Charlotte-Mecklenburg
Food Policy Council

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HEALTHY, AFFORDABLE & SUSTAINABLE FOOD FOR ALL

The Charlotte-Mecklenburg Food Policy Council exists to advocate for policies that build a sustainable, equitable and healthy local food system. The goals of our council are to enhance the health of our citizens, strengthen local economies and market opportunities, and reduce hunger and food insecurity. To achieve these goals, the Charlotte-Mecklenburg Food Policy Council connects local and state organizations involved in food systems work, and educates community members about the importance of healthy, fair, and sustainable local food.

Our mission is to strengthen our community by:

- Serving as a forum for discussing food issues
- Building relationships in the food system
- Educating, advocating for, and communicating policy issues
- Acting as a primary information source for food related issues
Since our founding in 2010, when the first Charlotte-Mecklenburg community food assessment was completed, the Charlotte-Mecklenburg Food Policy Council has advocated for policies that build a sustainable, equitable, and healthy food system. The original community food assessment, often referred to as the “Food Desert Study,” provided stark statistics about the state of healthy food access in our county.

While the statistics aren’t always pleasant, they do have the impact of mobilizing a community to make important changes. No one wants to hear that 35% of Mecklenburg County households with kids faced food insecurity in the past year or that some parents have to make the difficult choice between food for their families or medicine for themselves. Numbers like these can be hard to hear but they can also galvanize people to take action and work together to improve our food system.

Since that first food study in 2010, Charlotte and Mecklenburg County has seen mobile farmers market legislation passed, food pantries on college campuses opened, FoodCorps service members serving in high-poverty Charlotte-Mecklenburg Schools, the formation of the Fresh Look at School Food coalition to improve access to healthy food at school, the creation of the Piedmont Culinary Guild bringing together local chefs and farmers, and an overall increased awareness of the issues surrounding equitable food access.

With the release of the 2015 State of the Plate Community Food Assessment, we are so proud that not only do we have the facts and figures to further the work of our organization and countless others in Charlotte, but that this report also has an even more important component – the voice of the community.

As Mark Winne, community food systems advocate, said, “When it comes to how we assess a community’s food system, listening is the most important tool we have.”

The 2015 State of the Plate would not have been possible without the support of two very important sponsors: Wells Fargo, and Blue Cross and Blue Shield of North Carolina.
North Carolina. The breadth and depth of the work accomplished in 2015 happened because of the collaboration of many partners here in Charlotte and due to the tireless work of our two primary researchers, Victor Romano, EdD and Katherine Metzo, PhD. We are fortunate to have a very dedicated Board of Directors and Experts’ Panel who helped in so many ways to see this enormous undertaking to completion. We want to thank Johnson C. Smith University for their leadership, and our colleagues from Queens University, Winthrop University, and UNC Charlotte, as well as the dynamic team at the Mecklenburg County Health Department for their contributions to this project and their continued support going forward as we make even more improvements to increase healthy food access in our community.

The release of the 2015 State of the Plate report is truly just the beginning. We don’t have all the answers but we are excited to be leading the discussion and helping the community take action to build a more just food system in Charlotte and Mecklenburg County.

Erin Brighton, MPH, M.Ed.
Executive Director
Charlotte-Mecklenburg Food Policy Council
Executive Summary

Nationally and locally, chronic disease is rising at alarming rates: 61% of Mecklenburg County residents are overweight or obese and our rates of cardiovascular disease, high blood pressure, and high cholesterol are on the rise. Diet and access to healthy food are essential to preventing and treating these chronic diseases, yet only 11% of residents eat the recommended daily number of servings of fruits and vegetables. A key factor is that access to healthy food is not equally available. This study of Charlotte and Mecklenburg County focuses on food access based on availability, affordability, and quality within neighborhood environments. Our overarching question is to see how the local food system has changed in the past five years to provide fresher, healthier, and safer foods through improved food access and food security for all Charlotte and Mecklenburg County residents.

In revisiting the 2010 Mecklenburg County Community Food Assessment, we focus our analysis on food insecurity, which is a more nuanced understanding of households and food access. While “food desert” is primarily a geographic distinction that tells us about food availability within a low-income community, it does not reveal enough about food security. Food security is more about the lived experience of households. By looking at food security we can begin to explore alternative strategies and policies for combating hunger and improving health in our community.

Food Access Mapping

We examined the food stores and their characteristics within the 373 census block groups (CBG) and 230 census tracts in Mecklenburg County, NC. All food stores with Standard Industrial Classification (SIC) codes listed that are associated with food sales that were in operation as of February 23, 2015 were used in this analysis, as well as restaurants and fast food restaurants. Through this, a total of 2078 stores were identified.

In 2015, Charlotte and Mecklenburg County were home to approximately 1 million residents. Through traditional food desert mapping techniques, we found that there are 64 Census Block Groups (CBGs) and 87,354 residents who are living in food deserts. This is an increase of 20.01% from 2010. However, there has also been a 37.08% increase in the number of non-full-service stores within these areas. This data indicates that these CBGs are gaining access to food stores with limited selection, though lacking proximity to a traditional Full-service Store
(stores that sell a variety of fresh fruit, fresh vegetables, fresh meat, fresh dairy, and processed foods).

**High Food Insecurity Risk Areas**

Relative to previous work, this study takes a different approach to identify high-risk areas for food insecurity, using drive time and radius mapping to focus on the true accessibility of food within Charlotte & Mecklenburg County. Through the utilization of these new mapping techniques, we created a new classification: High Food Insecurity Risk Areas. Census Block Groups were categorized as High Food Insecurity Risk Areas based on the following criteria: a drive time in excess of 5 minutes to a full-service store, a drive time in excess of 5 minutes to a store that sells fresh produce (fruits & vegetables), and a limited total offering of food stores for any type of food purchase.

**Brookshire Blvd Corridor (NC 16)** Between I85 & I485

**West Blvd Corridor (NC 160)** Between Billy Graham Pkwy & I485

**Albemarle Rd Corridor (NC 27)** Between I485 & Mecklenburg County Boundary Line

**Voice of the Community**

This study also incorporates a community-based survey and focus groups to help us better understand how food access affects Charlotte and Mecklenburg County residents. In the survey, we use a series of questions developed by the United States Department of Agriculture (USDA) to identify who is food insecure. Through both quantitative and qualitative measures, we look at how residents shop for fresh fruits and vegetables. We want to understand where residents shop and how they get there. And we examine these choices within the context of the values that drive people’s decision-making regarding food.

Based on our sample, overall rates of food security in Mecklenburg County are similar to national averages. When speaking about households with children, however, Mecklenburg County is doing worse than the nation as a whole.
For households that receive public assistance, like SNAP (Supplemental Nutrition Assistance Program, formerly known as “food stamps”), adults can buy better food, but still may feel, “like I’m not a good Mom because I can’t give my kids the dairy that they need or the fruits and vegetables that they need.” We are a prosperous region and we must do a better job providing access to healthy foods to our residents.

Close to 80% of residents use a full-service, chain grocery store as their primary place to purchase fresh fruits and vegetables and nearly all residents travel to their store of choice by personal vehicle (94% for full sample; 78% for food insecure households). Just under 25% travel 1 mile or less to their primary store, while 35.9% travel 1-3 miles and 23.7% travel 3-5 miles. Farmers markets, natural food stores, and wholesale clubs were also popular locations as primary stores.

Over half the sample (58.3%) reported facing no challenges in getting the fruits and vegetables they want. For those who identified challenges in the full sample, they were primarily cost of produce and time to prepare. For food insecure households, these were also challenges, but they listed transportation,
lack of availability where they shop, and the need to carry what they buy as well. Cost, rather than distance to stores is the primary barrier to access.

We asked a number of questions related to the values that drive decision making. For the full sample of households, freshness was the most important overall, followed by cost, health/nutrition, and taste. Cost was still a primary driver in decision making for food insecure households, but they were interested in freshness and health/nutrition. Based on the focus group discussions, we learned that decision-making around food is far more complex. While most participants would agree that they, “try to get the best quality at the best price for the amount of time” available, in practice each shopping trip may look a little different. For example, in restaurants and farmers markets, “local” serves as a proxy for freshness and quality and most people are willing to pay a little more for the quality that comes with buying local. For most households, eating “healthy” means eating fresh vegetables and lean meats (70%), awareness of portion size (38%) and home cooking (30%).

For areas that were identified as food deserts in 2010, the focus groups were particularly instructive. While there are some newer grocery stores that offer lower prices, many residents still have to drive longer distances to get what they want to feed their families. They worry about the glut of fast food restaurants as much as they continue to call for economic incentives that will lead to more healthy, affordable, and convenient choices in their neighborhoods. They argue that the economic base is there, but that the money keeps flowing into wealthier neighborhoods.

Based on these findings, we have identified five key areas with opportunities for change: high food insecurity risk areas, healthy food access based on geography, healthy food access based on cost, food insecurity and values around the local food system, and neighborhood economic development as an aspect of food access. We see opportunities to expand access by creating new retail, enhancing existing retail, moving towards 100% availability of SNAP and WIC (Women with Infants and Children) at full-service groceries, developing innovative programs that increase distribution of high quality produce, and continuing or expanding programs that educate youth and adults on healthy eating. We also stress that attention to food insecurity needs to be part of city and county discussions around neighborhood economic development and we encourage incentives, grants, and zoning measures that will foster local entrepreneurship.
INTRODUCTION
When Charlotte-Mecklenburg Food Policy Council decided to undertake an updated Community Food Assessment, we wanted to evaluate what has changed since the 2010 study and we wanted to examine other aspects of “accessibility” that are not reflected in the “food desert” model. The overarching question to be addressed in this assessment is how the local and regional food system of Charlotte and Mecklenburg County changed in the past five years in providing fresher, healthier, and safer foods through improved food access and food security for all residents. This report covers a wide range of information about Charlotte and Mecklenburg County that is roughly divided into two sections: Availability Mapping and Voice of the Community. Under each of these sections, we address a number of questions:

**Availability Mapping**

- Using the same analysis as the 2010 study, what can we say about how the location and configuration of “food deserts” have changed?
- If we look city- and county-wide, and not just in “food deserts,” what can geography tell us about access to fresh fruits and vegetables in Charlotte and Mecklenburg County?
- Specifically, how well food stores, especially ones that accept Supplemental Nutrition Assistance Program (SNAP) and Women with Infants and Children (WIC), align with bus and LYNX routes?
- Recognizing that people get their food from a variety of places, what can we learn about the geography of access by mapping stores other than full-service grocery stores? And can this help us create a smaller set of areas in which to focus policy efforts around the availability of fresh fruits and vegetables?

**Voice of the Community**

- What percentage of Charlotte and Mecklenburg County residents are considered food insecure, based on questions developed by the United States Department of Agriculture (USDA)?
- How do people shop for food in Charlotte and Mecklenburg County? Where do they go and how do they get there? And, are there differences between how food insecure households shop in contrast to the general population?
- What barriers to access to fresh fruits and vegetables do people define as the most important?
- Finally, why do people shop the way they do? What are the values about food and eating that inform their decision making?
Why Food Systems?

