



Seguridad Alimentaria

Food Security in Atlanta's Latinx Community

Acknowledgements

This study could not have been possible without the generous financial support of the City of Chamblee. Technical assistance was made available by the Atlanta Regional Commission through their Community Development Program. ARC contributed a technical report providing crucial geospatial and demographic information pertaining to the case study community. Key contributions were made, as well, from Emory University Masters in Public Health students through a Nutrition Environment Measures Survey focused on the case study community for this project, and it was completed for their Community Engaged Food Security course, data from their research endeavors was contributed to this research project. Finally, a Masters in Development Practice student implemented the stakeholder interview tool and analyzed and reported out on the data produced therein.

Key Contributors

Evan Daily, Spanish Coordinator Cooking Matters, Open Hand

Anna Baggett, Community Planner, ARC

Elizabeth Sandlin, Planner, ARC

Becca Herring, Masters of Public Health student, Emory University

Avery Elloway, Masters of Public Health student, Emory University

Carolina Escobar, Masters of Public Health student, Emory University

Hannah Bunting, Masters of Public Health student, Emory University

Diana Altorre, Masters of Development Practice student, Emory University

Executive Summary

Black and brown communities are disproportionately exposed to the risks of being food insecure and impacted by the life-long health outcomes associated with food insecurity. Food insecurity exists when individuals do not have consistent access to the culturally appropriate foods which they need to live a healthy life. The exposure of Atlanta's Hispanic community to the risks of food insecurity has not previously been assessed, and this report seeks to create new, needed, information for decision makers through a mixed-methods study. To create a holistic image of the food security status of the community, the study assesses food availability, physical and financial accessibility of food, and factors around the utilization of food. The study combined a "bird's eye view" geospatial information systems (GIS) analysis of the community food landscape, focus group discussion, community member surveys, a demographic analysis of the case study community, nutrition environment measures survey, and stakeholder interviews to create an understanding of the community's food security status. The case study community, the Buford Highway Corridor from the City of Brookhaven to the City of Doraville, is home to a majority Hispanic community which finds many well stocked, culturally relevant food access options in the corridor. Access challenges, however, were observed primarily due to gaps in pedestrian infrastructure and high rates of poverty; these findings most likely contribute to self-reported community member food insecurity rates over 60%. Proposed solutions have been developed through a framework with 5 categories: Urban agriculture/Community Gardening, Transportation and Pedestrian Infrastructure Evaluation and Prioritization, Housing, Education and Outreach, and Food Access Policy and Programming (education).

Table of Contents

Acknowledgements	1
Executive Summary	2
1. Introduction	4
2. Methods.....	7
2.1 Methodology	8
2.1.1 Quantitative.....	9
2.1.2 Qualitative	12
2.2 Limitations	15
3. Results and Discussion.....	16
3.1 GIS Analysis	16
3.2 Demographic Analysis.....	25
3.3 Community Member Survey	26
3.4 Nutrition Environment Assessment Surveys.....	30
3.5 Stakeholder Interviews	33
3.6 Focus Group Discussion	35
4. Conclusion and Recommendations	46
6. References	48
7. Appendix.....	55
7.1 Appendix A: Stakeholder Interview Questions.....	55
7.2 Appendix B: Focus Group Discussion Materials	56
7.3 Appendix C: Nutrition Environment Measures Survey	60

1. Introduction

In July of 2018, a leader within the Atlanta-based Latin American Association mentioned to Open Hand that her constituents were facing challenges accessing the foods they needed. Without concrete documentation about who was facing what challenges and how difficult those challenges were, little could be done. Information on food security in the Latinx community in the Metropolitan Atlanta area in 2018 was almost non-existent. This report fills that crucial informational gap through a mixed-methods research project led by Open Hand Atlanta with financial support from the City of Chamblee and technical assistance from the Atlanta Regional Commission (ARC) through the Community Development Assistance Program (CDAP).

