Food pantry employees witness a high need of emergency food. The Trinity Lutheran Church food pantry in Tompkinsville (just north of Stapleton) noted an increase in the number of participants the first quarter of this year compared to the first quarter of last year. Even with the increasing need, staff members of food pantries have seen a number of other food providers close this year. Staff at St. Mary of the Assumption Church food pantry also noticed an increase in need. When asked to describe the population a member commented:

²⁷ Food and Nutrition Service, "Seniors' Farmers' Market Nutrition Program," USDA, <http://www.fns.usda.gov/wic/SeniorFMNP/SeniorFMNPOverview.htm>.

[There is] a lot of need. Most of the people really need the services--all families, all backgrounds. The people are good. A lot of seniors, young kids, single parents, single mothers... Spanish, Russian, black, pretty much mixed.

Project Hospitality is one of the largest EFPs in Staten Island. It is an interfaith non-governmental organization dedicated to improving the quality of life of homeless and hungry individuals in Staten Island, especially those with special needs such as individuals with HIV/AIDS, mental illness, and substance abuse problems. They have offered emergency food services, shelter, job training, healthcare, family services, and legal assistance since 1982. Project Hospitality is also a resource for residents to determine SNAP eligibility and to apply for benefits.

An oral and written focus group activity was conducted with 35 people who take computer literacy courses, high school GED classes, and ESL courses at the Park Hill YMCA. Many of the respondents did not speak English; the majority were Spanish speaking, West African, and West Indian. Food security was assessed orally through a handout explaining their choices. The choices were also written on a board. Respondents were asked to pick the number that best corresponds with the food situation in their household:²⁸

- 1: Enough of the kinds of food we want to eat
- 2: Enough but not always the kind of food we want
- 3: Sometimes not enough to eat
- 4: Often not enough to eat
- 5: Don't know

Of 19 responses, 12 chose response option 2, indicating that they have enough food but not always the kinds of food they desire. One person chose option 4 and three respondents chose option 3 as best indicating their food security. Only two people have “enough of the kinds of food they want to eat.” One person did not know the answer, potentially due to a language barrier.

Many residents already use SNAP and food pantries (as stated above, 45% and 51% of survey participants), though more information on accessing these sources in a variety of media and languages would be helpful, especially as some populations are more transient than others. It was also discovered that residents travel extremely far to get to some food pantries. When asked which food pantry a resident frequented she replied:

When I first came out here, the resources in Staten Island, it's beautiful. They have food, clothes... a lot of things you can do if you use your resources. Staten Island is not that bad of a town. The pantries are great--they have it two days a week at the church over here and the Salvation Army and both those are in Stapleton. If you go down a little further, they have Project Hospitality. You're going there and it's like shopping in a little market...The pantry's been helping out a lot. They're giving you more food because the economy's messed up. They're increasing the food stamps for people. I just got a raise on my food stamps.

²⁸ Question is based on USDA's food security measure: Food and Nutrition Service, "Guide to Measuring Household Food Security," USDA: Office of Analysis, Nutrition and Evaluation, 2002, <http://www.fns.usda.gov/FSEC/FILES/FSGuide.pdf>.

For example, the survey asked, "What does healthy food mean to you?" Responses to this question ranged from a description of healthy food to the impact of a healthy diet on quality of life. According to surveys, many community members see healthy food as important; 38% (86 respondents) mentioned responses representative of the sentiment: *"very important, because to eat good is to have long life and longevity."* The response reveals a willingness to change dietary habits to improve health, nutrition, and quality of life. Another 22% (50 respondents) answered the question by identifying and defining healthy food and unhealthy food. Answers like: fruits, vegetables, fresh baked whole wheat bread, wheat pasta, fresh juice were included in this figure. This response illustrated a clear knowledge of the foods that comprise a healthy diet. Many individuals who answered this question in this manner related their response to the impact of healthy or unhealthy foods on various diseases, e.g., *"Keeps you healthy from getting fewer diseases like high blood pressure, diabetes, cholesterol."* These answers demonstrate an understanding of the link between diet and health.

However, 17.2% (39 participants) responded with only vague answers. For example: *"anything that's not bad"* was one such response, which does not demonstrate a clear awareness of "good" food. These responses do not distinguish between the healthfulness of foods and the affect of food on health outcomes, making the nutrition knowledge of these residents unclear. For example, in focus groups, six different respondents had a comment along these lines. *'The doctor says you have to lose weight.'* Many focus group participants stated that they agreed with comments like: *"you can eat what you want to eat, but I think it's the portion of what you eat"* or *"all food is good for you as long you watch how much of the food you eat and you can control your weight,"* indicating that a variety of food groups is important.

The majority of youth and adults specifically said that fresh food is healthiest and often their responses included unprocessed food or organic items: *"like apples and home cooked stuff is nutrition."* And there was overall awareness of the linkage of food consumption with health. As one youth stated: *"It's something that is supposed to work with your system for your body to help you grow."* Adults emphasize fresh foods and this reflects how our immigrant population sees healthy food.

Breads, like wheat, rye anything that's fiber, anything that's green, you get your chlorophyll, you get your carotene from the carrots and anything that's yellow you get your B5, B12 vitamins, it helps with your eyes, your hair, and your nails, everything.

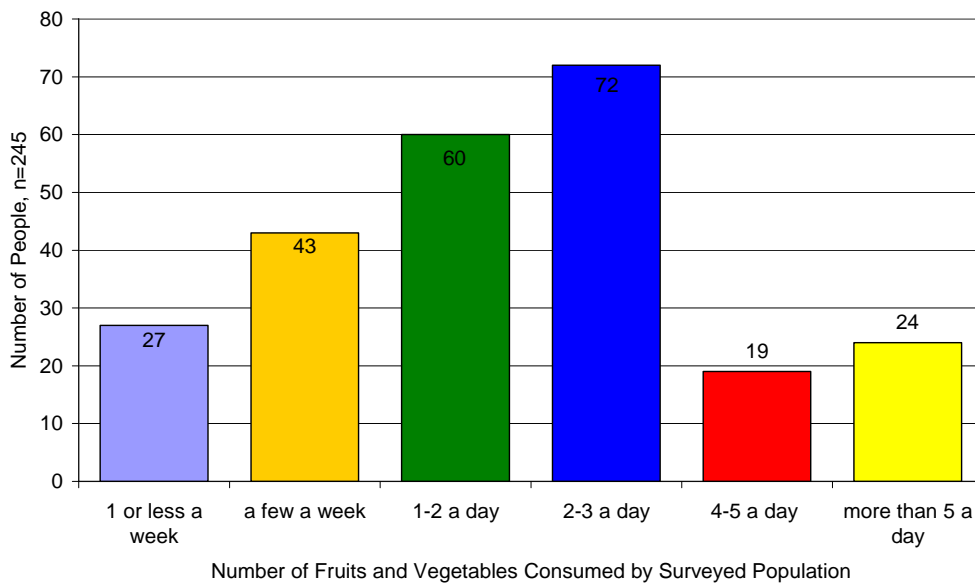
A Liberian immigrant said that nutrition knowledge was simply *"common sense"* and this opinion seemed to prevail among her discussion group. Most Liberians mentioned Liberian foods specifically as healthy.

Healthy food to me I think it would be greens. Because my whole entire country is green. And never no one's fat is hanging out. We are always in shape in Africa. So greens to me are healthy. Greens with beans and corn, carrots, or broccoli. These vegetables are nutritious... So if I'm ordering the broccoli, I am not going to add oil. I am going to braze it with olive oil because olive oil is nutritious and coconut oil is nutritious.

3.3.2 Eating and Shopping Behavior: The Culture Around Food

Currently, the majority of surveyed residents (82%) eat three or less servings of fruits and vegetables per day, which is less than the U.S. average of 3.41, and far less than the five to nine servings per day recommended for adults. Nearly a third of respondents, 29%, eat less than one fresh item a day. The surveys asked residents the *number* of fruits and vegetables rather than *serving size* because people don't necessarily think about food quantity in term of serving size. Because most fruits and vegetables are similar in size, it's a relatively valid measure. Residents were asked, "How many fruits and vegetables do you eat a day?"²⁹ Consumption levels of fresh fruits and vegetable in the survey sample are far less than the U.S. average. A study of average consumption found mean daily consumption levels to be 3.41 servings and that 25.2% eat at least five servings of fruits and vegetable a day compared to 18% in Park Hill and Stapleton.³⁰ As discussed earlier, this in part is determined by affordability, but cultural differences suggest behaviors are determinants.