The health of America’s citizens is an important topic coming to the forefront with our record rates of obesity and heart disease. What many people fail to realize is that there is a clear equity issue in people’s ability to access healthy food. As the growing number of people in urban spaces stretches the global food supply ever thinner, the need for nutritious food within urban centers has risen along with poor health and low accessibility to food resources. Recognizing the factors that influence the spatial arrangement of urban supermarkets, we can now look at the major health consequences that stem from this uneven distribution. Researchers have shown that people tend to make food choices based on the food outlets that are available in their immediate neighborhood (Furey et al., 2001), so residence within a food desert poses major barriers to purchasing nutritious foods (Whelan et al., 2002). Poor supermarket access is almost always coupled with a higher density of fast-food restaurants and convenience stores (Drewnowski and Specter, 2004).

These outlets increase residents’ exposure to energy-dense, processed foods containing high contents of fat, sugar and sodium, that often lead to poorer health outcomes compared to a diet high in complex carbohydrates and fiber (Block et al., 2004; Lewis et al., 2005; Swinburn et al., 2004). Research indicates that neighborhoods with high minority populations have six times more fast-food restaurants and fewer healthy food options compared to predominantly white neighborhoods (Block et al., 2004; Lewis et al., 2005). Grocery stores can alleviate the influence of these outlets because they offer food items with greater variety and quality at a lower cost (Kaufman et. al. 1997), but in a food desert, this necessary option is simply inaccessible. Food deserts, areas lacking nutritional food resources, are a critical problem facing modern urban areas.

Recent empirical studies of food deserts in the United States have focused on the overarching racial/ethnic disparities and income/socioeconomic status of these areas. In an examination of the associations between the availability of food stores in the U.S and race, ethnicity and socioeconomic status, Powel et al. (2007), found that the availability of chain supermarkets in black neighborhoods was only 52% that of their white counterparts. A similar study used geographic information systems (GIS) to measure spatial accessibility of chain supermarkets with respect to neighborhood racial composition and poverty in Detroit, Michigan. Their findings showed that the most impoverished neighborhoods in which African Americans resided were 1.1 mile farther from the closest supermarket compared to the most impoverished White neighborhoods (Zenek et al., 2005).

Supermarkets have been fleeing inner city neighborhoods for decades now, drawn to the open land and clientele of the suburbs (Pothukuchi, 2005). Since supermarkets are the prominent provider of food for a neighborhood, this
creates a number of difficulties for the residents. Convenience stores are the most accessible alternative; however, many residents end up paying higher prices for a poor selection and a lack of healthy options, specifically fresh fruit and vegetables (Pothukuchi, 2005).

Because convenience stores are in the same classification system as grocery stores according to the North American Industry Classification System (NAICS), food deserts may not be easily recognized despite the discrepancy in products offered (Food Empowerment Project, 2010). People also end up turning to fast food restaurants that line low-income neighborhoods for their affordable but nutrition-free options. If a food desert resident wants more than what the neighborhood convenience store or fast food restaurant can offer, this means that travel to a grocery store is involved, demanding a sacrifice of both time and money. Those that travel from low access areas are more likely to have their children with them than other shoppers, which only adds to the stress of travelling (“Access to Affordable and Nutritious Food” 2009, 33). Once supermarkets abandon a neighborhood, the access to food, and not just healthy food, instantly becomes a legitimate concern to residents.

Given the important role that built factors of the neighborhood food environment have in shaping people’s health and diet, we believe it is important to apply this research to our own city, so that the distribution of food stores can be observed, and disadvantaged neighborhoods that lack supermarket access (food deserts) can be noted. Although many look at the term food desert and simply assume that a lack of food is all that constitutes a food desert, the depth of this issue and the problems stemming from it, prove to be much larger. Problems including socioeconomic status, poor food access, transportation availability, and even childhood obesity all seem to be strongly correlated in areas defined by various researchers as food deserts.

Evaluation of the neighborhood environment as it relates to food access is a growing area of research. Many studies have found that residents in low-income and minority communities have poor access to grocery stores and healthy food products. Residents that live in “food deserts” have been found to be at higher risk of food insecurity and obesity. Food deserts are areas with no nutritious food stores, generally in low-income neighborhoods. In addition, research suggests that areas with a high concentration of unhealthy food stores may also be associated with poor health.

A food system assessment is a powerful way to tell the story of what is happening with food in a community, based on information already collected by community organizations as well as what community members share through a variety of conversations and surveys. Assessments examine a broad range of food-related problems and successes to improve a community’s food system.
In 2010, the Mecklenburg County Community Food Assessment (CFA) 2010 was completed. The CFA found that half the population in Mecklenburg County does not have a full-service food store in their CBG. This report identified 60 census block groups in Mecklenburg County as Food Deserts. (Racine, Wand, & Wilson, 2010).

**Food Security**

In re-examining the 2010 Food Assessment, we have chosen to focus our analysis on *food insecurity*, which is a concept that encompasses a more nuanced understanding of households and food access. While “food desert” is primarily a geographic distinction that tells us about food availability within a low-income community, it does not reveal enough about food security. Food security is more about the lived experience of households. Low-income households within food deserts face greater constraints than low-income households in areas that host a greater variety and abundance of shopping options. At the same time, households that fall well above the threshold defined as “low-income” can suffer from food insecurity due to changes in employment, the number of household members, medical expenses, and other factors. By looking at food security we can begin to explore alternative strategies and policies for combating hunger in our communities.

The concept of food security, “means that all household members had access at all times to enough food for an active, healthy life.” (Coleman-Jensen et al. 2015:8). In contrast, the USDA defines a food insecure household as one whose, “access to adequate food is limited by a lack of money and other resources” (Coleman-Jensen et al. 2015:1). The authors of the USDA report also remind us that food insecurity tends to be episodic, not chronic. That is, households are considered food insecure if they alter their eating habits due to lack of resources at some point in the previous year, which could be one or two days a month or for an isolated period of several weeks.
RESEARCH METHODS
Food Availability Mapping

We examined the food stores and their characteristics within the 373 census block groups (CBG) and 230 census tracts in Mecklenburg County, NC. All food stores with the Standard Industrial Classification (SIC) codes listed below that were in operation as of February 23, 2015 were used in this analysis, as well as restaurants and fast food restaurants.

To determine the total number for all food for purchase options, this report included: grocery stores, and formal and fast food restaurants county-wide, as well as convenience stores that sell non-packaged food items such as sandwiches, pizza and prepared foods to ensure, in so far as possible, the accuracy of the report. Some establishments do not lend themselves to easy categorization and were, therefore, categorized arbitrarily based on menu offerings and type of services provided. In addition, stores were categorized if they were WIC-approved and/or SNAP-approved.

Each of the food stores followed up with to verify store offerings, by phone or on-site visits. The purpose was to determine whether or not the food store sold fresh meats, fresh dairy, fresh fruit, fresh vegetables, and processed foods. Other categories were identified to access true food availability, such as: restaurants, fast food, and prepared “take & eat” food.

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<th>Standard Industrial Code (SIC)</th>
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<tr>
<td>5331</td>
<td>Variety Stores</td>
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<tr>
<td>5411C</td>
<td>Convenience Store - Without Gasoline</td>
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<tr>
<td>5411R</td>
<td>Grocery Stores</td>
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<td>5421</td>
<td>Meat &amp; Seafood Markets, Including Freezers</td>
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<tr>
<td>5431</td>
<td>Fruit &amp; Vegetable Markets</td>
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<tr>
<td>5441</td>
<td>Candy, Nut, and Confectionery Stores</td>
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<tr>
<td>5451</td>
<td>Dairy Product Stores</td>
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<tr>
<td>5499</td>
<td>Miscellaneous Food Stores</td>
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<tr>
<td>5541C</td>
<td>Gasoline Stations - With Convenience Store</td>
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</table>

A total of 2078 stores were identified. In the listing below, some stores may overlap due to them holding multiple classifications (ex: an international market that also has a restaurant).
### Categorizing Food Availability

**Fresh Fruit:** A store that sells three options of fresh fruit.

**Fresh Vegetables:** A store that sells three options of fresh vegetables.

**Fresh Meat:** A store that sells any fresh meat such as chicken, steak, pork or fish, will be determined to have “fresh meat.” Processed meats such as hot dogs or frozen burger patties are not included.

**Fresh Dairy:** A store that sells three options of dairy products, such as milk in a multiple-serving container, (regardless of fat content), cheese (any refrigerated form), sour cream, and yogurt, was determined to have “fresh dairy.”

**Processed Foods:** A store that sells processed foods, dried pasta, canned fruit and vegetables, boxed or frozen dinners, chips, crackers or bakery items, was determined to have “processed foods.”

**Full-Service Store:** Stores that sell fresh fruit, fresh vegetables, fresh meat, fresh dairy, and processed foods; typically, what many would consider a grocery store or supermarket, but also includes food warehouse and discount stores.

**Fresh Produce Store:** A store that sells fresh produce, carrying three or more varieties of fruits and vegetables (six total options), was determined to have “fresh produce.”

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<td>Corner Stores</td>
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<td>International Markets</td>
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<td>Gas Stations with Convenience Store</td>
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<td>Specialty Stores</td>
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<td>Restaurant: Made to Order</td>
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<td>Restaurant: Fast Food</td>
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<td>Pre-Made Take &amp; Eat Food Options</td>
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<tr>
<td>SNAP Approved Store</td>
<td>746</td>
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<tr>
<td>WIC Approved Store</td>
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Stores that sell three options of fresh fruit and three options of fresh vegetables.

**International Market:** A store that focuses on food for a specific race and/or ethnicity.

**Corner Stores:** Small, usually independent stores that do not sell gas. Examples can be convenience stores, general merchandise stores, and pharmacies.

**Specialty Food Stores:** Establishments that specialize in a small selection of food items, such as meat & seafood markets, year-round farmers markets, bakeries, and other establishments that offer primarily one non-entrée food, such as coffee, ice cream, donuts, and cookies.

**Gas Stations with Convenience Store:** A store that sells gas (automotive fuel), that also sells food.

**WIC Approved Stores:** A store that participates in the Women, Infants and Children (WIC), a special supplemental nutrition program for low-income pregnant women, breastfeeding women, and infants and children under the age of five.

**SNAP Approved Stores:** A store that participates in the Supplemental Nutrition Assistance Program (SNAP), formally known as the Food Stamps program, used for the assistance of purchasing food.

**Restaurants:** Food typically prepared in response to order, with table service.

**Fast Food Restaurants:** Little menu variety, serving lines or walk-up service, frequently includes drive-through service.

**Take & Eat Stores:** A store that sells pre-made food that would regularly require some sort of preparation by the consumer, and is ready to be consumed at time of purchase.

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**Community Survey**

The community survey uses questions from the USDA panel on food insecurity, the Denver Food Council’s community assessment work, and questions specific to our local needs designed by the PIs in collaboration with CMFPC’s Experts Panel. Our sample represents 465 households in Mecklenburg County and all respondents are adults (18+ years old) who complete at least 25% of food purchases for the household. Based on income, geographic distribution, and age, our sample is representative of the demographics for Mecklenburg County. The sample is less representative of race and education, which is likely a function of the method of distribution (through the internet) and the demographics of the “local food” community.
In the community survey, we ask about where participants purchase food, what food they commonly consume, what difficulties they have in accessing healthy food, and what values around the food system influence their purchasing behavior. This information complements the mapping data as it provides more insight into perceptions, personal choices, and perceived barriers. We also use a set of questions from the USDA on food insecurity to determine which respondents in Mecklenburg County are food insecure.