Interest in this research stemmed from community member comments about observed food access challenges for Hispanic individuals. Initial research into population growth yielded an understanding that the area Hispanic population is growing rapidly, so much so that it is outpacing every other community in the metro area, Figure 1 visualizes this trend (ACS 2019). The importance of developing an understanding of the food security status of a growing population statistically prone to experience food insecurity at higher rates leaving the population more vulnerable to chronic health risks.

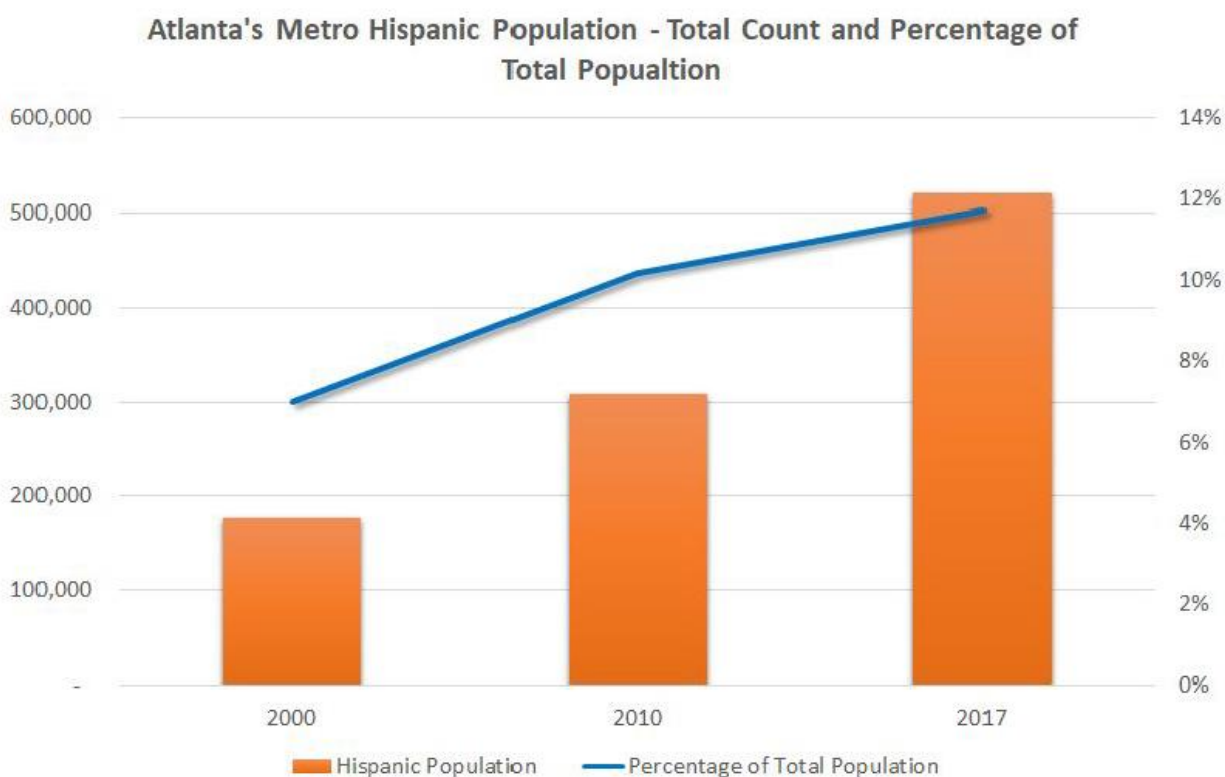


Figure 1. Population growth over time for the Metropolitan Atlanta area's Hispanic community (ACS 2019)

To generate the information required to inform the stakeholders, a case study community was selected that was understood to be a historically Hispanic area of the metro region. The case study community at the focus of this study was a 7 mile stretch of Buford Highway, a high volume traffic corridor in the northeast section of the metropolitan Atlanta area which runs from the southwestern most tip of the

city limits of the City of Brookhaven, through the City of Chamblee, to the northeastern limit of the City of Doraville. Figure 2 below presents a map of the case study area.