Figure 5 Fruits and Vegetables Consumed Per Day

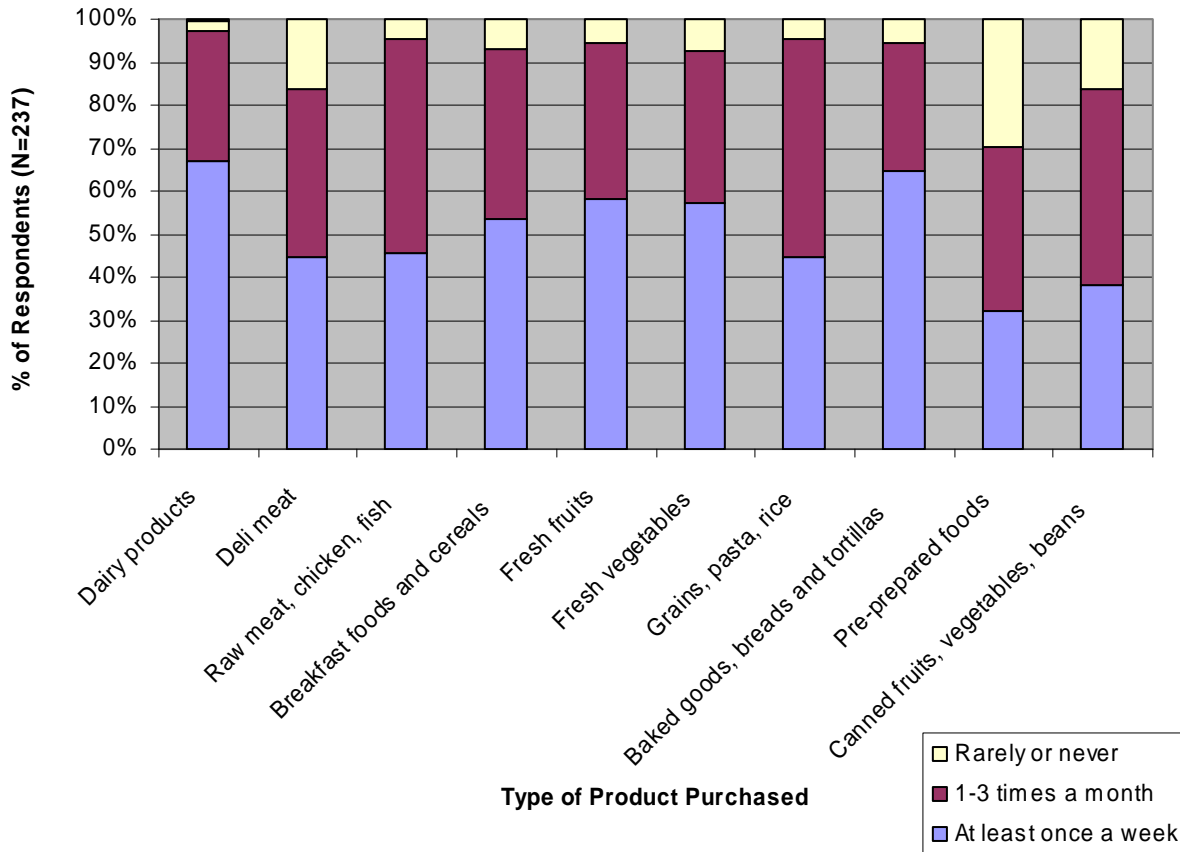


Surveys also asked residents, "When you go to the store, how often do you buy the following?" Figure 8 indicates that residents have a preference for and are buying fresh items regularly, in particular dairy items, baked goods, fruits, and vegetables. But much of this purchasing happens at local stores and bodegas, which lack adequate variety.

²⁹ Residents were asked numbers of fruits and vegetables as opposed to servings for ease in identifying amounts as many are unfamiliar with serving quantities.

³⁰ Serdula, Mary, L. Kettel-Khan, R. Farris, J. Seymour, and C. Denny, "Trends in Fruit and Vegetable Consumption Among Adults," *American Journal of Public Health*, 2004; 94(6).

Figure 6 Frequency of Food Purchases



Park Hill residents frequented bodegas less often than Stapleton residents. Shopping frequency was stratified by neighborhood of residents. Residents shopped either fairly often or rarely, which is illustrative of the disparities in foods people eat and how people eat. Patterns in Stapleton are clearly far different than those in Park Hill due to differing demographics and food store environment.

The survey confirmed that for many residents, eating habits were based on knowledge and experience passed down through their families. Immigrants tended to eat more servings of fruits and vegetables than their U.S.-born neighbors. Focus group discussions covered the theme of “food culture” in Stapleton and Park Hill, but with so many diverse cultures the information is limited. However, conclusions can be drawn. Culture is a strong factor, an individual’s cultural experience creates a set of preferences around food that will last a lifetime, and people associate what they eat with their family and identity and thus re-enact their relationship with food on a daily basis.

A large portion of the comments made in focus groups were associated with food consumption behavior, while only 14 people discussed issues related to behavior and the role of family. An interview conducted with a representative of Community Health Action in St. George described

the foods people in the community eat as *comfort food*, defining it as “*what parents made, what culturally links us to our families [and] how one was raised.*”

Another focus group participant explained the disconnect between culture and awareness:

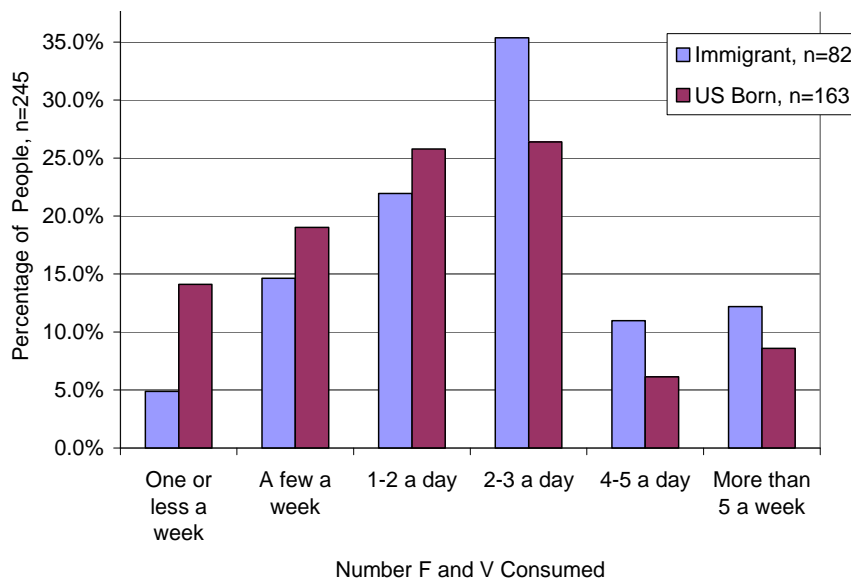
Knowing what to eat and actually following that is two different things. Everyone might know what not to eat, but that don't mean they're not gonna eat it. Because most of the food we eat is not good for you, yet we still eat it.

This comment implies “we”, as a community, eat a certain way, which may not be healthy but is familiar. Although people know what foods are healthy, there tends to be an unhealthy food culture in the community.

3.3.3 Eating Habits of Immigrant Groups

For older Liberians, Latinos, and Russians in the neighborhoods, the experience of immigrating to the U.S. has deeply transformed associations with food preference, habits, and expectations. Survey data was stratified by immigration status. Results showed that a higher proportion of immigrant groups eat more than two or three fresh fruits and vegetables, as compared to U.S.-born respondents.

Figure 7 Fruit and Vegetable Consumption Comparison: Immigrant vs. U.S. Born



Focus group results indicated that the process of immigration has a strong impact, and change of status also changes behaviors in diet and food consumption. In the focus groups, the immigrant communities often spoke with more satisfaction about services available to them, but also acknowledged a lack of information about options that could be available. If a person is never provided tools and resources to maneuver social services, media campaigns, supermarket bargains, and so on, their reality differs from those who have more experience. Focus groups heard from recent immigrants who remembered what they had, but found contentment in their current

situation—not knowing, as others may, what kinds of varieties of foods could indeed be available to them.

If you bring the American food, we take it. Any kind of food you bring, what are you gonna eat? We eat it, we will be all right. We take it. So we can't choose the African food that you are not able to get...America is now our home.

A participant from the Latino community stated: “*What I notice in our community and the Mexican community: we don't pay good attention to the eating habits and it affects the kids. So we have a lot of overweight kids.*”

Other participants from this group explained dietary changes since coming to the U.S. One said, “*A doctor a few months ago told me to eat less red meat. I also watch what some of my co-workers eat, so I started eating or trying out what they eat, things like soy milk and yogurt.*” Another said, “*I used to deep fry meat a lot, now I roast or bake meats. Instead of using so much oil weekly, now one gallon of oil will last me almost two months.*”

The executive director of Project Hospitality, Reverend Terry Troia, shared her perception from years working with the community. She has seen that Latino families use fresh foods and not processed or prepared goods, more so than other cultures. Furthermore, the Latino population generally does not frequent large supermarkets, but prefers corner stores in walking distance.

Two Russian women described their eating habits during a focus group:

I can't really say that we are necessarily in need when it comes to food. In the Russian supermarket, you can buy any type of produce that you want. But we don't really have a lot of desires when it comes to food. I can't eat fatty foods, I can't eat sweet foods. So according to those rules we are fine.

They both came to the country less than ten years ago and sometimes go to a local senior center, food pantry, or the City Harvest Mobile Market to obtain foods.

3.3.4 Cooking Knowledge

Among elderly residents, focus groups included a detailed discussion on preparing certain foods as well as food safety. Surveys asked residents how many home cooked meals they eat per week. The average response was about seven home cooked meals a week. Overall, it appears adults eat home cooked meals and do not eat out often.

Community members recognize that Park Hill and Stapleton have a great depth of cultural food knowledge that could be expanded upon to improve community relationships and the food culture of these neighborhoods. However, they are also aware of the loss of food traditions and knowledge among youth. Both the youth and adult discussed the difference between generations' knowledge of food.

When I was a kid we ate together, everybody got home at a certain time. Something happened in the eighties. My mother stopped cooking. She would cook, but she went from six days a week to three days a week. Not because she didn't want to but because of the convenience, you know, 'Honey, bring home a ten piece.' You got microwavable lasagna. Something happened in the eighties.

A group of students were asked, "Do you think your generation knows how to cook?" Responses included: "No, we know how to dial: Domino's" and "We know how to order." They were then asked: "Why do you think this generation knows how to cook less than others?" Responses to this question included: "laziness" or, "A lot of people don't cook at home. If they do, they'll cook once a week to last the rest of the week." One student expanded on that theme:

It's because back then our parents knew how to cook because their parents forced them. But I guess because our parents don't force us about the foods that we eat. A lot of us are really picky, so it's whatever.

While lifestyle and neighborhood food culture contribute to the lack of importance in knowing how to prepare food among youth, many youth are not being taught how to cook. Adult focus group participants were surprised to learn cooking education is not offered in schools. A participant reiterated after he asked a question to an older gentleman who explained how he cans his vegetables:

And I think that that's what's missing, showing the younger generation how to do that and how to eat. I think that's the biggest problem other than the microwave.... because nobody's teaching them. That's why I asked in the beginning, 'Who taught you?' Because my mother, well she tried to teach me. There's a lot of things I wish I would have learned.

A group of Liberian residents in Park Hill discussed the generational differences they see with regards to food preferences. The facilitator asked, "How are your children dealing with food?" A female responded: "They eat fast food (at) McDonald's and Burger King. You can't take it away from them." Another participant then said: "They do like the African food." Often, the youth in Park Hill whose parents are direct immigrants are constantly recreating their food culture in response to highly accessible American food. One African teenager stated: "I want less traditional food...because at our house, like, we eat things that are our culture and stuff, I just want less."

There is at once assimilation influenced by geography, availability, and the habits of young people, but at the same time, a resistance to it. Those with knowledge of cooking and nutrition might be mobilized to introduce more people in the community to the importance of a healthy diet.