Between May and September, we tracked completed surveys by zip code to ensure distribution of responses across Mecklenburg County. Since internet access was a prerequisite to complete the survey and this would likely affect lower income household participation, we worked with Mecklenburg County Health Department to reach out to lower income households. Interns traveled to various locations to do targeted sampling in populations based on geography or income—YMCA, public libraries, outside storefronts, and the Department of Social Services, all with permission.

**Qualitative Research**

In addition to survey, we conducted five community focus groups and three targeted focus groups with farmers, food entrepreneurs, and non-profit leaders, in June through August. We recruited for the community focus groups through a request at the end of the survey, through social media and neighborhood outreach, as well as through personal appeals sent out by CMFPC board members and Experts Panel members. The community focus groups were ethnically and economically diverse. We asked participants to track their food consumption for three days in the week leading up to the focus group. Some participants wrote out their diaries, others took photos and mailed them to us. Each focus group lasted 90 minutes. We began each focus group with a discussion of these food diaries, and moved into a discussion of how representative the week had been of how they typically eat. We explored the values behind food choices as well as the challenges that households face in eating the way they would like to eat. When time permitted, we also spent several minutes at the end on identifying potential solutions or strategies to the challenges identified. We began the targeted focus groups with a discussion of food diaries and moved into a more targeted set of questions.

One of the PIs (Metzo) completed observations at several Queen City Forward focus groups as part of their Innovation Challenge for 2015 on Food and Hunger. She also completed observations in grocery stores and Family Dollar stores during the summer and early fall.

Copies of the research community survey and focus group script are included as an appendix to this report.
FOOD ACCESS MAPPING
Food Store Availability by Type
Mecklenburg County, NC

- Full Service: 42%
- Corner Store: 19%
- International Market: 7%
- Gas Station: 9%
- Specialty Store: 3%
- Restaurant: 5%
- Fast Food: 8%
- Take & Eat: 7%
Food Store Availability by Median Household Income
Mecklenburg County, NC

Type of Food Stores That Are Available
By Family Median Household Income

- Take & Eat Food
- Fast Food Restaurant
- Restaurant
- Gas Station w/ Food Sales
- Speciality Food Store
- International Market
- Corner Store
- Full Service Store

Below Median Income
Above Median Income

$0.00-$31,499  $32,500-$55,443  $55,444-$69,999  $70,000-$99,999  $100,000 & Over

Type of Food Stores That Are Available
By Families Living Above or Below County Median Household Income ($55,544)

- Take & Eat Food
- Fast Food Restaurant
- Restaurant
- Gas Station w/ Food Sales
- Speciality Food Store
- International Market
- Corner Store
- Full Service Store

Below Median Income
Above Median Income
2010 Food Deserts
By Census Block Groups

- 60 Census Block Groups (16.01%)
- 72,793 Residents
- 89 Non-Full-Service Stores
- 1 Store the Sells Fresh Produce
- 75% of Food Stores Accept SNAP

(Racine, Wang, & Wilson, 2010)

2015 Food Deserts
By Census Block Groups

- 64 Census Block Groups (17.16%)
- 87,354 Residents
- 122 Non-Full-Service Stores
- 8 Stores the Sell Fresh Produce
- 85% of Food Stores Accept SNAP

CHARLOTTE-MECKLENBURG FOOD POLICY COUNCIL | 2015 STATE OF THE PLATE
2010 Demographics of Low-Income Households with No Full-Service Stores
By Census Block Groups

- Caucasian: 26%
- African American: 57%
- Hispanic: 17%
- Other: 5%

2015 Demographics of Low-Income Households with No Full-Service Stores
By Census Block Groups

- Caucasian: 20%
- African American: 59%
- Hispanic: 12%
- Asian: 2%
- American Indian: 0%
- Hawaiian / Pacific Islander: 0%
- Other: 5%
- 2+ Races: 2%
Full-Service Store Availability by Bus: ¼ Mile Proximity
Mecklenburg County, NC

83.52%
Full-Service Stores are Accessible by Bus

Accessible by Bus (1/4 Mile)
Not Accessible by Bus (1/4 Mile)
By Census Tract Mapping

1st Ward
3rd Ward
4th Ward
Arlington Forest
Ashbrook Clawson Village
Ashley Park
Aysrley
Atanda Junction
Autumnwood
Back Creek Church Road
Ballentine East
Barclay Downs
Beatties Ford-Trinity
Belmont
Berewick
Beverly Woods
Biddleville
Blackney
Boulevard Homes
Bradfield Farms
Brookhill
Cady Lake
Cameron Woods
Capitol Drive
Carmel
Chapel Cove
Cherry
Clarabella
Cotswood
Coulwood West
Coulwood East
Danby
Double Oaks
Downtown Cornelius
Druid Hills
Eagle Lake
Eastland
Echo Hills
Elizabeth
Elizabeth Townes
Farmwood North
Firestone-Garden Park
Foxcroft
Glennridge
Harbour House
Harris
Haywyck Meadows
Hemstead
Hemlock Pines
Henderson Circle
Heritage Green
Hickory Ridge
Hidden Valley
Highland Creek
Houston
Hudson Place
Huneters Point
Idlewild South
Jackson Homes
Laseside Acres
Liden Oaks
Lincoln Heights
Macauly
Mallard Creek
Markham Village
Martwood
McAlpine
McMullen Creek
Melbourne
Mill Creek
Mitchel Townes
Montclare South
Moore Chapel
Morning Star Acres
Myers Park
Nevin Community
Newell
North Lake
North Sharon Amity
Oak Forest
Oakdale North
Oakdale South
Oakhurst
Oakview Terrace
Old Providence South
Optimist Park
Oxford Hunt
Pallsdes
Pine Harbor
Pineville
Plaza Midwood
Plaza-Shamrock
Preston Forest
Providance Crossing
Providance Plantation
Prosperity Church Road
Providence Park
Providence Towne
River Run
Riverpoint
Runnymede
Sanctuary
Sardis Forest
Seversville
Silverwood
Spring Heights
St Albans
Starmount Forest
Steelcroft Place
Steele Creek
Stonehaven
Sugar Creek
Tara @ Providence Planation
Taybrook @ Wynfield
The Vineyard @ Lake Wiley
Thomasboro-Hoskins
Touchstone Village
Villa Heights
Wedgewood
West Bourne
West Sugar Creek
Westchester
Westmoreland Farm
Westover Hills
Westwood Forest
Wilora Lake
Willow Pond
Wilmore
Wilora Lake
Windsor Park
Winthrop Downs
Woodford Green
Woodlawn
Wyndemere Crossing
Wynfield Creek
Wynfield Forrest
Yorkmount
Yorkshire

Neighborhoods Without a Full-Service Store
Mecklenburg County, NC

By Census Tract Mapping
Full-Service Stores
Mecklenburg County, NC

Traditional Mapping
By Census Block Group

Location-Based Mapping
By 2 Mile Radius

Full-Service Stores
By Type of Store

- Big Chain Stores: 84%
- International Markets: 8%
- Corner Stores: 5%
- Speciality Stores: 3%

CHARLOTTE-MECKLENBURG FOOD POLICY COUNCIL | 2015 STATE OF THE PLATE
Median Household Income
By Census Tracts

- $0.00-$31,499
- $32,500-$55,443
- $55,444-$69,999
- $70,000-$99,999
- $100,000 & Over

Race of Household
By Census Tracts

- Caucasian
- African American
- Hispanic
- Asian
- American Indian
- Hawaiian / Pacific Islander
- 2+ Races
- Other Race

Full-Service Stores
Mecklenburg County, NC
Stores that Sell Fresh Produce
By Type of Store

- Big Chain Stores: 64.35%
- International Markets: 19.13%
- Corner Stores: 11.74%
- Speciality Stores: 3.04%
- Gas Stations: 1.74%
Stores the Sell Fresh Fruits & Vegetables
Mecklenburg County, NC

**Median Household Income**
By Census Tracts

- $0.00-$31,499
- $32,500-$55,443
- $55,444-$69,999
- $70,000-$99,999
- $100,000 & Over

- 49.02% Above Median Income
- 50.98% Below Median Income

**Race of Household**
By Census Tracts

- Caucasian: 49.51%
- African American: 27.10%
- Hispanic: 10.63%
- Asian: 4.48%
- American Indian: 0.40%
- Hawaiian / Pacific Islander: 0.06%
- 2+ Races: 2.26%
- Other Race: 5.57%

CHARLOTTE-MECKLENBURG FOOD POLICY COUNCIL | 2015 STATE OF THE PLATE
International Markets
Mecklenburg County, NC

Traditional Mapping
By Census Block Groups

Location-Based Mapping
By 2 Mile Radius

International Market Food Offerings
By Percentage

<table>
<thead>
<tr>
<th>Category</th>
<th>Has</th>
<th>Does Not Have</th>
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<tr>
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<tr>
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<td>65</td>
<td>0</td>
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<tr>
<td>Deli</td>
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<td>59</td>
</tr>
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<td>Fresh Dairy</td>
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<td>34</td>
</tr>
<tr>
<td>Fresh Meat</td>
<td>34</td>
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<tr>
<td>Fresh Vegetables</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td>Fresh Fruit</td>
<td>43</td>
<td>22</td>
</tr>
<tr>
<td>Full Service</td>
<td>23</td>
<td>42</td>
</tr>
</tbody>
</table>

CHARLOTTE-MECKLENBURG FOOD POLICY COUNCIL | 2015 STATE OF THE PLATE 35
**Median Household Income**

By Census Tracts

- Below Median Income: 16.28%
- Below Median Income: 83.72%

Income Ranges:
- $0.00-$31,499
- $32,500-$55,443
- $55,444-$69,999
- $70,000-$99,999

**Race of Household**

By Census Tracts

- Caucasian: 37%
- African American: 31%
- Hispanic: 16%
- Asian: 4%
- American Indian: 0%
- Hawaiian / Pacific Islander: 0%
- 2+ Races: 2%
- Other Race: 10%

International Markets
Mecklenburg County, NC
Corner Stores
Mecklenburg County, NC

Traditional Mapping
By Census Block Group

Location-Based Mapping
By 2-Mile Radius

Corner Store Food Offerings
By Percentage

Restaurant
Prepared Food
Processed Food
Deli
Fresh Dairy
Fresh Meat
Fresh Vegetables
Fresh Fruit
Full Service

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Has Does Not Have
Corner Stores
Mecklenburg County, NC

Median Household Income
By Census Tracts

- $0.00-$31,499
- $32,500-$55,443
- $55,444-$69,999
- $70,000-$99,999
- $100,000 & Over

Race of Household
By Census Tracts

- Caucasian
- African American
- Hispanic
- Asian
- American Indian
- Hawaiian / Pacific Islander
- 2+ Races
- Other Race