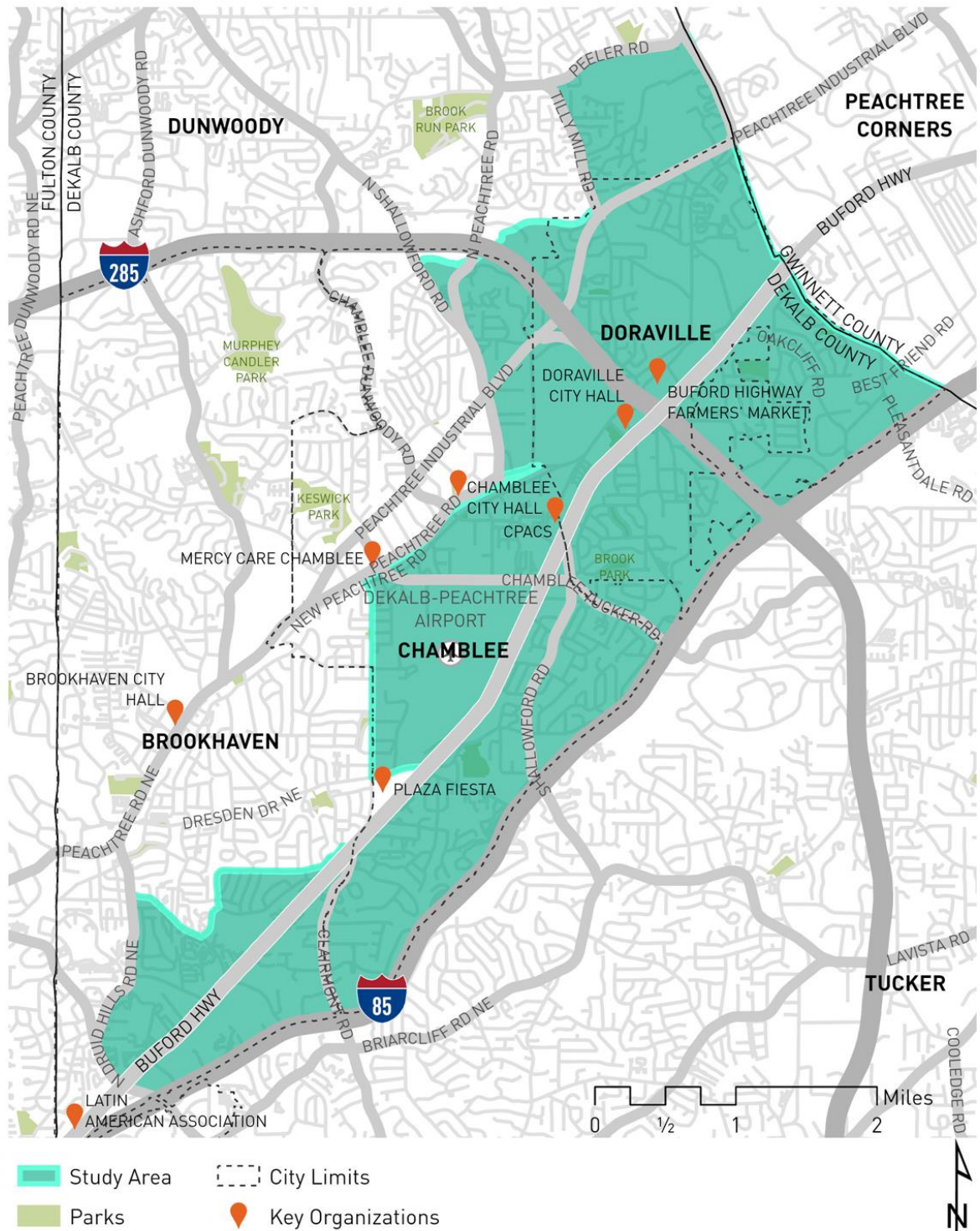


Figure 2. Case study community: Buford Highway.