3.3.5 Youth Habits and Influences

A total of six focus groups were held with children and teenagers. Two youth focus groups were conducted at local schools, a third was held at the St. George Public Library, a fourth at a church in Stapleton, a fifth at the YMCA, and a sixth focus group was also held with a group of Liberian soccer players, ages 12 to 20. Youth shared their thoughts on food, nutrition, school food, and food-related media and advertisements. The key themes that emerged were: a reliance on school

food during the day; the lack of structured activities having a negative impact on eating habits; the effects of media and branding and low-cost dollar menus; poor knowledge about what “fast food” is; and the strong influence of parents in the household.

Students from the neighborhoods relied heavily on school food as a regular and stable source of food. The students shared their food behaviors and families’ role in their diet, including shopping habits. Curtis High School students expressed concern with the availability of food near their campus. There is only one deli in walking distance, and other fast food options are a much longer walk from the school. Many students reported eating lunch only from the vending machines stocked with juices, chips, and snacks. One woman who works at a local library summed up the situation:

I would say, if I had to make up a statistic, that 75% of the teens walk into the teen room after school with food in their hands. That’s one of our biggest problems in the teen room. They all complain about having no money but every day they have enough to buy a 20-ounce bottle of soda and chips. Every day.

Parents and adults in the community perceived a lack of structured youth activities. Many of the students’ associations with food related to “hanging out” such as going to the mall, spending time in their neighborhood, and going out to eat with friends. Eating fast foods was associated with these activities. As observed by one Stapleton Houses resident: *“These kids here after school have most of these arguments because they are hungry and irritated.”*

Alternatively, those engaged in structured activities such as sports were more conscious about their diet. A focus group with Liberian students who participate in a soccer league said playing sports had the most significant influence on eating habits. *“It’s just how it is... It’s basically your choice of food. If you’re an athlete, you should at least know which foods to eat that are healthy and which are not. That’s the way I see it.”*

Many of the students agreed that overeating would negatively affect their physical activity, but only a handful of participants discussed the nutritional qualities of the food they were eating. As for adults, the most important issue related to nutrition health was not being overweight.

Youth ages 6 to 17 identified the follow food items they typically purchase in neighborhood stores: chicken, pizza, mozzarella sticks, hamburgers, French fries, honey buns, donuts, beef patties, Chinese food, Mexican food, chips, candy, and “bummy sodas” (a generic soda around 50 cents a can).

Young consumers are often driven by cravings and convenience. One student summarized: *“90% - 80% are gonna take a burger over a salad.”* A female respondent elaborated: *“It’s a want. Needing something is not being able to live without it. It’s like you want it so bad you need it.”* Although this student attributed her food choices to simply laziness her comment is a reflection of habits, personal identity, and underlying issues around food culture: *“The Chinese store is right next door and you’re lazy. You go right there.”*

Another major influence on food consumption was the cost of food and the branding of low-cost food items. “*Oh, that’s only a dollar!*” was commonly cited as a major reason youth choose to purchase food. Or another response included more small priced items: “[With \$2] *I would buy candy, a bag of chips, cake, more chips, and a quarter bag of chips, 75 cent candy, two more bag of chips, that’s \$1.50 and, Mike and Ike’s and a pack of gum.*”

In one focus group the facilitator asked, “What ads or media affect the foods you choose to eat or drink, if anything?” A student responded:

I have an example. Me and my brother are watching TV, right, and some Taco Bell commercial comes up and for some crunchy, cheesy thingy and my brother was like, ‘I want that’ and I’m like, ‘it looks gross – why do you want it?’ And he’s like, ‘it’s crunchy and cheesy and I want it.’

Marketing strategies such as terms like “crunchy” and “cheesy” employ language commonly used by teenagers, which they might be more apt to remember. Marketing of certain food products was consistently mentioned by almost every youth participant:

...They make [commercials] not just for our age group but for younger ones. They make it like, ‘Oh, it’s happier and oh it’s fun, you know, come here. Eat. Have fun. There’s a playground in there.’

Additionally, a debate ensued in a teenage focus group over the definition of fast food. A student responding to the debate said, “*They call it fast food because it’s really unhealthy for you. It’s a lot worse than if you’re ordering Chinese food or pizza or something like that.*” A student responded:

If I make bacon, egg, and cheese at home...and I go to store and buy it, how is that in the store fast food and when I make it it’s not fast food? If it’s still the same ingredients and stuff like that.

The inability of this group to define what makes fast food “fast” shows a lack of knowledge of preparation and health. Many youth had the perception that cooking food “from scratch” and from “whole foods” is extremely time consuming and impossible for most families. There may be a perception that to eat delicious foods, the food either has to be store bought or made using elaborate techniques. Either way, the discussion of “fast” food was an extremely contentious issue among students.

Parents and family also provided influences on food choice. Yet parents were infrequently mentioned as a source of information on food: nutrition labels, friends, and school seemed to function as major sources of information. But youth acknowledged that since parents prepare and supply food and do the food shopping they have the most significant affect on the foods youth have access to in the household.

3.3.6 The Community's Seniors

Two focus groups were conducted with seniors. One diverse group included Caucasians, Dominicans, Guyanese, Germans, Hondurans, and Mexicans. Another group was comprised of recent Russian and Central American immigrants. Many seniors had immigrated to the U.S. within the past ten years. The focus groups covered a range of topics. Comments related to perception of social services as well as neighborhood environment were generally positive.

Major concerns included transportation as well as shifts in the retail environment as mentioned previously. Among the two focus groups, residents seemed to find their neighborhood food environment adequate; there were no major concerns voiced in the two discussions. This could be related to many of the seniors' participation in the Stapleton Senior Center programming which offers reduced-cost meals, free trips to the grocery store, as well as visits to local food pantries. Thus their food safety net is relatively expansive. A few participants also had support from their children (which seemed intermittent for many) and services such as Access-A-Ride. Unfortunately, many seniors say they walk to the supermarket.

However, a few participants say that they find it difficult to afford a diet with decent variety and quantity of fresh items. Conversations with seniors touched more on seasonality and quality than other groups. One discussion highlighted these issues: *"The cheapest fruit you can buy is bananas. But other than that, everything else is expensive."* And another comment was, *"We think it's expensive because during the winter nothing grows. They don't get things growing in winter. Nothing grows. That's why it's expensive."*

Four respondents who have been living in the New York area for a long time actively discussed farms and farming history:

Suffolk County, Long Island used to have a lot of farms but now there's very little because it's been taken over by developers. I used to remember walking through the field and you could eat strawberries, blueberries right off the ground. You could pick them right up. All of that is gone.

Additionally a number of seniors said that they eat less due to their age. This was stated as though they have less to worry about and are not as actively thinking about food concerns as they once were: *"We can't eat the same as when we were young like you [referring to facilitator]. We used to eat more and now we eat a little bit."*

The focus group with Russian women emphasized the importance of fresh foods in their diet as did other populations in the community: *"When I go to the supermarket, I see the things that are healthy for me, for example, I look at the food that is fresh like fruits, fresh meat."*

3.4 Community Readiness and Community Solutions

Survey asked, “What would make it easier for you to eat more fruits and vegetables?” Largest responses included:

- Cheaper produce
- Help with budgeting and managing expenses
- Having a farmers’ market or community garden where I live
- Having better quality fruits and vegetables in our neighborhood

3.4.1 Community Readiness

From the experiences of this project, it appears that there is both leadership on food issues at a local level and a climate of willingness to participate in change. During this CFA, a food council was created and completed a series of meetings that included some initial analysis of options. It was comprised of key local organizations and leaders, and represents a basis for further organizing for change.

Three Community Improvement and Food Council Meetings occurred in Stapleton, as a result of participants’ desire to continue the discussion started in

the focus groups. The meeting drew organizations’ community members from Stapleton, St. George, and Park Hill. A gardening project was planned by the food council, but could not be undertaken during the CFA study.

Through the focus group and food council discussions, it was learned that although individuals and the people of the community collectively possess many resources, not all are currently being tapped. People understand what healthy food is; they want to eat fresh, unprocessed foods, but they see that it is not available to them as it is in other communities. Some people want more education on how to use or choose items, but most just want more easily accessible and affordable choices. When asked how many were willing to work on just one aspect of change—community gardens—48% were very interested to grow vegetables in a garden, and 61% indicated they’d be very interested to buy locally grown vegetables. Both responses indicate a strong interest in improving consumption of healthier food.

3.4.2 Community Solutions

Focus groups yielded a series of specific recommendations directly from the community:

- Arrange culinary classes for youth, and parental education classes to reach children;
- Engage seniors, especially those retired, to educate single mothers in healthy cooking;
- Establish new farmers’ markets, fruits and vegetable stands, and fish stands across the area;
- Bring in new supermarkets, so they accessible in each neighborhood;
- Establish vegetable gardens;
- Hold block parties to build community spirit across cultures, including food as a focus;
- Organize support groups that combine food sharing, cooking of meals, and childcare;
- Arrange a shuttle-bus to make it easier to access supermarkets;
- Make food at soup kitchens healthier; and
- Organize a food cooperative.

A few key comments from the focus groups demonstrated the rationale of these recommendations from the community's perspective:

Education: *Let's say a fruit stand opened up across the street. We are gonna have to teach people how to prepare the food, the vegetables and stuff, and how to, once they buy it, how to store it. I think that is going to be the biggest problem. Because I bought fresh cabbage, fresh lettuce and it was gone in two days. I didn't even have a chance to eat it. And that was because I don't know what to do with it. Once I got it home, I just threw it in the refrigerator.*

Access: *I believe it's important to alleviate the need for fresh and healthy food in the neighborhood...to be able to get fresh food in our neighborhood at a walking distance, including fruits and vegetables.*

I want to see more fish markets and fruit stands. I don't see those anymore. When I do see them, the only place I see them is in Port Richmond. That's why I want to open one...

Multicultural activities: *We have to learn how to get along with our neighbors who live in Park Hill, whether they are African or Mexican, whoever... We do live together but we have to find that common goal to bring us all together... like this lot across the street like we could have a big festival and we could have the whole neighborhood, have different cultural food like that. But if we reach out and do it on neutral ground than we come together.*

Gardens: *That (community garden) would be absolutely wonderful. Where my son lives, he has a small bit of land, and I planted five potatoes, some dill, some parsley, and I love it very much. The tomatoes taste like real tomatoes like they are from home in Ukraine. The dill smells fresh, not like it does in the supermarket*

These community preferences, along with the rest of the study results, were taken into account in formulating the recommendations that follow.



A City Harvest nutrition education course. Classes are offered to communities around the city (and regularly in Staten Island's North Shore) offering healthy recipes, information, and cooking skills.