Above Median Income
- 71.30%
- $55,444

Below Median Income
- 28.70%
Specialty Food Stores
Mecklenburg County, NC

Traditional Mapping
By Census Block Group

Location-Based Mapping
By 2-Mile Radius

Specialty Store Food Offerings
By Percentage

Restaurant
Prepared Food
Processed Food
Deli
Fresh Dairy
Fresh Meat
Fresh Vegetables
Fresh Fruit
Full Service

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Has  Does Not Have

CHARLOTTE-MECKLENBURG FOOD POLICY COUNCIL | 2015 STATE OF THE PLATE 39
Gas Stations with a Convenience Store
Mecklenburg County, NC

Gas Stations with a Convenience Store Food Offerings
By Percentage

Restaurant
Prepared Food
Processed Food
Deli
Fresh Dairy
Fresh Meat
Fresh Vegetables
Fresh Fruit
Full Service

Has  Does Not Have
Gas Stations with a Convenience Store
Mecklenburg County, NC

Median Household Income
By Census Tracts

- $0.00-$31,499: 16.49%
- $32,500-$55,443: 23.71%
- $35,444-$69,999: 18.56%
- $70,000-$99,999: 10.49%
- $100,000 & Over: 6.19%

Above Median Income: 58.76%
Below Median Income: 41.24%
Median Household Income: $55,444

Race of Household
By Census Tracts

- Caucasian: 43.06%
- African American: 31.60%
- Hispanic: 12.14%
- Asian: 3.81%
- American Indian: 0.45%
- Hawaiian / Pacific Islander: 0.07%
- 2+ Races: 2.36%
- Other Race: 6.51%

- Caucasian
- African American
- Hispanic
- Asian
- American Indian
- Hawaiian / Pacific Islander
- 2+ Races
- Other Race
Restaurants: Made to Order
Mecklenburg County, NC

Traditional Mapping
By Census Block Group

Location-Based Mapping
By 2-Mile Radius

Locality of Restaurants in Mecklenburg County
By Percentage of All Restaurants

- 33% National Chain Restaurants
- 67% Regional/Local Restaurants
Restaurants: Made to Order
Mecklenburg County, NC

Median Household Income
By Census Tracts

- 9%
- 14%
- 26%
- 34%

- $0.00-$31,499
- $32,500-$55,443
- $55,444-$69,999
- $70,000-$99,999
- $100,000 & Over

Race of Household
By Census Tracts

- Caucasian 49.34%
- African American 26.99%
- Hispanic 10.93%
- Asian 4.26%
- American Indian 0.42%
- 2+ Races 2.28%
- Other Race 5.72%
- Hawaiian / Pacific Islander 0.06%
### Race of Household

By Census Tracts

- Caucasian, 43.89%
- African American, 32.09%
- Hispanic, 11.08%
- Asian, 4.20%
- American Indian, 0.43%
- Hawaiian / Pacific Islander, 0.06%
- 2+ Races, 2.39%
- Other Race, 5.86%

### Median Household Income

By Census Tracts

- $0.00-$31,499
- $32,500-$55,443
- $55,444-$69,999
- $70,000-$99,999
- $100,000 & Over

- 20.00% Below Median Income
- 42.22% Above Median Income
- 5.56% $0.00-$31,499
- 21.11% $32,500-$55,443
- 11.11% $55,444-$69,999
- 21.11% $70,000-$99,999
- 5.56% $100,000 & Over

- Median Household Income: $55,444
Types of Stores that Sell Pre-Made Take & Eat Food Options
By Total Number

- Full Service Store: 126
- Corner Store: 126
- Gas Station: 54
- Specialty Store: 28
- International Market: 48
- Restaurant: 96
Pre-Made Take & Eat Food Options
Mecklenburg County, NC

Median Household Income
By Census Tracts

Race of Household
By Census Tracts

CHARLOTTE-MECKLENBURG FOOD POLICY COUNCIL | 2015 STATE OF THE PLATE 48
Government Food Assistance Programs
Mecklenburg County, NC

Food Stores That Accept SNAP & WIC
By Census Block Groups

186 Food Stores Accept SNAP & WIC
63.74% of Full-service Stores Accept SNAP & WIC
Government Food Assistance Programs
Mecklenburg County, NC

Supplemental Nutrition Assistance Program (SNAP)
By Census Block Group

Supplemental Nutrition Assistance Program (SNAP)
By 2-Mile Radius

Woman, Infant and Child (WIC)
By Census Block Group

Woman, Infant and Child (WIC)
By 2-Mile Radius
**SNAP Available Food Stores: Median Household Income**

By Census Tracts

- 17.88%
- 36.87%
- 22.35%
- 16.20%
- 6.70%

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<thead>
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<th>Income Range</th>
<th>Percentage</th>
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<td>54.75%</td>
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<td>45.25%</td>
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<tr>
<td>$55,444 - $69,999</td>
<td>45.24%</td>
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<tr>
<td>$70,000 - $99,999</td>
<td>54.76%</td>
</tr>
<tr>
<td>$100,000 &amp; Over</td>
<td>54.75%</td>
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**WIC Available Food Stores: Median Household Income**

By Census Tracts

- 17.46%
- 37.30%
- 23.81%
- 14.29%
- 7.14%

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<thead>
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<th>Income Range</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>$0.00 - $31,499</td>
<td>54.76%</td>
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<tr>
<td>$70,000 - $99,999</td>
<td>54.75%</td>
</tr>
<tr>
<td>$100,000 &amp; Over</td>
<td>54.75%</td>
</tr>
</tbody>
</table>
Government Food Assistance Programs
Mecklenburg County, NC

SNAP Available Food Stores: Race of Household
By Census Tracts

- Caucasian 46.73%
- African American 29.03%
- Hispanic 11.32%
- Asian 4.13%
- American Indian 0.42%
- Hawaiian / Pacific Islander 0.06%
- 2+ Races 2.31%
- Other Race 5.99%

WIC Available Food Stores: Race of Household
By Census Tracts

- Caucasian 46.54%
- African American 28.49%
- Hispanic 11.53%
- Asian 4.42%
- American Indian 0.42%
- Hawaiian / Pacific Islander 0.07%
- 2+ Races 2.33%
- Other Race 6.21%
High-Risk Communities for Food Insecurity
A category of High-Risk Communities was created due to the limited total food options within these communities, specifically fresh (non-processed) foods. Three communities were categorized as High-Risk Communities due to their limited offering of non-full-service stores, and drive time in excess of five minutes to a full-service store and to a store that sells fresh produce (fruits & vegetables). The risk for food security for these three communities are the highest, not only due to the limited access to full-service stores and to fresh produce, but due to the limited current infrastructure that is available for all types of food purchase within these communities. This limits the development of food availability through increased access of use of non-traditional, non-full-service stores.

**High-Risk Communities**

**Brookshire Blvd Corridor (NC 16)**
Between I85 & I485

**West Blvd Corridor (NC 160)**
Between Billy Graham Pkwy & I485

**Albemarle Rd Corridor (NC 27)**
Between I485 & Mecklenburg County Boundary Line

**Types of Food Available in High-Risk Communities**
By Food for Purchase Offerings

<table>
<thead>
<tr>
<th>Food Type</th>
<th>Has</th>
<th>Does Not Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processed Food</td>
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<tr>
<td>Deli</td>
<td></td>
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<tr>
<td>Fresh Dairy</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Fresh Meat</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Fresh Vegetables</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Fresh Fruit</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
High-Risk Communities for Food Insecurity
Mecklenburg County, NC

Brookshire Blvd Corridor (NC 16)
Between I85 & I485

Food Stores Within the NC 16 Corridor
By Type of Store

- Restaurant, 8
- Fast Food, 2
- Gas Station, 4

Food Within the NC 16 Corridor
By Type of Food

- Fresh Fruit, 3
- Fresh Dairy, 3
- Processed Food, 4
- Fresh Fruit, 3
- Fresh Dairy, 3
- Processed Food, 4
High-Risk Communities for Food Insecurity
Mecklenburg County, NC

West Blvd Corridor (NC 160)
Between Billy Graham Pkwy & I485

Food Stores Within the NC 160 Corridor
By Type of Store

- Corner Store
- Gas Station
- Restaurant
- Fast Food
- Take & Eat

Food Within the NC 160 Corridor
By Type of Food

- Fresh Fruit
- Fresh Dairy
- Processed Food
Albemarle Rd Corridor (NC 27)
Between I485 & Mecklenburg County Boundary Line
VOICE OF THE COMMUNITY
Who is Food Insecure?

In revisiting the 2010 Food Assessment, we have chosen to focus our analysis on food insecurity, which encompasses a more nuanced understanding of households and food access. While “food desert” is primarily a geographic distinction that tells us about food availability within a low-income community, it does not reveal enough about food security. Food security is a concept that is more about the lived experience of households. Low-income households within "food deserts" certainly face greater barriers to access than low-income households in areas that host a greater variety and abundance of shopping options. At the same time, households can suffer from food insecurity due to changes in employment, the number of household members, medical expenses, and other factors, even when they fall well above the poverty line in terms of annual household income. By looking at food security, we can begin to explore alternative strategies and policies for combating hunger in our communities.

Food Insecurity = access to adequate food is limited by a lack of money and other resources

The concept of food security, “means that all household members had access at all times to enough food for an active, healthy life." (Coleman-Jensen et al., 2015:8). In contrast, the United States Department of Agriculture (USDA) defines a food insecure household as one whose, “access to adequate food is limited by a lack of money and other resources” (Coleman-Jensen et al., 2015:1). The authors of the USDA report also remind us that food insecurity tends to be episodic, not chronic. That is, households are considered food insecure if they alter their eating habits due to lack of resources at some point in the previous year, which could be one or two days a month or for an isolated period of several weeks.

In this study of Charlotte and Mecklenburg County, we used a battery of questions designed by the USDA to determine food insecurity. The full list of questions appears in the methodology appendix, but some of the questions include:

- We worried whether our food would run out before we got money to buy more.
- In the last 12 months, did you or other adults in your household ever cut the size of your meals because there wasn’t enough money for food?
- In the past 12 months did you lose weight because there wasn’t enough money for food?
We couldn’t feed our children a balanced meal because we couldn’t afford that.

Based on our sample, the rate of food insecurity in Charlotte and Mecklenburg County is similar to that of the United States:

The demographics of food insecure households look similar to our overall sample, but there are a few features worth noting. First, food insecure households are distributed throughout Mecklenburg County, not just in areas identified as “food deserts.” Second, within our sample, African-American respondents and respondents between 18-24 years old were more likely to be food insecure than other demographic groups. Food insecurity is not a problem restricted to those with less education. In 39.58% of food insecure households (n=48), at least one of the adult members has a Bachelor’s degree or higher. Perhaps least surprising is that lower-income households are more likely to be food insecure. However, households with a total household income of $50,000-$125,000 are not immune to food insecurity.
In discussing food insecurity, we need to look at food assistance programs, as well. Of the 55 households identified as food insecure based on the USDA questions, 18 were SNAP recipients (Supplemental Nutrition Assistance Program, formerly known as “food stamps”). However, in our full sample, 24 households receive SNAP. Likewise, two of six households that use WIC (Women with Infants and Children) were food insecure while four were not (there is some overlap between SNAP and WIC recipients). All of those who took advantage of food pantries in our sample were also food insecure. These numbers tell us several important things:

• WIC and SNAP can be effective tools to prevent food insecurity among lower income households.
• Many households that don’t qualify for SNAP or WIC struggle to find the resources to provide meals that support a “healthy and active lifestyle.”
• Further, these households may not be showing up in statistics on poverty.
• Households that use food banks tend to suffer from food insecurity.