4. Recommendations

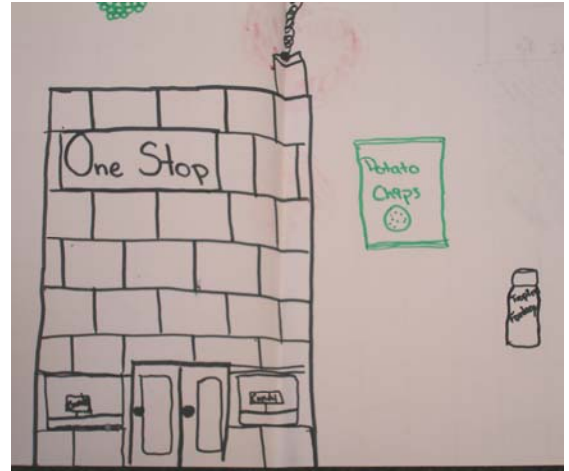
With sufficient planning and organization, food projects that address hunger and food insecurity can succeed in these neighborhoods if residents, key constituencies, and local organizations are genuinely involved in the process. A combination of short-term and long-term actions are foreseen, to be accomplished both by City Harvest and by the residents and organizations who were involved in the CFA study.

1. Share the Study. The first step will be to share findings from the CFA, in particular with the community, and to all those organizations and interested residents who took part in the CFA and the donors who supported it. Presentation forums can include farmers' markets, citizens and civic associations, and board and council meetings. Secondly, it should be shared with those city officials and candidates for elected offices during upcoming election seasons who can have an impact on decisions on food system issues in the area. Results of this study can also be shared with local newspapers, local academic institutions, and community and citizen groups.
2. Take Early Action. Priority small scale initiatives that alleviate current conditions should be initiated while the larger planning process is moving forward. This will help to create visibility and build political will for larger changes as well as provide immediate benefits. Also, some of the activities can serve as ways to demonstrate potential for longer-term action and larger investments. Actions could include:
 - Support existing organizations and their assets to create a shuttle service to supermarkets and farmers' markets from the Stapleton and Park Hill housing complexes, possibly with borrowed buses, such as programs facilitated by the Department of Aging. (<http://cityroom.blogs.nytimes.com/2009/10/13/same-bus-different-mission/>)
 - Collaborate with (CENYC) Greenmarkets to establish at least two Youthmarket farm stands, or a privately run satellite greenmarket closer to the Stapleton and Park Hill housing sites.
 - Finance existing entrepreneurial initiatives, e.g., the Liberian women's cultural business that also brings in fresh produce from farms and resells it in the neighborhood. Partnering with micro-credit CBOs, such as Accion, or through a City Harvest seed grant program, can provide the financing.
 - Encourage churches, mosques, and temples to prepare bundles of food a low cost, as currently undertaken by Angel Food Ministries, a Georgia-based organization that provides low-cost food delivery through churches, including two sites in NYC, one at Urban Harvest Ministries in Staten Island.
 - Start to decentralize and expand nutrition education and cooking clubs through local organizations and community volunteers, working with groups such as Project Hospitality. Engage youth in practical classes on how to buy and cook healthy foods,

and courses for adults on managing food budgets as well as meal preparation and nutrition.

- Collaborate with GreenThumb, Green Guerillas, Just Food, CENYC, or other community gardening organizations to support community interests in developing community spaces around gardens.
 - Engage youth to give back for the training they receive. Encourage local agencies to pilot projects to involve youth that meet community needs, such as a youth-run soup kitchen in which they learn cooking skills. This can be done within the context of school and after-school programs, and with at-risk youth as well. Small grant opportunities should also be allotted for such youth-based projects.
 - Optimize the amount of fresh food and produce brought into area pantries and kitchens by both City Harvest and the Food Bank for New York City.
 - Create partnerships with smaller stores to improve their fresh food variety and quality, as well as store cleanliness, storage, and presentation. Five stores that were part of this study are interested in participating in such a project. Programs such as the Healthy Bodegas Initiative and Healthy Hearts Program should be modeled in Staten Island, with support from and in partnership with Project Hospitality and City Harvest.
3. Plan for Long-Term Solutions. The recommendations should be moved to a new level by holding a series of professionally-led meetings over several months to develop a results-oriented strategy and action plan for improving the community's food system. This should be done with buy-in from the major stakeholders at the community, donor, official, and political levels. The plan should take into account the barriers and resources documented as a result of this study. The plan should include specific project options by which strategic goals can be measurably achieved.
 4. Build and Strengthen Community Coalition and Build Skills. Help organize local food related community based organizations and advocates into a strong and active voice for change. Increase community self-reliance by strengthening skill sets of community leaders, neighborhood activists, non-profit leaders, faith-based organizations, and those simply interested in community improvement. This can be done through community leadership and skill-building workshops, especially those led by groups such as the Citizens Committee for New York City. Ensure that a coalition of agencies and residents, as well as donors, drive the development and implementation of the plan, and feel accountable for achieving its aims. Existing groups should be brought together for this process, such as the Staten Island Interfaith Coalition of Feeding Ministries, the New York City Coalition Against Hunger, and the Community Action Board of Stapleton.
 5. Engage Youth in Community Projects. In 2000, 27.6 % of residents in the North Shore were under the age of 18. This is a major population to consider when addressing culture and needs of different community members with many resources to share in community projects. Throughout the CFA, there were many positive elements of the youth population that could be built upon and worked with for future projects.

During one youth discussion, participants created corner store drawings, including products students typically see in the stores and typical neighborhood store attributes. They were then asked to create an ideal grocery store, stocked with food they consider healthful, which included fruits and vegetables at affordable prices. One had trees and flowers in the front which is a stark contrast to their other drawings, and to the typical storefront seen in the area. Students identified ways they could bring change in their neighborhood such as asking store owners to stock more produce and getting petitions signed to present to their local stores.



Drawing of a "typical" neighborhood store by a resident youth during a discussion group.

Based on experiences and resident reflections about community youth engagement during the CFA, a set of recommendations was developed for future engagement with youth:

- Incentives are preferred. Youth might have been more compelled to complete the project if they were paid per survey. If monetary incentives are not available, other ideas are donated gift certificates, prizes for accomplishment, fulfillment of school credits, development of a team competition, or other meaningful incentives.
 - Time of year. The project took place during the final half of the second semester of the school year when students' schedules are less flexible. Summer and other school breaks would be ideal times to plan and implement youth projects.
 - Continued involvement: Youth should be involved in multiple phases of the project. A sustained relationship with students would ensure a sense of ownership and education on the issues, thus they would be invested in its success.
 - Recruitment sites. Youth volunteers should be enlisted from community organizations involved in related issues.
 - Staff. Coordinating with youth takes time and attention, and needs a dedicated individual. City Harvest was limited for this endeavor, and recommends that future efforts are focused and dedicated on relationships with youth.
6. Organize, Lobby, and Leverage Official Support. Engage local leaders to lobby and bring attention to the area with the Staten Island borough president, the City Council and Mayor's office, and citywide food access policies, so that Staten Island gets included in more city programs from which it is often excluded. Particularly work with Mayor Bloomberg and Speaker Quinn's office's FRESH (Food Retail Expansion to Support Health) initiative to focus financial incentives that bring more supermarkets and other healthy outlets close to where the lower-income people live in the study area. The Stapleton and Park Hill areas are indeed "additional" areas where funding may be available. Resources should be lobbied to assure that the program is expanded into Staten

Island. (<http://www.foodsystemsnyc.org/fresh> AND http://www.nyc.gov/html/dcp/pdf/fresh/eligible_area_map.pdf)

7. Promote and Operationalize the Strategic Plan as a Collaborative Undertaking. A clear, written plan with wide support will help to bring about larger scale and systematic changes. Major endeavors that can meet the area's needs include:
 - Bring one or more larger grocery stores, discount food stores, or supermarkets within walking distance of the Stapleton NYCHA and Park Hill housing complexes.
 - Improve public transportation with more direct routes established to food outlets and regular and sustainable shuttles to supermarkets and farmers' markets. Create subsidy programs for low-income residents unable to walk to markets.
 - Coordinate with food banks, key emergency food providers, and farmers across the state to establish a large scale program so that unharvested NYS farm food is gleaned, rescued, or purchased in large quantities and made available through existing channels either for discounted prices at retail locations or through pantries and kitchens.
 - Bring new, or improve existing, outlets established for better access to fresh food. Existing farmers' markets should be used to the fullest extent and made accessible, and/or satellite markets created. Further, Staten Island would benefit greatly with the expansion of Health Bucks redemption and the organization of Healthy Bodegas.
 - Establish cross-subsidized community supported agriculture (CSA) programs, buying clubs, and/or food cooperatives.
 - Develop marketing tools to promote healthy thinking and behavior in relation to food choices and food shopping, to be used locally with resources from relevant funders and community advocates.
8. Track Progress: Ensure that the drivers of the plan and its implementation are working with a clear timetable and tracking outcomes over an agreed period of time. Track the extent to which the strategic objectives are being met in a public and visible manner.

III. Appendices

Appendix A CFA Timeline

Months 1-2 (September 2008 through November 2008)
Define the geography and parameters of the work by investigating areas of need, key relationships, and resources in the community.
Conduct research on neighborhood demographics and relevant food systems data. Develop community inventory of food suppliers and social service organizations to better describe the food environment and determine available resources. The inventory is also a useful way to mobilize community action around gaps and inadequacies.
Initiate pilot surveys and refine them. Begin to implement final version of surveys.
Months 3-6 (December 2008 through March 2009)
Continue to implement field surveys.
Link with organizations and community leaders to understand the local food landscape. Mobilize residents to get involved in the project.
Conduct a series of “pilot surveys” administered by local residents to inform future surveys distributed in the community. Conduct pilot surveys at emergency food service sites.
Work with local organizations to conduct and define key pieces of the food assessment such as identifying stakeholders, underserved populations, and relevant projects. Organize focus groups and survey distribution to identify key concerns and needs.
Record, log, and facilitate community food/improvement projects.
Collect data for maps in final report.
Develop and implement ways to involve underrepresented groups such as through attending community meetings, networking, and conducting outreach.
Facilitate and complete 15 focus groups around food systems issues.
Months 7-8 (April 2009 through May 2009)
Complete 251 field surveys (April).
Engage youth component to complete neighborhood store assessment.
Analyze all field data.
Draft CFA and recommendations.
Months 9-13 (June 2009-October 2009)
Additional data collection and secondary research.
Completion of final CFA report (October 2009).

Census tract: _____
Location: _____
Zip code: _____
DE Date: _____
Survey ID#: _____

Appendix B Field Survey

Surveyor Name: _____ Time start: _____ Time finish: _____

Location of survey: _____ Date: _____

Introduction: Hi my name is _____ and I am a volunteer with a non-profit organization called City Harvest. We're asking people questions about food in their neighborhood. Do you live in Clifton/Park Hill, Stapleton or St. George?

- Yes
- No (if 'No' move on)

Are you 18 years or older? (If 'No' discontinue survey) I won't take more than 15 minutes of your time and your responses are entirely anonymous. You will get a roundtrip Metrocard for completing our survey!

Section 1- Demographic Information

I am going to ask you a few questions to help us better understand some basic information about the people taking this survey. All of these questions are anonymous.

1. What neighborhood do you live in? What are the cross streets? _____
2. Gender: Male Female
3. How old are you? _____
4. How many people live in your home, **including yourself**? _____
5. Do you have children living in your home? Y N
If 'Yes', How many of children are less than 18 yrs old? _____
6. What is your highest level of education completed? _____
(i.e., 6th grade or less, 9th grade or less, high school, college, vocational/trade)
7. Are you currently employed? (**mark one**) Yes No Retired
8. What was your major source of income in the past month? (**check one**)

<input type="checkbox"/> Full-time job	<input type="checkbox"/> Alimony	<input type="checkbox"/> No Answer
<input type="checkbox"/> Part-time job(s) or occasional work	<input type="checkbox"/> Unemployment	
<input type="checkbox"/> Social Security	<input type="checkbox"/> Assistance from a friend or family member	
<input type="checkbox"/> Disability	<input type="checkbox"/> Pension	
9. Were you born in the United States? Y N (*if 'No' answer A and B*)
 - A. How long have you been living in Staten Island? _____
 - B. Where were you born? _____
10. What is your ethnicity? (**check all that apply**)

<input type="checkbox"/> Black/African	<input type="checkbox"/> Hispanic/ Latino	<input type="checkbox"/> South Asian	<input type="checkbox"/> White
<input type="checkbox"/> East Asian	<input type="checkbox"/> Caribbean/West Indian	<input type="checkbox"/> other: _____	

11. Do you have a personal vehicle or regular access to one? Y N

12. Do you or your children currently participate in any of the following? Have you participated in any of these programs in the past? (**check all that apply**)

- | | |
|--------------------------|--|
| Past | Current |
| <input type="checkbox"/> | <input type="checkbox"/> WIC (women infant child) nutrition programs |
| <input type="checkbox"/> | <input type="checkbox"/> Food stamps (EBT)/ Supplemental Nutrition Assistance Program |
| <input type="checkbox"/> | <input type="checkbox"/> Farmers' market nutrition program coupons |
| <input type="checkbox"/> | <input type="checkbox"/> Urban Harvest Ministries: monthly pick up of reduced groceries on 651 Bay St. |
| <input type="checkbox"/> | <input type="checkbox"/> School Meals (<i>i.e., free or reduced lunches and breakfast in school</i>) |
| <input type="checkbox"/> | <input type="checkbox"/> City Harvest Mobile Market |
| <input type="checkbox"/> | <input type="checkbox"/> Food pantry, <i>which one(s):</i> _____ |
| <input type="checkbox"/> | <input type="checkbox"/> Soup kitchen, <i>ask which one(s):</i> _____ |
| <input type="checkbox"/> | <input type="checkbox"/> Delivered meals for seniors |
| <input type="checkbox"/> | <input type="checkbox"/> None |

Section II – Shopping Habits

13. Are you the person who does the food shopping in your household? (**check one**)

- Always Sometimes Never

14. a. What time of day is most convenient for you to do your shopping? _____

b. On average, how long does it take you to get to the grocery store? _____

15. Can you name the 3 stores where you get most of your food and why you shop at each of these stores? (**get name and record the reason for each store**)

Store 1: _____ Reason: _____

Store 2: _____ Reason: _____

Store 3: _____ Reason: _____

16. How often do you go to the stores you mentioned? (**ask about each of the stores listed above; record one choice for each store**)

	A few times a week	once a week	twice a month	once a month	Less than once a month
Store 1					
Store 2					
Store 3					

17. How do you usually get to these stores? (**check all that apply**)

- | | | |
|---------------------------------------|--|--|
| <input type="checkbox"/> public bus | <input type="checkbox"/> car service/taxi: _____ | <input type="checkbox"/> Staten Island Rapid Transit |
| <input type="checkbox"/> ferry | <input type="checkbox"/> walk | |
| <input type="checkbox"/> personal car | <input type="checkbox"/> friend's vehicle | |

18. Are there any reasons that make it difficult for you to get to the grocery store?

19. When you go to the store how often do you buy the following? (*check one box for each food type*)

Food Type	a few times a week (a lot)	once a week (sometimes)	2-3 times a month (occasionally)	once a month (not often)	rarely/ never
dairy: eggs, cheese, milk, yogurt					
deli meat					
raw meat, chicken, fish					
breakfast foods and cereals					
fresh fruits					
fresh vegetables					
pasta, rice, beans, potatoes					
bread/baked goods/tortillas					
frozen or pre-prepared meals ³¹					
canned fruits, veg, beans					

20. How often do you shop for food at bodegas and corner stores? (*check one*)

- every day
- once every few days
- 1 time a week
- twice a month
- once a month
- less than once a month or never (*go to #22*)

21. When you shop at bodegas and corner stores what do you usually buy? (*check all foods that apply and write which fruits and vegetables, if any*)

- milk
- deli meats
- raw meat, chicken, fish
- juice/water
- cultural foods³²
- bread/tortillas/baked goods
- cheese/yogurt
- eggs
- breakfast foods, cereal
- pasta/rice
- cigarettes or alcohol
- fresh fruits: _____
- fresh vegetables: _____
- soda
- canned fruits, vegetables, beans
- snacks, candy, chips
- sandwiches or other pre-made food

22. Do you ever go to the Greenmarket in St. George? Yes No Don't know about it
(the market with the white tents where local farmers sell goods near the ferry stop.)
(If 'Yes') How many times a month do you go to the Greenmarket? _____

³¹ Includes pre-made foods in deli section, frozen dinners, etc.
³² Food specific to the interviewees' culture

23. Do you ever go to Gerald's Farmers' Market? Y N Don't know about it
(the market on Richmond Terrace with white tents in New Brighton)
(If answered 'Yes') How many times a month do you go to Gerald's? _____

Section III- Eating Habits and Food Security

I just have a few more questions for you. Thanks for getting this far.

24. a. About how many home cooked meals do you eat a week? _____

b. Do you feel comfortable making meals from whole, fresh ingredients? Yes No

25. How many fruits and vegetables do you eat a day?

- | | |
|--|---|
| <input type="checkbox"/> More than 5 a day | <input type="checkbox"/> 4-5 a day |
| <input type="checkbox"/> 2-3 a day | <input type="checkbox"/> 1-2 a day |
| <input type="checkbox"/> a few a week | <input type="checkbox"/> 1 a week or less |

26. a. Are you able to easily find and buy fresh fruits and vegetables in your neighborhood?

Yes No

b. Do you feel you eat a balanced and nutritious diet? Yes No Unsure

(If 'no' or 'unsure') Why not? _____

c. What would make it easier for you to add more fruits and vegetables into your diet?

- Help with budgeting and managing expenses
- More food outlets
- More skills to cook and prepare food
- Knowing that my family will eat these items
- Having a farmers' market or community garden where I live
- Knowing more about the nutritional benefits of fresh food
- Having better quality fruits and vegetables at the stores in my neighborhood
- Cheaper fruits and vegetables
- Having more fruits and vegetables at food pantries or soup kitchens
- You do not want to eat more fruits and vegetables
- Other: _____

27. What does "healthy" food mean to you? (What foods do you think are healthy? How do you think food affects your health?) _____

28. What is your opinion of the local food stores in your neighborhood?

29. Are there any foods that you would like to purchase on a regular basis but cannot due to cost or lack of availability? _____

30. In the past 12 months, have you ever had trouble stretching your food budget to the end of the month? Yes No

If “yes,” how often does this happen? (check one)

- every month several months in the last year
 about every other month once or twice in the past year

31. *(please check one box for questions A-E):*

How interested are you in a:	Very interested	Somewhat interested	Not interested
A. Local outdoor area where you could grow some of your own vegetables?			
B. Regularly maintaining the garden (at least 1 time a week?)			
C. A farmers’ market?			
D. A shuttle that goes directly to a grocery store?			
E. Free classes on nutrition and cooking with fresh foods			

32. Are you interested in being involved in City Harvest’s work in your neighborhood? The results of this survey will be used to develop projects and share information with the community. We are also holding community forums with food, compensation, and the opportunity to discuss issues in your neighborhood.

Name: _____

Phone Number: _____

Address: _____

E-mail: _____

Thank you so much for your time. You are finished!

Appendix C Field Survey Directions and Tips

Staten Island Community Food Assessment Survey Tips

General Information:

- If respondents make additional comments, please take notes in the margin. But be aware surveys are expected to be completed. Too many distractions will keep participants from completing survey.
- Be aware of the community and your surroundings. Do not wear flashy items and be conscious of the sensitivity of the questions you are asking.
- Each survey will take you 10-15 minutes.
- Do not get hung up on questions. It is okay for a participant to say, “I do not know.”
- Stay focused. If respondent has additional questions say, “I may be able to answer this at the end of the survey.”

Intro question: “Do you live in Clifton/Park Hill, Stapleton...”

If “no”, discontinue survey. If “yes” to this question and they are 18 years or older let them know they will receive a round-trip metro card.

In general if you notice any apprehension to answering some of the more sensitive questions (income, education level, etc.), assure the respondents the information will in no way be connected to them and that the questions are being asked to learn general information about the community as a whole, not them as individuals.

Details on Section I

Q1: Respondents do not need to give an exact address -- neighborhood and cross streets are detailed enough. Ask for ZIP code.

Q9 & 10: Ask people their ethnicity when appropriate. Do not assume based on appearance. Ask, “What is your family’s background? What do you consider to be your ethnicity?”

Q11: Make sure to stress the “*or regular access to one?*” part of this question. We want to know if people have regular access to a car even if it is not their personal vehicle.

Q12: Note the distinction between *past* and *current* use of emergency food services.