Another important aspect of food insecurity is the impact on children. Between July 2009 and July 2014, the number of children in Mecklenburg County receiving SNAP benefits rose from 22% to 31.4% (Hughes, 2014). In 2013, 56.5% of all children in CMS schools received free or reduced price lunch (ibid.). Based on the metrics used by Feeding America, the estimated rate of food insecurity...
among children in Mecklenburg County was 22.3% in 2012. The metrics we use are somewhat different, but the results were similar.

We analyzed the battery of USDA questions using the method described in Coleman-Jensen, et al. (2015). Within our sample, 143 households had children. Looking only at households with children, only 67% of the households in Mecklenburg County can be considered food secure, while 80% of households with children nationwide are food secure. Over 33% of households with children in our community are food insecure. That can be further broken down into households where only the adults in the household are food insecure (10% US; 19% Mecklenburg County) and households where both adults and children are food insecure (9% US; 16% Mecklenburg County).

For households experiencing food insecurity in Charlotte and Mecklenburg County, those children are twice as likely to experience food insecurity themselves than what we see nationally. Adults in food insecure households try to keep children from experiencing the impacts of the lack of resources,
perhaps reducing portion sizes or skipping meals themselves, rather than compromising what they give their children. The effort that parents put into providing healthy, nutritious food for their children was clear in each of the focus group discussions that we had around the food diaries that participants kept for the days leading up to their scheduled meeting. A working mother on SNAP (West 1) said, “Sometimes I feel like I'm not a good Mom because I can't give my kids the dairy that they need or the fruits and vegetables that they need.” At the same time, she said that cost would be a more important consideration for her if she were not on SNAP. “Because of food stamps, we can buy food that's a little better. It's so sad to even say that.” Even with SNAP, she makes decisions about what to buy based on how far she can make the product stretch. This strategy was mentioned by middle-class households in the focus groups, as well. In the survey, several households with incomes between $75,000-100,000 also met the definition of food insecure (see household income chart, above).

How Charlotte-Mecklenburg Residents Shop

With the Voice of the Community portion of this project, we want to gain insight into how residents of Charlotte and Mecklenburg County shop for fresh fruits and vegetables. We want to understand where they shop and how they get there. Part of the reason for this is to understand how availability affects their choices. We also want to examine these choices within the context of the values that drive people’s decision-making regarding food. Throughout the results presented in this section and the one that follows, we will illustrate the data as reflected in the total sample (“All households”) and as reflected in the subset of households that were identified as food insecure based on the USDA battery of questions (“food insecure households”).

When it comes to where people shop for food, it is perhaps not surprising that the majority of households look to large chain grocery stores. In response to the question; “Where do you buy the food your family eats?” respondents were allowed to choose all the locations they buy from on a weekly basis. Beyond grocery stores, farmers markets, natural food stores (such as Healthy Home Market and Earth Fare), and wholesale clubs (such as Costco and Sam’s Club) round out the top four sources for grocery shopping. Grocery stores were very popular as the primary choice for fruits and vegetables, as well (respondents were allowed to
choose up to two types of stores as their “primary” sources of fruits and vegetables). More than three-quarters of the sample selected chain grocery stores as one of their primary places to buy fruits and vegetables, while over one-third selected farmers markets. Natural food stores, wholesale clubs, and growing your own make up the remaining choices in the top five.

Where Charlotte & Mecklenburg County residents buy their food

These quantitative data match what we learned in the community-based focus groups. Grocery stores are regular stops for food buying because they are convenient. They offer consistent availability of heavily-used items and access to products in all food categories, not just fruits and vegetables. There is also consistency in terms of quality, which sometimes means that households will shop at multiple grocery stores within the same week to get the right combination of quality and price to meet their family's needs.

While grocery stores were still the most commonly chosen type of store as a “primary” source for fruits and vegetables, there were some important concerns raised in focus groups about grocery stores:
Pros

Inexpensive stores:

“I like Aldi’s they have good prices on organic”

Ease of Access in some neighborhoods:

“Where we live there is an Aldi, there are three Harris Teeters in a mile, there is a new fresh market, there is BI-LO, did I say BI-LO already?, there are two on central which is actually a Harris Teeter but it’s still on Central, and I’m trying to think..” “Trader Joes”. “Trader Joes and that’s that second one. So within a mile I have six different places to go to grocery store. And that’s not counting the places that deliver to my house.”

Cons

The produce isn't consistent quality across stores:

“I, you know, I go to Wal-Mart for cat litter, coffee, and you know and I’ll look at their produce and I’ll sometimes, their produce is really scary and so I don’t get it.”

Labeling:

“I am concerned we’re eating GMO foods and we’re not being told which ones are GMOs”

“Honesty in labeling and it’s basically like just-- be honest about what it is and don’t use any tricknology. Yeah, like labeling, you know what I mean, just whatever it is is what it is.”

Need to shop at several grocery stores to get the best price:

“I’m a 'hard shopper'...Anything I buy I don’t pay full price for anything. I go between [4 or more stores].”

And NO access in other neighborhoods:

“Regardless of where I go to shop, I have to go out of my neighborhood to shop.”

Farmers markets don’t have the same variety year round and many are only open seasonally. Farmers market prices can be substantially higher on some products. For many, the farmers markets are a special trip because they are located further away from home than grocery stores. Nevertheless, for 36.1% of respondents, farmers markets are one of their most important sources of fresh fruits and vegetables. For many of our focus group participants, the once a
week trip is worth it for the high quality of produce and the ability to connect with growers. In focus groups, respondents explained that farmers markets are important because:

“I try to support and keep [farmers markets] going because I really like the idea and the concept of getting my food from people who grew it”. (North)

“I put more value to the food I’m eating based on where I know it’s coming from” (Central)

“I like the aspect that I can go to the market and pick up produce on a Saturday that was harvested the previous couple of days before and not buy the apples that the grocery store that are covered in wax and have fertilizer on them and I really enjoy supported the local farmers as well.” (South)

At the same time, farmers market produce is too expensive for many residents to afford on a regular basis:

“I’m actually a graduate student so the farmers market is outside the purview of my graduate stipend, so I don’t go there. Well, I have, but I don’t consistently go there because we have to pay rent” (Central)

“I love farmer’s markets but sometimes organic, local stuff is six, seven, eight, nine dollars a pound and I can get the same stuff at Harris Teeter for four dollars a pound” (South)

Cost is also a concern for farmers.

“If my business model would allow it, I wouldn’t grow [microgreens]... We got into that niche market because it’s what turned our business around and made it more than an expensive hobby that we were losing our tails on and made it into something we could sustain ourselves on. So it’s huge, but I don’t consider [microgreens] to be a food that feeds a hungry person. And I can get emotional about that.”

Setting a fair price point was important to all the farmers. Focus group participants were happy to pay a little more for the high quality and freshness available through farmers markets. Nevertheless, both in preparing food and acquiring it, careful planning with attention to household budgets was a factor across Charlotte and Mecklenburg County. In general, if there were more mid-week markets or more markets located more convenient to participants’ homes, most of our focus group participants would purchase more of their produce from seasonal farmers markets, despite higher prices.

While there is no existing data with which to compare, 9% of residents state that “growing their own food” is one of their primary ways of sourcing the fruits and vegetables eaten within their household. That means that 45.65% of those who said that they grow their own food use it as a primary source of fruits and
vegetables. Focus groups participants indicated that this was a key way in which many households managed their food budget if local and organic were important to them. For some, a full garden was possible, but others grew only a few items that they knew they could grow well and would help them stretch their food budget. There was interest in cooking and canning classes even thought this was something we did not ask about directly. In phase 2 of the 2010 food assessment (Racine, Wang, Gomez 2011), cooking classes were cited as important to residents of food deserts.

“I don’t consider [microgreens] to be a food that feeds a hungry person.” - Charlotte-area farmer

There are two other choices listed on the survey that we did not include in the table above, but would like to draw attention to. Respondents chose “direct from farm” as a source of fresh produce only 5.8% of the time and “food assistance” (such as food pantries) only 1.9% of the time. The importance of these choices should not be underestimated simply because they rank lower on the list. For those who chose these sources of food, over half identified them as one of their two primary sources of fruits and vegetables.

In addition to understanding where people shop, we want to know how often they buy fresh fruits and vegetables. Nearly two-thirds of our respondents, regardless of food security status, only buy fresh fruits and vegetables once or twice per week. Respondents younger than 55 years old bought produce less often than respondents over 55 years old. Very few respondents (3%) have three or more children, but having more children did not lead to more frequent shopping for fruits and vegetables.
Survey respondents were asked to rank their top three challenges in getting the fruits and vegetables that they want to eat at home. We created a weighted number to represent how much of a challenge each factor is on a community level. Over half the sample (58.3%) reported facing no challenges in getting the fruits and vegetables they want. Because this percentage is so much higher than other reported challenges, we’ve left it out of the chart. When we look at the comparison of our full sample to the subset of food insecure households, a few patterns stand out. In the full sample, the top two challenges are cost, followed by the time necessary to purchase and prepare fresh fruits and vegetables. During focus groups, participants talked about traveling to a variety of stores throughout the week to purchase all the items they needed for their households. Working families with children and full-time students with family and/or jobs face the greatest constraints on their time. Food insecure households also rate cost as the biggest challenge. Time to prepare vegetables is an important challenge, but several other challenges are equally important: the need to carry whatever is purchased, lack of availability where they shop, and the lack of transportation received a similar number of responses.
The food desert model, because it focuses on distance to a full-service grocery store, builds in the assumption that transportation is a major concern for low-income households. And, while transportation and needing to carry groceries over distances do come up as important challenges, we also asked questions about how far respondents travel to the grocery store and how they get there in order to better understand the overall context of how Charlotte and Mecklenburg County residents shop. In 2015, the USDA published a report examining the shopping habits of US households (Ver Ploeg, et al., 2015). They found that for the average household, the nearest grocery store is 2.14 miles away, but the average distance traveled to the primary store is 3.79 miles. Instead of food insecurity, this study looked at SNAP recipients. The average SNAP household travel 3.36 miles to their primary store even though they are, on average, only 1.96 miles from nearest supermarket or supercenter that accepts SNAP. The authors of that report conclude that, “Store proximity may be important, but clearly other store attributes—such as price, quality, and selection—affect where households do their primary food shopping.” (ibid.: 13) Our findings are consistent with this data. Just under 25% of our sample travel one mile or less. 35.9% travel one to three miles and 23.7% travel three to five miles to the store.
Three-quarters of Mecklenburg County residents travel over one mile to do their primary food shopping.