Details on Section II

Q18: Ask respondents to think about the question for a moment if they have trouble coming up with an answer. Can probe with: “Is food shopping inconvenient for you and your family?”

Q19: Give the respondent the possible answers to shopping frequency: “a few times a week”, “once a week,” “2-3 times a month,” “once a month,” “rarely/never,” before reading the food items in the question.

Q22: If respondents do not know the name of the markets in these questions use the italicized descriptions to give them an idea of where/what they are before marking a response.

Details on section III

Q24 b: Explain that you are referring to food that has not been processed, canned, or boxed and partially prepared before they cook it. Use term “from scratch” to refer to food prepared from whole, fresh ingredients.

Q25: Refer to portion size chart if necessary to gauge amount of fruits and vegetables eaten. If necessary ask respondents direct question about portion size of items eaten (e.g., “Did you eat a golf ball size of corn or a baseball size?” See Portion Size Chart.)

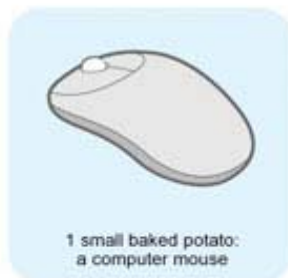
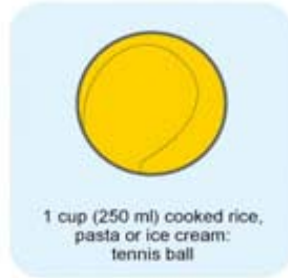
Q26a: Make sure to stress in your neighborhood, i.e., a distance that is walkable. We want to know what is available in respondents’ neighborhoods, not other neighborhoods they may travel to for groceries.

Q26c. Ask respondent what they believe to be a nutritious diet. Then ask them if they believe they eat a balanced nutritious diet. Take notes on their description of nutritious diets.

Q26d. Ask this question in an open-ended manner. Take notes on their initial responses and mark in space next to “other” if the response does not match with an answer listed. Additional notes can be taken on last sheet of survey. If respondents have trouble answering, offer options from the list by reading aloud.

Q30. Record information if the respondent is interested in getting involved. Ensure respondent that information provided is only for participation and meetings.

Appendix D Portion Size Chart for Field Survey



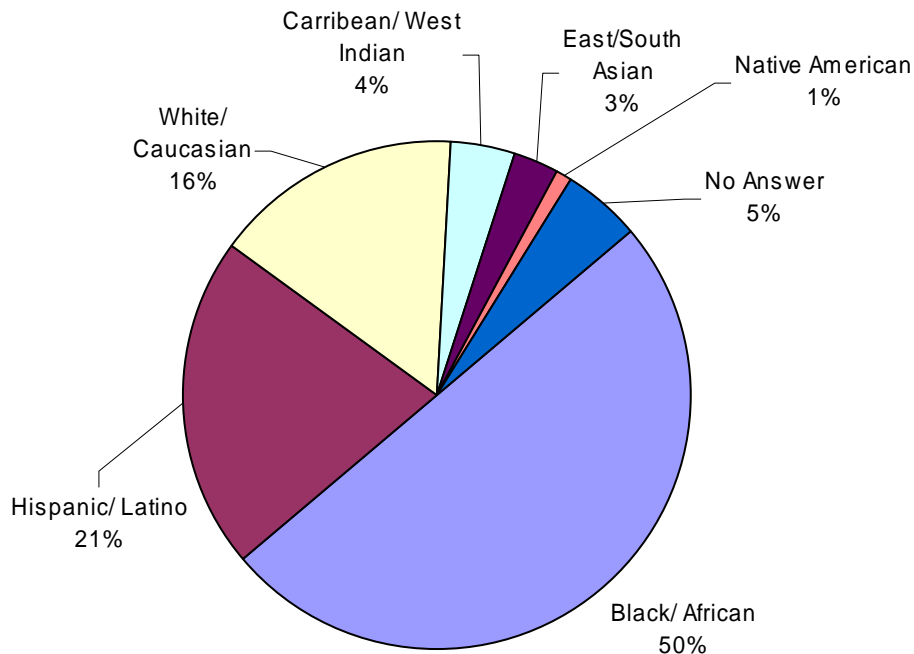
³³ Source: http://www.leancuisine.ca/en/NutritionWellness/Nutrition/Keeping_an_eye_on_portion_sizes.htm

Appendix E Demographics of Survey Participants

Of 251 participants,

- 27% of those surveyed completed some high school but did not graduate
- 37% completed high school
- 33% completed some college or vocational school
- 41% were employed at the time of completing the survey
- 54% were unemployed
- 11% were retired
- 42% reported current or past use of emergency food
- 66% were female
- 58% had children living in their home at the time of the survey
- 76% were from Stapleton or Clifton and Park Hill.

Figure 8: Ethnic Composition of Survey Participants



Appendix F Sample Flyers

FOOD COUNCIL AND COMMUNITY IMPROVEMENT MEETING!!

WHAT: A group meeting on improving Stapleton and Park Hill by focusing on nutrition and local food projects. Suggest ideas and contribute to your community. Get involved in an exciting group!



WHEN: Thursday, April 2nd at 7:00 p.m.

WHERE: Urban Harvest Ministries, 2nd Floor, on 651 Bay St. (Take the 51, 81, 74, 76, 84 buses to get there)

Agenda:



- Planning a neighborhood block party
- Community gardens
- Local food markets
- Hear about neighborhood projects
- Join a community improvement group

CALL THE NUMBERS BELOW IF YOU HAVE ANY QUESTIONS:

Jonna McKone xxx-xxx-xxxx

Derrence Kellman at xxx-xxx-xxxx

This meeting is part of a City Harvest project in partnership with local organizations and neighborhood residents to better understand how food works in Staten Island. The process is community driven: resident input is the most important piece of the project.

Community Food Discussion March 21st at 3:00 p.m.



ENJOY SOME HEALTHY SNACKS, A DISCUSSION, AND RECEIVE AN \$8 METRO CARD!

- **WHAT:** A discussion on nutrition and food in your neighborhood. Suggest ideas for programs and changes that might affect you. Voice your thoughts and contribute to your community. Learn about opportunities to get involved.
- **WHEN:** Saturday, March 21st at 3:00 p.m.
- **WHERE:** YMCA on 285 Vanderbilt Ave (76 bus)

WE WANT TO HEAR FROM YOU! Please call the number below if you have questions or would like to attend!

The Community Food Assessment is a project developed by City Harvest in partnership with local organizations and neighborhood residents to better understand how food works in Staten Island. The process is community driven and resident input is the most important piece of the project. Contact Jonna McKone (email) or (phone)

RESCUING
FOOD FOR
NEW YORK'S
HUNGRY
**CITY
HARVEST**



Appendix G Focus Group Template

Facilitators:

Timer:

Number of Attendees: male _____

female _____

Materials:

- name tags
- 20 surveys
- tapes, 2 recorders
- 15 food pyramid charts, in color
- blank paper
- pens

Agenda:

- 5:45: sSet up
- 6:00-6:15: Intro and icebreaker
- 6:15-6:25: Perceptions
- 6:25-6:45: Knowledge
- 6:45-6:50: Activity 2
- 6:50-7:10: Habits and Barriers
- 7:10-7:25: Emergency Food/Changes
- 7:25-7:30: Closing/Surveys?

Pass out blank paper, pens, set up recorder and introduce project:

Thank you for attending this focus group session. This meeting is to learn about your thoughts and ideas around food, nutrition, and the community. My name is Jonna and I have been working as a community organizer in Stapleton and Park Hill since the fall. Kendra is also here to facilitate. During this session, we will be recording some of your thoughts and taking notes. Your responses are entirely confidential though this meeting will be recorded. I also want to let you know that your participation in this forum is extremely important to your neighborhood and the work we are doing. **The discussion will go for around 1.5 hours and you will complete surveys if there's time.**

A few things:

- a. Please remember to turn phones off.
- b. Try not to interrupt one another.
- c. There are no right or wrong answers so don't be afraid to speak up.
- d. Listen to one another and be respectful.
- e. Please let me know if you don't understand a question or activity.

Icebreaker:

Does everyone here live in Stapleton? Please raise your hands. *Record number.*

We are going to go around the room and say your name, where you are from, as well as one thing you like about your community. Please also say if you were born in the U.S. or another country.

Perceptions:

- Let's take a moment to discuss some general community-related concerns. I'd like everyone to take a moment to brainstorm one thing you would like to change about your community—it can be anything. You will have five minutes and then we will go around and discuss your thoughts. *Pass out paper if necessary.*

Write down responses on poster paper. Relate commonalities and differences in responses.

Now I have some general questions about how you perceive the health of your community. Please feel free to just call out responses:

- What changes (good and bad) have occurred in the community in the past few years?
 - Population?
 - Economic?
 - New businesses?
 - New developments?
 - New services? Food pantry and soup kitchens or other services?
- How do you think of nutrition in the neighborhood? What are your eating habits like? Where do people eat out? Young people? Other ethnic groups? Elderly? Families? Do you think people in this neighborhood are aware of health issues and problems?

Knowledge:

- What foods do you think are healthy? What does it mean to eat healthy foods?
- Do you think nutrition is important for your health? Why?
- Who do you speak about food with?
 - Friends?
 - Family members?
 - Physicians? Dieticians?
 - Other community members?
 - Storeowners?
- Do you think your diet matches your knowledge of a healthy diet?
- Does anyone here use WIC, food stamps or Farmers' Market Nutrition Program Vouchers? (*Raise hands and count.*) Does anyone here access food from a community garden or farmers' market?
- How do these programs work and what do you think of them?

Habits/Barriers to Access:

Pass out a food pyramid map.

Food Retail and Shopping:

- **Neighborhood Stores:** What do you think of the food stores in your neighborhood? What do you like about them? What kinds of foods do they sell? Any foods in the food pyramid? Do they sell the food you need? What is missing, if anything (from the food pyramid and in your opinion)? What is the quality like? What do you mean by *quality*? What would do you think could be done to improve the stores within walking distance from your house, if anything?
- Do you ever ask the store to stock your foods you would like? If so, describe the outcome?
- **Grocery Stores:** How do you get there? What do you think of the food options at the grocery store? What about the quality?
- How do you get to the store? Do you find public transportation convenient to get to places to do food shopping? What is inconvenient/convenient for you? How often do you use the bus to go food shopping? Walking?
- Are there certain stores that you purchase foods from regularly? Can you name some of the stores and their location? What kinds of foods do you buy at these stores? *Record responses on poster paper.*
- What foods would you like to eat but are unable to get? *Record.* Do you go somewhere else to purchase foods you cannot access? Do you try and substitute foods? What foods?
- What influences **where** you shop? How do you usually decide which store to go to?
- What influences **what** you purchase in the stores? *Mark tallies on influences sheet.*
 - Do you make a budget?
 - A list of what to buy?
 - Kids/family?
 - Do your children eat at home or out? What do they ask for?
 - What's on sale?
 - What do you notice? What looks good? Quality? Your mood?
 - Nutrition labels? Doctor's advice? (Can you read/understand the nutrition labels?)
 - Ads: TV? Radio? Newspaper? Magazine?
- Do any of you have kids living in your home? Can you raise your hands? *Record number.* How do your kids influence what you buy? Do they go shopping with you? Do you think your kids like healthy foods? Do you think you have an influence on the foods your kids choose to eat?
- **In your opinion are locally grown foods available in this community? If so, where can they be purchased? What foods?** ("Locally grown foods" means food produced or grown within a geographic region or cultural area.)

Activity 2: Food Shopping Habits

Pass out and give 10 minutes to complete. Assist those who may need assistance filling the activity out.

Eating Habits:

- How many fruits and vegetables do you eat a day? Raise your hands if you've eaten a fruit or vegetable today. *Record number.*
 - Was it frozen, canned, fresh, with something on it?

- Has your diet changed since moving to the U.S.? How would you describe an American diet? Is it healthy or less healthy from your own?

Emergency Food Options/ Food Security:

- Are there any obstacles to eating a healthy diet for you?
- Personal: money, knowledge of nutritious foods, preparation skills, time, taste, cultural, other reasons?
- External: The foods are not available, quality, what is good quality?, stores, transportation, cost, times of the year/season, friends/ family members, cost.
- Do you rely on friends and family to get your food? For transportation?
- If you don't have enough food, do you have any strategies to deal with this?
- Are there services in the community that are provided if you do not have enough to eat that you know about and would like to mention?

Changes:

- What is one thing you would like to change about your diet? Have any of you made significant changes to your diet? Why? Have you been able to follow through with these changes?
- What issue would a group that meets to talk about food tackle that might be important to you? How interested would you be in joining some sort of council?
- What tools and skills/events/program would help the community eat healthier?
- What is the best way to communicate about events, new services, meetings?
- Do any of you know people who would be interested in growing vegetables for their own use in a community space in Stapleton or Park Hill?

Closing Activity Now I am going to pass out paper to everyone and I want you to write down what issue stood out as most important to you. Feel free to eat and then I will collect the responses and we'll have a short discussion about the topics you brought up.

Food Security Activity: if time.

Thanks for coming!

Turn off tape recorder. Ask participants to fill it out a survey and include name and number if they want to stay involved and informed.

(Other questions to incorporate: Is language ever a barrier in your food shopping experience? How?)

Appendix H Completed Focus Groups

#	Location	Number of Participants	Age Group	Population Characteristics	Recruitment Method	Major Themes
1	Roza Promotions, Park Hill	10	Over 40	Liberian refugees, attending an adult literacy class	Linked with organization director	American food, obtaining food, overall cooking and health in U.S.
2	IS 49 middle school, Stapleton	25	Middle-school age	Student council members, ages 12-14	Worked with middle school's vice principal to organize event.	Consumer literacy – ads as an influence, shopping habits with parents varied, eating habits and preferences
3	Roza Promotions, Park Hill	22	Teenagers	Mostly Liberian participants from Park Hill and Rosebank	Linked with a director	Fitness and Food – sports encourage young people to eat properly; lack of access and the food culture in the area is a concern
4	Urban Harvest Ministries, Stapleton	20	Adults with families	Most of population based in Stapleton, Park Hill, and South Beach	Outreach in Stapleton, local churches, and worked with church's pastor	Supermarket prices and locations are inadequate to meet food needs; purchasing fresh is secondary when food budget is minimal
5	Stapleton UAME Church, Stapleton	6	Children ages 6 to 10	Children who attend the church's Kids' Café after-school youth programming where meals are provided	Worked with local pastor, Maggie Howard	Children have minimal concern/ knowledge of the food they eat
6	St. George Library, St. George	10	High school students	Youth from target area	Youth librarian conducted outreach for the meeting	Definition of fast food, lack of knowledge of nutrition, and how few meals eaten at home
7	Urban Harvest Ministries Community Meeting	20	Range of ages, teen to adult	Residents from Stapleton-St. George area	Conducted general outreach	Access to food, thoughts on fresh food markets; determined that the group should meet again.
8	YMCA, Park Hill	35	Teenagers	Attendees of YMCA's literacy and computer education classes	Worked with coordinators of YMCA's New Immigrants Services Program	Food security and access, limited access to culturally appropriate food
9	African Refuge, Park Hill	8	Middle-aged	Liberian adults from Park Hill	Participants of African Refuge Food Pantry and other client services	Hard to access culturally-appropriate, affordable food; neighborhood is not conducive for physical activity; nutrition info is difficult to access.

#	Location	Number of Participants	Age Group	Population Characteristics	Recruitment Method	Major Themes
10	Stapleton Community Center, Stapleton	6	Seniors, parents, and middle-aged participants	Over age 40, mostly parents, all live in Stapleton area, particularly NYCHA houses	Flyers in stores, libraries, NYCHA houses and individual outreach to interested participants	Lack of food options, generational gap of food information, overall neighborhood problems, need for more parental education and involvement
11	YMCA, Park Hill	6	Park Hill parents and individuals	Spanish-speaking, Liberian, and an Egyptian-born individuals	Flyers and organizing in the Park Hill area	Quality in stores, affordability of prices, community initiatives
12	Our Lady of Good Council Church	7	Adults with families	Hispanic community, facilitated conversation in Spanish	Connected with priest at church, announcement occurred after church to recruit people	Education more important; Hispanic foods are available; church, school, radio, and TV are major vehicles of communication; Get word out through other vehicles, not meetings
13	Curtis High School after-school program	8	High school students	High school students	Coordinated by Tom Hepworth, the after-school program director.	Few ate breakfast or lunch, snacks made up meals; knowledgeable about nutrition but media an influence; shopping habits and food choices at home
14	Community Senior Center, Stapleton	11	Over 60 years old, members of senior center	Seniors from Stapleton area, many immigrated from different countries, 5 Spanish speakers – one translated for non-English speakers	Coordinated with Glenda Martinez to recruit participants	Change in quality, transportation, services provided by senior center, changes in the quality and appearance of fresh items over the years
15	Elizabeth Boyle Homes, Stapleton	7	Elderly members of Elizabeth Boyle Homes	2 Russian-speaking seniors, 5 Spanish-speaking participants	Coordinated with Genoux Baez of Elizabeth Boyle Homes	Lack of knowledge of existing food resources

Appendix I Focus Group Coding Schema

Code	Definition
Aff	Perceived affordability of food products and other needs, services
Age	Age, reference to age or generational differences
Alt	Reference to alternative food outlets (not including EF sources, such as food pantries or soup kitchens), e.g., farmers' markets, community gardens, CSAs
Assets	Community assets and individual assets, e.g. community organizations and services, resources that community organizations might draw upon
Avail	Availability, e.g., general reference to the presence of FV available at food outlets and alternative food sources in the neighborhood
Aware	Awareness and knowledge of nutrition, health, access points, and markets; includes knowledge of where food comes from and seasonality, etc.
Beh	Internal behavior factors that relate to food consumptions: refers to reciprocal behavior, influence of community, personal preference, consumer preference
change-D	Changes in diet, e.g., preference for dietary change or mentioning diet change
Change-P	Behavioral/personal change, e.g., willingness to alter eating habits and attitude
Comm-def	Definition of community in community's/individuals' context, includes community relationships, stakeholder interaction, communication among residents
Comm-eff	Community efforts, e.g., community discussion about local efforts ad services as well as effectiveness of these services
Comm-hist	Community history, e.g., reference to community history and changes over time
Cons	Consumption, e.g., reference to the consumption and eating of particular foods
Cult	Cultural, e.g., specific reference to cultural eating habits, cultural identity, as well as memories or thoughts concerning food
Dis	Reference to diet-related disease
Disab	Disability or other physical ailment preventing access/barrier to acquiring food
Educ	Education, e.g., reference to education specifically, formal streams of information sharing, learning --not receiving information passively
EF	Emergency food source reference as well as reference to strategies used to meet food needs
Ext-loc	External factors related to food access centered on location: transportation, distance, walkability, reference to place and specific sites
habits- E	Eating/dietary habits
habits- G	General habits that might be indirectly related to food
habits- P	Purchasing habits, includes subjects like sales and budgeting
Hist-P	Personal history, e.g., background
Id	Identity and self efficacy, e.g., comments relating to identity
Info	Information, e.g., reference to specific streams of information dissemination, media sources, etc.
inst	Institutional food, e.g., food that community members receive in institutions such as hospitals, schools, and nursing homes
Interv	Intervention/programming, e.g., CH or initiatives generated outside of community
Lit	Consumer literacy: reference to nutrition labels, media/advertisements, etc.
nutr	Awareness and knowledge of nutrition
Percep	Perceptions of places, locations, people
Phy	Physical activity, e.g., fitness, sports, playing various sports
Prep	Food preparation habits
Prod	Produce, e.g., fruits and vegetables
Quality	Reference specifically to food quality
Ret	Retail, e.g., includes quality of food retail, opinion of local food outlets, perceptions of retail options, concerns with vendors
role-c	Role of child or children, reference to childhood roles in family
Role-comm	Role of community, e.g., role of community and friends in diet choices and in food systems-related activities
Role-F	Role of family members in influencing eating habits
Role-I	Role of individual
Safe	Food safety, e.g., related to food safety and sanitation
Sec	Reference to hunger (food security)
trans	Transportation e.g., how people get places
Variety	Variety, e.g., different types and kinds of food items

Appendix J Food Retailer Survey

Census Tract: _____
Location: _____
Zip Code: _____
DE Date: _____
Survey ID #: _____

Survey Conducted By (Team Name/Number): _____

Date and time survey conducted: __/__/09 ; _____AM / PM__

Travel Time (length of travel from neighborhood to store):

There: _____ Bus Routes Taken: _____

Back: _____

1. Store Name (written on storefront): _____
2. Store Street Address: _____ Phone Number: _____
3. Manager/Owner Name: _____
4. Store Owner Ethnicity
 Black Hispanic/Latino South Asian White
 East Asian Caribbean/West Indian other: _____
5. Store Type:
 Bodega/corner store/deli
 Independent grocer
 Supermarket

Questions for storeowners

6. Excluding meat and produce, which of the following sources do you currently use to acquire food items/products for your store? (Please check all that apply.)
 A food wholesaler
 A large national manufacturing company
 A direct store delivery vendor (DSD)
 Decision made at headquarters
 Directly from a small food producer (including farmers and small food entrepreneur business)
7. Which of the following are the three most important criteria used to decide which food products will be place on the shelves in your store? Of the three you choose, which is the most important (select only three and circle the most important one)?
 Available shelf space Label printed in English and Spanish
 Product category Customer recommendation/request
 Sales history/profitability Supplier recommendation
 New product Packaging
 Ability to re-stock Option of consignment sales
 Promotional help Other (please list) _____
 Shelf life

Exterior

8. Outside of Store: (Take picture of exterior if possible)
Rate appearance:
Worst 1 2 3 4 5 6 7 8 9 10 Best

Comments on rating/appearance: _____

9. What ads are displayed in front of the store? (What products (e.g., food, alcohol, cigarettes) are advertised on the store front?) List All.