In looking at transportation to the store, we find that 94% of the total sample use a personal vehicle at least some of the time. Among food insecure households, 78.12% use a personal vehicle at least some of the time. Walking was the second most popular mode of transportation to the store. By looking at who selected both driving and walking, 82.14% of those who selected walking as one of the main ways they use to get to the store also have a personal vehicle that they use at other times (46 have both car and walk out of 56 who walk). The focus group discussions provide some additional context for these numbers. Even for households that don’t perceive the distance traveled or transportation as a barrier, walkability is important because residents recognize that not everyone has the same abilities. Having options within a safe walking distance or options accessible through public transit are still important for low-income households, in order to save on gasoline costs or accommodate multiple adults in a household sharing a vehicle. These options are also important for the elderly and young adults.

How do you usually get to the places where you buy/receive fruits and vegetables? (choose up to 3)
In the survey, we addressed access through a set of questions that asked respondents to think about availability and affordability of fresh fruits and vegetables in their neighborhood. The results support the other findings that cost is the bigger barrier to access. Over 75% of the respondents, both in the general population and the food insecure population, felt that fresh fruits and vegetables were easy to find. Over 50% of the general population agreed or strongly agreed that fresh fruits and vegetables are affordable. Only 32% of the food insecure population agreed or strongly agreed on the question of affordability, while 43% disagreed or strongly disagreed.
**Food System Values**

Several sections of the survey included questions aimed at understanding what values inform the choices that people make. We asked respondents to rate nine qualities on a scale ranging from “extremely important” (7) to “not at all important” (1). While many of these qualities turned out to be important to at least 50% of respondents, freshness, taste, health/nutrition were consistently the highest rated among both the total sample and the subset of food insecure households. Not surprising, cost was rated as “extremely important” by nearly two-thirds of food insecure households. The percentage of households who rated “organic,” “local,” and “social justice” as important were nearly the same in the full sample and the subset of food insecure households, but 15% to 20% of food insecure households rated these qualities as “not at all important.”
All Households: How important are the following qualities when choosing fruits and vegetables to purchase?

- **freshness**
- **cost**
- **health/nutrition**
- **convenience/ease of preparation**
- **taste**
- **familiarity**
- **organic**
- **locally grown**
- **social justice**

- **extremely important**
- **very important**
- **important**
- **neither important nor unimportant**
- **somewhat unimportant**
- **very unimportant**
- **not at all important**
After rating each quality independently, respondents were asked to choose the most important quality. For the full sample of households, freshness was the most important overall. For food insecure households, cost was the most important quality overall. For the full sample, cost, health/nutrition, and taste rounded out the top for choices with local, organic, and social justice being far less important. For food insecure households, cost was followed by freshness, and health/nutrition. These three choices made up 78.18% of the total.
Which qualities are MOST important in choosing fruits and vegetables to purchase (all households)?

- Freshness
- Cost
- Health/nutrition
- Taste
- Locally Grown
- Organic
- Other

Which qualities are MOST important in choosing fruits and vegetables to purchase (food insecure households)?

- Freshness
- Cost
- Health/nutrition
- Taste
- Locally Grown
- Organic
- Other
The survey data regarding what people value in choosing fresh vegetables and which quality is most important resonates with what we learned in the focus groups. While “local” and “organic” are qualities to aspire to, they have a moral, rather than a pragmatic value for most households. Decision-making is highly fluid and contextual. One of the more articulate expressions of the decision-making process that reflected a general sense of how people across the focus groups make these choices was: “I try to get the best quality at the best price for the amount of time that I have” (Central). What this looks like within each individual household varies, but this participant continues: “Sometimes all of those will differ. So first thing I think of is, ‘buy local first,’ whether its meat, vegetable… So local comes first but you can’t always get local. So the next thing would be… organic, two, and then conventional would be third. You know when you’re in a pinch, when you have five minutes in the grocery store and you want broccoli and they don’t have organic broccoli so you just get the other... I try to do all of those things mindfully of the price” (Central). None of these values exists in a vacuum.

“I try to get the best quality at the best price for the amount of time that I have.”

Freshness was associated with the quality of produce and was the clearest indicator that the produce had a higher nutritional value. Because shopping and preparing food is time-consuming, buying fresh produce of the highest quality leads to less waste. And this is one of the ways that context matters. Spending a little more for produce is worth the extra money, if you have it, because the produce will last longer and result in less waste. One of the strategies used by households is to “buy some things cheap” in order to afford spending more on purchases from farmers market, for example. Another strategy is growing your own produce and raising your own chickens. Homegrown and farmers markets are, by their very nature, fresh, so these become important seasonal sources of “freshness” in selecting produce. The interest in farmers markets is more about “freshness” than it is about “local.”

Buying “local” seems to be more important when going out to eat. Many of our focus group participants were willing to pay more at restaurants that buy from local farms because of the added value of having the freshest, highest quality produce. Local is a proxy for freshness. As one participant asked, “What are you getting for what you pay to eat out?” It’s hard to know in many places, but when chefs work with local farms, that tells the customer that he or she is getting something that is worth the mark-up you pay to eat out. Thus, “local” has value, but that value is inextricably linked to quality, freshness, and taste.
“Local” has value in a different way that may also explain why “organic” is ranked so much lower than “nutrition.” Because customers get to know the farmers, produce from farmers markets also has the advantage of transparency. In all but one of the community focus groups, participants brought up the issue of labeling in grocery stores. There are so many terms in use in labeling, only some of which have formal certification processes. Focus group participants wondered what exactly “organic,” “sustainable,” “natural,” etc. meant. One participant referred to the ambiguity in labeling as “tricknology” to highlight that it is a marketing, rather than a food safety tool. Participants claim that it’s difficult to know what sources of information to trust. Buying direct from an employee of the farm at a farmers market cuts out the guesswork and allows customers to ask questions. In the farmer focus group, these interactions with customers were described as some of the most important work they do to establish trust in their brand.

Because we focused on general values and behaviors, we did not ask about how many servings of fruits and vegetables people eat. Other studies show that people tend to over-report “positive” behaviors on surveys. In the week leading up to our focus groups, we asked people to keep a journal of what they ate in order to get an idea about what is “typical” and what is not. According Mecklenburg County (2014), only 11% of adults report consuming the recommended five or more servings of vegetables a day. Among those who participated in our focus groups, that number was quite a bit higher, but some of that could have been due to seasonality, as the focus groups took place in July and August, at the peak of gardening and farmers market season.

Some of the other values we looked at in the survey were around how we consume food. There are no dramatic differences between the responses of all households versus food insecure households. Based on the strength of support for each statement, however, “including favorite foods” and “eating at home” have a little stronger support among food insecure families and “eating healthy meals” has a little stronger support among the full sample.
All HH: How important are each of the following to your family?

- Our meal includes our favorite foods
- We make dinner at home
- We eat a balanced meal
- We eat a healthy meal
- We eat together as a family

- Extremely important
- Very important
- Important
- Somewhat unimportant
- Neither important nor unimportant
- Not at all important
- Very unimportant
Because our mission at Charlotte-Mecklenburg Food Policy Council focuses on healthy and local foods, we also asked about community perception of what those terms mean. We asked respondents to choose two items from a list of definitions for “healthy” or provide an alternative. The overwhelming majority (70%) chose “fresh vegetables and lean meats.” The next two choices, in order, were “awareness of portion size” (38%) and “Home cooking” (30%). “Avoiding junk food” (28%) rounds out the top 4. “Home cooking” is perhaps more surprising than the other choices in the top three. In each of the focus groups, we discussed the challenges of preparing and eating healthy meals at home, but one woman gave a clear, concise explanation for why home-cooked is an
important factor in healthy: “It's home-cooked. You determine what goes in. Not like that packaged stuff.” (West 2). Home cooking as healthy may also speak to the success of the variety of cooking classes offered around Charlotte through non-profits, for-profits, the Health Department, schools, and the cooperative extension office.

Because we work with our partners to strengthen the local food economy, we wanted to see which definition of “local” resonates most with residents of Mecklenburg County. In our sample, 53% define local as the Piedmont region of NC/SC. This was followed by North Carolina, and smaller numbers choosing Mecklenburg County or a specific radius (either 50 or 100 miles).
There are a number of additional issues that came up in focus group discussions, especially in those areas defined in the 2010 study as “food deserts,” that address some of the specifics of food access not already discussed. First, community leaders are concerned not only about the lack of access through full-service grocery stores within a mile of households, but also about the general lack of availability of healthy options that are fast and affordable. Residents are not necessarily concerned about having a large chain grocery store. The would like to see more, smaller grocery stores, with an emphasis on healthy options. Several people talked about driving to Central Avenue to go to Healthy Home Market or to South Park to Whole Foods. One woman states, “I have made the trek, but then I think ‘man, that’s gas,’ but that’s so far away” (West 1). Residents in these corridors know that they are not alone and that most residents travel outside of their neighborhood, even traveling as far as South Carolina from West Blvd to shop in the kinds of places they want to shop. They asserted that the neighborhoods on the West side could support a full-service grocery store through their current purchasing behavior. Because of reasons already mentioned, they would like a variety of options, including natural food stores; corner stores with fruits, vegetables, and dairy; and farmers markets. At the time
of this writing, the Health Department has begun a Corner Store Initiative on the West side to increase access to fresh fruits and vegetables.

A second concern is a corollary to the lack of healthy choices, namely, the glut of unhealthy choices available in “food deserts.” The maps in the earlier section of this report support the observation of focus group participants on the West side that there are more fast food restaurants in their neighborhoods than elsewhere in the city. Part of the dialogue from the focus group on West Blvd is instructive:

Respondent 1: I don’t like to cook anymore. [I’m more apt to eat my grandson’s cookies that are lying around.] I just don’t feel like I have the energy. But yet, I tell myself that if I would cook things that would build my energy up, then I wouldn’t be tired like I am. But I can’t get up to do that. You know? It’s terrible. And the fast food places. That’s a killer.

KM: Okay. Talk a little about that.

Respondent 1: I tell myself I’m not gonna go, you know. And my daughter, you know—she needs to stop going, too. And here we go. I got mine— you got your money? Here we go...

Respondent 2: And it’s tempting, ’cause that’s all that’s around. Burger King, McDonald’s, Popeye—

(several people commenting in agreement)

Respondent 3: I’ve never in my life been so sick of looking at [these fast food places].

The sheer availability of fast food restaurants without equally convenient, healthy options means that individuals and families are not always making the kinds of choices they aspire to. In another focus group, a woman stated: “It’s so easy for a parent to stop for fast food. The children are developing bad habits at a young age.” Especially for families with children, the behavior of parents is sometimes dictated by what choices exist in the space between school and after school event for their children. In a different focus group, where one of the participants talked about having 6 grocery store options within a mile of her home, she lamented that she took her son to TCBY between school and athletic practice because it was the only place for a quick snack that also fit the 30-minute time-frame they had.