Interior

10. Inside the Store:
Rate appearance.
Worst 1 2 3 4 5 6 7 8 9 10 Best

Comments on rating/appearance: _____

11. How many refrigerators are in the store? _____

Describe contents of refrigerator: _____

12. How many cash registers are in the store? _____

13. Does the store accept WIC?

YES NO

14. Does the store accept food stamps/EBT?

YES NO

15. What ads are displayed in the store? What products (e.g., food, alcohol, cigarettes) are advertised in the store? List All. _____

Inventory

Milk:

Item	Brand	Quality (include info on appearance, expiration date if passed, leaks, holes, etc.)	Unit price/price per gallon	Location in store/how stored and displayed
Milk, skim				
Milk, 1%				
Milk, 2%				

Produce: (See reference section on last page of survey.)

Stock at least one **white** fruit or vegetable (garlic, onion, potatoes, bananas, etc.)

- Yes No

List available **white** F&Vs in chart:

Item	Quality	Unit price/price per weight. If lb is not available, price per # of items (mark as advertised)	Location within store/how stored and displayed

Stocks at least one **yellow** F&Vs (lemons, corn, zucchini, etc)

- YES NO

List available **yellow** F&Vs in chart:

Item	Quality	Unit price/price per weight.	Location within store/how stored and displayed

Stocks at least one **green** F&Vs (broccoli, avocados, greens, lettuce, etc.)

- YES NO

List available **green** F&Vs in chart:

Item	Quality	Unit price/price per weight.	Location within store/how stored and displayed

Stocks at least one **orange** F&Vs (oranges, carrots, orange bell peppers, etc.)

- YES NO

List available **orange** F&Vs in chart:

Item	Quality	Unit price/price per weight.	Location within store/how stored and displayed

Stocks at least one **red** F&Vs (cherries, watermelon, strawberries, peppers, etc.)

- YES NO

List available **red** F&Vs in chart:

Item	Quality	Unit price/price per weight.	Location within store/how stored and displayed

Stocks at least one **blue/purple** F&Vs (blueberries, eggplants, etc.)

YES NO

List available **blue/purple** F&Vs in chart:

Item	Quality	Unit price/price per weight.	Location within store/how stored and displayed

Any additional comments:

Reference: Foods by Color³⁴

Here are examples of foods from each color category. Consider the color of the edible portions of the produce, rather than the peel/rind. A watermelon is a red fruit (the color of the flesh) rather than a green fruit (the color of the rind). A red apple is both red and white, because both the peel and flesh are eaten.

RED: tomatoes, grapefruit, papaya, guava, etc.

WHITE: cauliflower, leeks, garlic, potatoes, onions, pears, bananas, etc.

GREEN: spinach, broccoli, kale, green grapes, etc.

YELLOW: corn, zucchini, etc.

ORANGE: oranges, peaches, mangoes, etc.

BLUE/PURPLE: plums, blueberries, eggplant, etc.

³⁴ More information and fuller lists available at Fruits and Veggies Matter more: http://www.fruitsandveggiesmorematters.org/?page_id=1600

Appendix K Results from Store Surveys

A total of 16 stores were evaluated, 13 in the interior and 16 on the exterior, in the target area in March 2009; ten corner stores/delis/bodegas, three supermarkets, one specialty store, and two independent grocery stores.

The survey results show similarities in the following areas:

- a) SNAP/EBT participation
 - a. 93% (13 stores) accepted SNAP/EBT
- b) WIC participation
 - a. 71% (10 stores) surveyed accepted WIC.
- c) Advertisements
 - a. 86% (12 stores) had ads posted in the store and on the exterior of the store. The most common ads, usually posted inside the store, were for lottery, cigarettes, and beer.
- d) Produce
 - a. All stores stocked fresh fruits and vegetables
 - b. All stores had at least one white/beige vegetable available
 - c. All stores carried potatoes and bananas

The survey results show differences in the following areas:

- a) Criteria for determining stock purchases (from 9 storeowner responses)
 - 5 store owners and managers use customer recommendations and requests to make stock choices
 - 6 use sales history to determine future inventory
 - 3 used shelf life of product to make inventory decisions

b) Appearance/Cleanliness

Interior Appearance/Cleanliness was judged based on a scale of 1-10; 1 being the lowest (trash, foul odor, dirty, unorganized, unattractive displays, poor lighting, leaky or otherwise damaged ceiling, damaged floor tiles, etc.) and 10 being the highest (well lit, no odor, organized, well- stocked shelves, clean floor, attractive displays, clean ceilings). Stores received separate scores for the interior and exterior appearance and cleanliness of the store.

Interior

- 2 stores received a score of 4. These stores had an odor, low lightly damaged ceiling, dirty refrigerators, and/or old floor tiles.
- 5 stores received a score of 5-6. This score was considered average or typical of the neighborhood. Stores in this category were normally moderately lit, had no odor, somewhat clean, had litter in front of the store, and older paint jobs and infrastructure.
- 4 stores received a score of 6.5-7. This score was indicative of a store similar to the typical store in the area with a particular quality that set it apart in some way. For one store this was new floor tiles, for another it was the level of cleanliness.
- 2 stores received a score of 8-9. One was the independent grocery store. It was well stocked, well lit, and had organized well stocked shelves, with attractive displays.

Exterior

- 1 store received a score of 3. This score was given for cluttered windows, unclean exterior, unclean windows, litter, and graffiti. (The interior of the store was much cleaner than the outside.)

- 7 stores received a score of 5, or 5-6. This score was given to stores with drab, dull exteriors with a moderate amount of litter in front of the store. These stores typically had many ads in the windows and on the doors and walls. This was typical of stores in the area.
- 5 stores received a score of 7-8. They were attractive from the outside with new or well-kept paint with no or little litter.
- 3 stores received a score of 8-9. One was the same store to receive the 8-9 in the interior score. This store had only store ads, new paint, bright exterior, a parking lot, and clean windows.

c) Posted Ads

- 6 stores had advertisements for tobacco products posted in or on their store
- 4 stores had ads for the New York State lottery on display
- 3 stores had ads for alcoholic beverages
- Other ads included store specials and sales, ATM, prepaid phones, phone cards, and beverages

e) Low Fat Milk Options:

- 43% (6) of the stores had 3 options of low fat milk (skim, 1%, 2%)
- 29% (4) of the stores had 2 options of low fat milk (1%, 2%)
- 7% (1) of the stores had 1 option of low fat milk
- 21% (3) of the stores had no milk visible on the day surveyed

f) Produce Variety (sorted by color)

Produce was categorized by color to clearly show the level of variety stores carried or did not carry. When available, at least 5 different products were recorded. It was generally observed that when at least 3 products per category were offered, the quality of the product itself was higher, and offered the customer more options.

White Produce

- 92% (13 stores) stocked at least 3 white fruits or vegetables, the most common being potatoes and bananas. One store offered 2 options.

Yellow Produce

- 43% (6 stores) stocked at least 3 yellow fruits or vegetables, the most common being lemons. Six stores offered 1-2 options, and two offered none.

Green Produce

- 71% (10 stores) stocked at least 3 green fruits or vegetables, the most common being limes. Three stores offered 1-2 options, and one offered none.

Orange Produce

- 36% (5 stores) stocked an orange fruit or vegetable, the most common being oranges. Seven stores offered 1-2 options, and two offered none.

Red Produce

- 89% (8 stores) stocked a red fruit or vegetable, the most common being tomatoes and apples. Four stores offered 1-2 options, and two offered none.

Blue/Purple Produce

- 43% (6 stores) stocked at least one blue or purple fruit or vegetable, the most common being plums. Two stores offered 1-2 options, and six offered none.

Appendix L Gardens and Markets on Staten Island

Name	Type of Food Source	Location	Phone Number
Castleton Hill Moravian Church	Community Garden	1657 Victory Blvd, 10314	(718) 442-5215
Charleston Farmers Market (At the South Shore Commons shopping center)	Farmers Market	2379 Veterans Road West, 10309	
Decker Farm sponsored by Cornell Coop Extension, Trust for Public Land, CENYC, SI Historical Society. ³⁵	Organic produce farmed by immigrant farmers	435 Richmond Hill Rd., New Springville, 10314	(212) 677-7171
Geraldi's Market	Grocer with local produce	561 Richmond Terrace, 10301	(718)-727-7787
Greenthumb Garden	Community Garden	Quinn St. & Broad St., 10304	
Joe Holzka GreenThumb Garden	Community Garden	Castleton Ave., Between Taylor & Barker St., 10310	(917) 596-4198
New Restoration Project Community Garden- Westervelt Community Garden	Community Garden	143 Westervelt Avenue, 10301	(212)-333-2552
St. George Greenmarket	Farmers' Market	St. Marks Place & Hyatt Street, 10301	(212) 788-7900
Starbrite Farm	CSA	Christ Church at 76 Franklin, 10301	(718) 727-2941

This list may not represent every outlet on Staten Island. Please contact City Harvest to provide updates.

³⁵ Trust for Public Land. *NYC's Last Working Farm Protected*. http://www.tpl.org/tier3_cd.cfm?content_item_id=14025&folder_id=631