Finally, there is a deep concern with economic and social justice related to food in the neighborhoods identified previously as food deserts. In the focus groups conducted with the first food assessment (Racine, Wang, Gomez 2011), residents raised concerns that the produce in any retailer in their neighborhoods...
should be of the highest quality. In the community survey as part of the current study, social justice around the food system was perceived to be more important among food insecure households than the general population. And throughout the county, as we have already mentioned, part of the value placed on farmers markets is the desire to economically support farmers. One of the key considerations brought up in the West side focus groups was how much money is leaving the Beatties Ford Road and West Boulevard corridors to full-service grocery stores in other, more affluent neighborhoods. One woman said she understood the logic of larger chain stores, even though she disagreed with it:

“They put stuff in communities that people tend to buy. It doesn’t necessarily mean that if they put it here that people wouldn’t buy it. So, they make those choices.”

The concern with grocery stores and produce in corner stores is about much more than simply having a place to shop. There are full-service stores on Freedom Drive and Beatties Ford Road that some residents will bypass in favor of stores that are further away. One woman stated her concerns in the following way:

“I’m concerned about the quality of food. Because I feel like the environment that people are in, the things that they are given—subconsciously, they’ll think: ‘Well, this is my worth, I don’t really need good food.’ And you don’t really think that, but sometimes I wonder if people think, ‘I don’t deserve to have good food. This is all I have.’ I know I’ve thought that and that’s an illusion. It’s not really true.”

West Side residents know that money is flowing out of their neighborhood to stores in wealthier parts of town. They also know that many residents are struggling to get by. They want the businesses that come into their neighborhoods to be invested in those neighborhoods for the long term. In addition to encouraging smaller grocery stores, so that there would be more of them distributed throughout the West side, participants in one of the two West side focus groups highlighted their desire to see small businesses being run by
people who live in the neighborhood. By encouraging and supporting local entrepreneurs, the impact of small business loans would go much further, as entrepreneurs would hire neighborhood residents as employees and invest in their neighborhoods in other ways as well. Thus, the food economy is closely linked to overall neighborhood economic development.
OPPORTUNITIES FOR CHANGE
In the 2015 State of the Plate community food assessment, we have broadened the scope of inquiry beyond food deserts to a more comprehensive snapshot of food access. We have looked at the kinds of choices available as well as the values people have around food choices and the constraints they face. Geography is one constraint, but is neither the only nor the most important constraint.

**Food Insecurity: High Food Insecurity Risk Areas**

This study utilized drive time and 2-mile radius mapping to focus on the true accessibility of food within Mecklenburg County. By using this approach to identifying highest risk areas for food insecurity, we identified the following three locations as areas of greatest need: Brookshire Blvd Corridor (NC 16, between I-85 & I-485), West Blvd Corridor (NC 160, between Billy Graham Pkwy & I-485), and Albemarle Rd Corridor (NC 27, between I485 & Mecklenburg County Boundary Line).

**Opportunities:**

Build a full-service grocery store, or utilize smaller stores such as corner stores or larger scale gas stations, to provide a variety of fresh food within these High Food Insecurity Risk Areas. Such as, growing the current Mecklenburg County Health Department Corner Store Initiative to cover all of the Corner Stores within High Food Insecurity Risk Areas and all neighborhoods that are identified as a “Food Deserts.”

Begin to focus on creating a variety of avenues that would provide for wider distribution of fresh fruits and vegetables in low-income communities with limited access to fresh fruits and vegetables: home owner association gardening co-ops, community gardens, fruit trees on public and private land, and other edibles in public spaces (“food forests”), school gardens, etc.

**Food Insecurity: Access and Geography**

While the vast majority of Charlotte-Mecklenburg residents use their personal vehicles to travel to the store, and travel two or more miles to their preferred stores, there is a desire for more healthy options throughout the area and a desire for more walkability within low-income neighborhoods. We encourage the city and county to create incentives for more points of food access that are within safe walking distance, especially near more vulnerable populations, including seniors who may have less access to transportation and college students.
Opportunities:

Develop more points of food access that are accessible by walking or by public transportation, such as farmers markets or produce stands at transportation hubs, community centers, libraries, schools, churches, mobile markets, grocery store delivery or drop-off points.

Encourage and support data gathering around quantifying the purchasing power of lower income neighborhoods based on where residents currently shop.

Create a wider variety of fresh and healthy food sources throughout the city that are convenient and affordable for families with children, seniors, and college-aged students.

Food Insecurity: Access and Cost

Food insecure households identify cost as the main barrier to accessing healthier foods, and one of the primary values that drives decision-making around purchasing food for their families. SNAP and WIC help families to buy better food, but it’s often not enough. Cost is a consideration, even for families who are not food insecure.

Opportunities:

Support programs that give low-income and food insecure households increased buying power, such as:

Double SNAP dollars

Fruit and Veggie Prescription program

Increase SNAP and WIC availability to 100% of full-service stores in Mecklenburg County.

WIC availability needs to be increased to include a minimum of 50% coverage of all available food stores, beginning with full coverage in or around High-Risk Communities and “Food Deserts”
Food Insecurity: Values Around the Local Food System

Freshness, along with cost, is the most important value that drives decisions about food. People are willing to pay a little more for “local” because local foods are associated with freshness and the highest quality. Fresh foods are also understood to be more nutritious and people notice that the fresher the food is when you buy it, the longer it will last. Therefore, there is less waste and a better overall value. Families are looking to eat healthy meals with a foundation of lean meats and fresh vegetables, and, especially the food insecure households, value eating together as a family.

Opportunities:

Work with neighborhood leaders to support the types of retail that will be successful within their communities, especially in identifying locations for retail sites.

Build K-12 curriculum around healthy eating into every school.

Continue to explore innovative ways to bring cooking lessons out into neighborhoods, with an emphasis on simple, easy, and quick preparations, such as:

- Make-ahead meals
- Five ingredient or less meals
- Container herb gardens used to add flavor to your meals
- Cooking healthier traditional meals

Neighborhood Economic Development and Food Access

Especially in neighborhoods in West Charlotte, residents have concerns about both the quantity and quality of options available. Chain grocery stores and fast food restaurants that exist do not offer enough options that align with the values behind their food purchasing habits and desires. Likewise, throughout the community focus groups, people talked about their desire to have more small scale options rather than large chain groceries.

Opportunities:

Identify and publish zoning in vacant land and retail that would encourage a diverse array of economic activities in the food system, including urban agriculture.

Include the local food economy in ongoing discussions of economic development at the city and county level.
Establish small business start-up grants for local businesses that would be operated by owners who live within the community that they would be serving.

Create incentives for current small business owners to begin selling more fresh food options within their establishments to meet the needs and values of their customer base, focusing on: fresh produce, dairy, and meat.
REFERENCES & APPENDIXES
References


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Appendix: Voice of the Community Research Protocols

Community Survey

Welcome to the 2015 State of the Plate community survey. This survey is part of a comprehensive food systems assessment being conducted by the Charlotte-Mecklenburg Food Policy Council. The research is being done in collaboration with Johnson C. Smith University and a team of researchers from other local universities. We would like to better understand how people in Mecklenburg County make choices about how and what to feed their families. All your answers to the questions below are confidential and your participation is voluntary. You can stop participating in the survey at any time. We ask for demographic data for research purposes, including your zip code, but none of this information will be linked back to you. By completing the survey, you are signaling your agreement to have your answers included in the final analysis and report. The survey should take 5 - 10 minutes to complete. Thank you in advance for your time.

What is your home zip code?

Which of the following best describes your age?
under 18 (1)
18-24 (2)
25-34 (3)
35-44 (4)
45-54 (5)
55-64 (6)
65 or older (7)

What percentage of the food buying decisions are you responsible for in your household?
all of it (100%) (1)
most of it (75%-100%) (2)
more than half of it (50%-75%) (3)
less than half of it (25%-50%) (4)
little to none of it (less than 25%) (5)
Where do you usually buy the food your family eats (Select ALL that apply. Please focus on places you buy from at least once per week)?
Fast Food Restaurants (1)
"Sit down" restaurants (2)
Work place and public cafeterias (3)
Senior center (4)
Food assistance (food bank, pantry, churches, donations from other sources) (5)
Meal delivery program (e.g. Meals on Wheels, Friendship Trays) (6)
Large chain grocery stores (e.g. Food Lion, Harris Teeter, Walmart) (7)
Independent, family-owned grocery store (8)
Wholesale store (Sam's Club, Costco, BJ's) (9)
Convenience store/gas station (10)
Natural food store (e.g. Healthy Home Market, Earth Fare) (11)
Farmer's market or seasonal produce stand (12)
Direct from farm/ranch (e.g. CSA, meat-buying club) (13)
Online (14)
I grow/hunt my food (15)
other (16) ____________________

What is your primary source for the FRUITS & VEGETABLES that you and your family eat (fresh, canned, frozen)? (select up to 2)
Fast Food Restaurants (1)
"Sit down" restaurants (2)
Work place and public cafeterias (3)
Senior center (4)
Food assistance (food bank, pantry, churches, donations from other sources) (5)
Meal delivery program (e.g. Meals on Wheels, Friendship Trays) (6)
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Direct from farm/ranch (e.g. CSA, meat-buying club) (13)
Online (14)
I grow/hunt my food (15)
other (16) ____________________

How many times a week do you buy fresh fruits and vegetables?
1-2 (1)
3-4 (2)
5-6 (3)
more than 6 (4)
not sure (5)

How important are the following qualities to you when choosing fruits and vegetables to purchase? Please answer using a scale of 1-7, where 1 is "not at all important" and 7 is "extremely important".
### Importance of Qualities in Choosing Fruits and Vegetables

<table>
<thead>
<tr>
<th>Importance of Qualities</th>
<th>Not at All Important</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshness (1)</td>
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<td>Cost (2)</td>
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<tr>
<td>Health/nutrition (3)</td>
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<td>Convenience/ease of preparation (4)</td>
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<tr>
<td>Taste (5)</td>
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<tr>
<td>Familiarity (6)</td>
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<td>Organic (7)</td>
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<tr>
<td>Locally grown (8)</td>
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<tr>
<td>Common in my culture (9)</td>
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<tr>
<td>Social justice (healthy and fair working conditions) (10)</td>
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</tbody>
</table>

**Which of these qualities is MOST important to you in choosing fruits and vegetables to purchase?** *(Select only one)*

- Freshness (1)
- Cost (2)
- Health/nutrition (3)
- Convenience/ease of preparation (4)
- Taste (5)
- Familiarity (6)
- Organic (7)
- Locally grown (8)
- Common in my culture (9)
- Social justice (healthy and fair working conditions) (10)
- Other (11) ____________________

**What challenges does your household face in getting the fruits and vegetables you want to prepare at home?** *(Select and rank up to 3 answers)*

- The stores are too far away (1)
- We don’t have reliable transportation (2)
- I have to be able to carry what I buy (3)
- The store hours are too limited (4)
- Fruits and vegetables cost too much (5)
- I have physical limitations (6)
- We don’t have a lot of time to purchase and prepare them (7)
- Fruits and vegetables are not available where I get most of my food (8)
- We don’t have any challenges with getting the fruits and vegetables we want (9)
- Other (10) ____________________
How do you usually get to the places where you buy/receive fruits and vegetables? (pick no more than 3)
- personal vehicle (1)
- in someone else’s vehicle (2)
- shuttle/taxi (3)
- bus (4)
- walk (5)
- it’s delivered to me (6)
- not applicable as I grow most of my own fruits and vegetables (7)

How far do you typically travel to get most of your fruits and vegetables?
- 1-5 blocks (less than half a mile) (1)
- .5-1 mile (2)
- 1-3 miles (3)
- 3-5 miles (4)
- 5-10 miles (5)
- 10-15 miles (6)
- 15-20 miles (7)
- over 20 miles (8)

Which of the following statements best describes the food eaten in your household in the past 12 months?
- Enough of the kinds of foods we want to eat (1)
- Enough, but not always the kinds of food we want to eat (2)
- Sometimes not enough to eat (3)
- Often not enough to eat (4)
- Don’t know/decline to answer (5)

Look at the following statements that people have made about their food situation. For each statement, please choose whether the statement was often true, sometimes true, or never true for your household.

"(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more."
- often true (1)
- sometimes true (2)
- never true (3)
- don’t know/declined to answer (4)

"The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more."
- often true (1)
- sometimes true (2)
- never true (3)
- don’t know/declined to answer (4)
"(I/we) couldn’t afford to eat balanced meals." [According to the USDA, a balanced meal is one that includes a serving of fruit/vegetable, a meat/poultry, a starch, and a milk/dairy product.]

- often true (1)
- sometimes true (2)
- never true (3)
- don’t know/decline to answer (4)

In the last 12 months, did (you/you or other adults in your household) ever cut the size of your meals because there wasn’t enough money for food?

- yes (1)
- no (2)
- don’t know/decline to answer (3)

How often did this happen? Almost every month, some months but not every month, or in only 1 or 2 months?

- almost every month (1)
- some months but not every month (2)
- only one or two months (3)
- don’t know/decline to answer (4)

In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?

- yes (4)
- no (5)
- don’t know/decline to answer (6)

In the last 12 months, were you ever hungry, but didn’t eat enough because there wasn’t enough money for food?

- yes (4)
- no (5)
- don’t know/decline to answer (6)

In the past 12 months, did you lose weight because there wasn’t enough money for food?

- yes (4)
- no (5)
- don’t know/decline to answer (6)

Are there children under the age of 18 in your household?

- yes (1)
- no (2)

Look at the following statements that people have made about the food situation for their children. For each statement, please choose whether the statement was often true, sometimes true, or never true for (your child/children) living in the household who are under 18 years old.
"(I/we) relied on only a few kinds of low-cost foods to feed (my/our) (child/children) because (I was/we were) running out of money to buy food."
often true (1)
sometimes true (2)
never true (3)
don’t know/decline to answer (4)

"(I/we) couldn’t feed (my/our) (child/children) a balanced meal because (I/we) couldn’t afford that."
often true (1)
sometimes true (2)
never true (3)
don’t know/decline to answer (4)

"(My/our) (child was/children were) not eating enough because (I/we) just couldn’t afford enough food."
often true (1)
sometimes true (2)
never true (3)
don’t know/decline to answer (4)

In the past 12 months, did you ever cut the size of (your child’s/any of the children’s) meals because there wasn’t enough money for food?
yes (1)
no (2)
don’t know/decline to answer (3)

In the past 12 months, did (your child/any of your children) ever skip meals because there wasn’t enough money for food?
yes (1)
no (2)
don’t know/decline to answer (3)

How often did this happen—almost every month, some months but not every month, or in only 1-2 months?
almost every month (1)
some months, but not every month (2)
only 1 or 2 months (3)
don’t know/decline to answer (4)

In the past 12 months (was your child/were your children) ever hungry but you just couldn’t afford more food?
yes (4)
no (5)
don’t know/decline to answer (6)
In the last 12 months, did (your child/any of your children) ever NOT eat for a whole day because there wasn't enough money for food?
yes (1)
no (2)
don't know/decline to answer (3)

The following statements relate to your neighborhood or community. Please state how much you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is easy to find fresh fruits and vegetables.</td>
<td></td>
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<tr>
<td>It is affordable to buy fresh fruits and vegetables.</td>
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</tbody>
</table>

How do you define "local" food?
grown/raised in Mecklenburg County (1)
grown in the Piedmont region of North and South Carolina (2)
grown/raised in North Carolina (3)
grown/raised in the United States (4)
grown within a specific radius of my home (in miles), please specify: ________________
I don't know (6)
other (7) ____________________

How do you define "healthy" eating? (select up to TWO)
a plant-based diet (1)
home-cooking (2)
fresh vegetables and lean meats (3)
awareness of portion size/calorie intake (4)
eating seasonally (5)
local foods (6)
food that gives me energy (7)
avoiding fried foods, junk foods (8)

Please tell us how important each of the following is to your family. Please answer using a scale of 1-7, where 1 is "not at all important" and 7 is "extremely important." How important is it to you that your family:

<table>
<thead>
<tr>
<th>Importance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>eats together as a family (1)</td>
<td></td>
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<tr>
<td>eats a healthy meal (2)</td>
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<tr>
<td>eats a balanced meal (3)</td>
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<tr>
<td>makes dinner at home (4)</td>
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<tr>
<td>includes the family’s favorite foods (5)</td>
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</tbody>
</table>
How many people (including yourself) currently live in your household?
1 (1)
2 (2)
3 (3)
4 (4)
5 or more (5)
prefer not to answer (6)

How many children (under the age of 18) live in your household?
0 (1)
1 (2)
2 (3)
3 or more (4)
prefer not to answer (5)

What is your gender?
male
female
prefer not to answer

What is your race/ethnicity?
White/Caucasian (1)
Black/African-American (2)
Hispanic/Latino (3)
Native American/American Indian/Alaska Native (4)
Asian-American (5)
mixed race/ethnicity (6)
other (7) ____________________
prefer not to answer (8)

What is your highest level of education?
less than High School graduate (1)
High School Graduate/GED (2)
Some college/Technical School/Associates Degree (3)
Bachelor's Degree (4)
Graduate or professional degree (5)
prefer not to answer (6)

What is your annual household income?
less than $25,000 (1)
$25,000-49,999 (2)
$50,000-74,999 (3)
$75,000-99,999 (4)
$100,000-124,999 (5)
$125,000-149,999 (6)
$150,000 and above (7)
prefer not to answer (8)
My household receives (check all that apply)
SNAP/food stamps (1)
WIC (2)
other food assistance (3) ____________________
none of the above (4)

Focus Group Protocol

Before the focus group

Participants in community focus groups and in some of the target area focus groups will be asked to keep a 3-day food journal prior to the focus group. They will have the option of keeping a written or photo log and bringing it with them to the meeting or sending photos in real time to a project e-mail. [Any data sent to the project e-mail will be anonymized before being stored.]

Welcome

As people arrive, greet them, invite them to have a snack, fill out a name tag, and hand them two copies of the informed consent sheet and one copy of a questionnaire (if applicable)

If participants have completed food diaries, ask them to comment briefly (in writing) on the diary.

Briefly inform them of the purpose of the focus group. All of the focus groups are part of the State of the Plate food assessment which is being conducted to help the Charlotte-Mecklenburg Food Policy Council better understand how we make decisions about the food we eat and what opportunities and barriers exist within the food system to move our region towards a sustainable and inclusive food system.

The focus group conversation for the community focus groups centers on the food we eat, where we get it, and how we make decisions about the food we get and eat.

The focus group conversation in “target area” focus groups (non-profits, farmers, food entrepreneurs, faith-based communities, aging & nutrition/hunger, international, and childhood nutrition/hunger) centers more around the opportunities and barriers to healthy food access.

Informed consent: confidentiality

Begin the formal portion of the focus group by reviewing the informed consent material
Make sure everyone understands how the process works and make sure they all agree to participate and to be tape-recorded (for later transcription). Walk through the forms and ask participants to sign one copy and keep one for their records if they choose. Collect the signed sheets (Facilitator will also sign).

Inform participants that you will be audiotaping and taking notes to make an accurate record of what is said, including comments and guidance from the facilitator. Remind participants to only share their first names.

Remind participants about the importance of keeping any information discussed in the focus groups confidential. Ask each participant to verbally affirm that they will keep the conversation confidential—they will not discuss the material outside.

**Introductions & Food Assessment Overview**

Begin the recording. Introduce yourself and your role in the project. Let people know that your role as a facilitator is to: a) keep the group focused, b) maintain momentum, and c) whenever appropriate reach closure on questions.

Review the food assessment and talk about why we are doing it. Encourage questions.

Lead a round of introductions, reminding people that they only need to use their first names. (Remind participants that their feedback is very important and that it is confidential.)

Lay out ground rules for discussion and ask if there are additional ground rules participants would like to add:

1) there are no right or wrong answers to questions. The important thing is for everyone to share their experiences and opinions.

2) only one person will speak at a time

3) We all agree to listen actively. Respect the speaker by not interrupting or engaging in side conversations

4) allow at least two people to speak before you speak again

5) we will be talking about very personal decisions and experience. Avoid giving advice or critiquing someone else’s decisions

6) direct all questions to the facilitator (maybe you have a question about something that another participant has said, rather than shifting your attention to that person directly, allow the question to be open to the entire group.)

Questions/prompts
Community focus groups:

Allow each participant a few minutes to review their food diary with the group. Share photos on the screen and ask them to comment on which meals were “typical,” “ideal,” “unusual,” or “experimental.” Invite them to add other descriptors as well and elaborate on why those meal choices were made in that particular situation or moment.

More general questions (if these themes don’t come up earlier, or to allow all participants to comment):

What do you value most about food/eating? (listen for things like local, organic, sustainable, healthy, familiar, reflect my culture, trying something new—follow up with probes for the group for any of these that are not mentioned)

How do you decide where to get your food and/or what foods to buy? Where do you buy? Are there places you’d like to get your food from that you currently do not/cannot? (why?)

What concerns you most about the food you purchase? (follow up with: What might alleviate those concerns?)

Target area focus groups:

When appropriate or feasible, target area focus groups will also include a food diary and abbreviated discussion.

More prompts (not all will be appropriate for each focus group, please select 3-4 that will be most appropriate):

How did you, personally, become involved in the local food system? (or How did you start farming/working as X?)

What values inform your work in the food system and/or your own decisions about what to eat? (listen for things like local, organic, sustainable, healthy, familiar, reflect my culture, trying something new—follow up with probes for the group for any of these that are not mentioned)

Thinking about the population you serve (through your business/outreach/services), what opportunities do they have to eat like you do? What opportunities do they have to access fresh, healthy produce? What do you know about where/how they shop? (choose one of the above)

Again, thinking about this population, what concerns do you have about access/availability/affordability? About having enough of the right kinds of food?
For businesses/farms: At what points in the process is waste occurring? What happens to product/produce you can’t sell? (how is that working for you/your bottom line?)

What types of trainings do you take advantage of (and where do you go)? (ask farmers about crop insurance briefly)

What infrastructure projects would help you to be more effective in the work that you do? (follow up to ask for more detail on how they would use: Food hub [aggregation of produce from smaller farms]; packing house; food recovery program; community gardens/farmer food share; etc.)

**Conclusion**

Thank participants for their time and participation!

Remind them to watch for a Save the Date for State of the Plate Reveal in November. Keep a separate clipboard where they can sign up for an e-mail reminder.

Stick around for conversation and questions with participants.