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO 1996). Food insecurity and food access challenges are public health issues. Research from the Center for Disease Control and Prevention shows that a lack of access to supermarkets, and the fresh foods they make available, is foundational to perpetuating diet-related ailments like diabetes (Baker *et al.*, 2006). Further research shows that an overabundance of unhealthy options rich in salts, fats, and sugars, promote the development of the same diet-related issues (Adams *et al.*, 2003; Block *et al.*, 2004; Kwate *et al.*, 2009; Treuhaft and Karpyn 2010; Walker *et al.*, 2010; Gallagher 2011; Shannon 2014; Shannon 2015).

To best understand any potential challenges present within the community, a mixed methods study design was selected. Mixed methods research combines quantitative and qualitative research strategies and enables the development of a more holistic understanding of complex social issues, such as food deserts. There is a strong call in food desert literature for more mixed methods studies (Barrett, 2013; Chavez, 2013; Taylor and Lovell, 2014; Walker *et al.*, 2010). Food deserts have been defined by the United States Department of Agriculture Economic Research Service as census tracts which are characterized by both low income and low access to supermarkets (USDA ERS 2019). To achieve that more complete image, quantitative geospatial information systems, demographic analysis, nutrition environment measures surveys, and community member surveys were implemented alongside qualitative focus group discussion and stakeholder interviews.

The GIS analysis illustrated that even though the community is technically a USDA ERS food desert, it is home to a diverse and dense food environment which is characterized by a wide range of food access options. In total these options include 7 large grocery stores and over 50 small grocery stores. These stores, however, are extremely outnumbered by the high volume of restaurants located along the corridor which could contribute to an unhealthy food environment because of the volume of fast food restaurants, in particular. The GIS analysis also included a network analysis illustrated pedestrian infrastructure limitations and quantifies the significant difficulties pedestrians in the community would experience when walking to large and small grocery stores.

Demographic analysis created key insights into community member socio-economic dynamics and revealed that the case study community was 54% Hispanic and experienced high rates of poverty, high rates of renter housing cost burden, high rates of limited vehicle access, and low rates of educational attainment. A financial access issue could likely exist in the community.

A community member survey inquiring about grocery expenditure, food preferences, SNAP benefit usage, and food security at the household level revealed new information about preferences and experiences. On average, the survey respondents reported grocery shopping just under 3 times per month and spending \$174 per grocery trip. Results illustrate the unexpected finding that the greater household size rarely associated with grocery budget increases as larger households frequently reported spending the same amount as smaller households. Respondents also reported above average usage of SNAP benefits when compared to community wide averages. Participants were asked two United States Department of Agriculture food security screener questions. Based upon those validated questions, over 65% of participants screened for low food security.

A nutrition environment measures sought to understand the food available within the case study community by exploring foodstuffs in 4 grocery stores. This survey revealed that the food available

within half of the community's large grocery stores is diverse, high quality, culturally relevant, and mostly healthy. In some cases, healthier options of conventional foods like low fat milk were equally priced against standard options, or were more expensive. Overall, the food available in the community's commercial food outlets is supportive of a food secure community.

Stakeholder interviews revealed that stakeholders working in and around the corridor with the Latinx community or adjacent to the community see three main influences in the area of food security: legal status and documentation, the language barrier, and community assets. An individual's documentation and legal status and a lack of awareness of public benefits can hold individuals back from accessing all of the benefits they may qualify for. Additionally, an overtly negative presidential rhetoric regarding documentation 2016, such as Public Charge legislation¹, has induced high levels of anxiety in the community. This has been exacerbated by the language barrier. Fortunately, all respondents expressed an eagerness to support efforts to improve community food security.

Focus group discussion with community members yielded a profound amount of information regarding their perspectives on food and their experiences acquiring food. Many participants expressed deep levels of awareness about the food they need to eat to live healthy lives, but also commented on the frustrations they have about not being able to go to the stores they prefer. Access challenges were noted because of distance related restrictions. Additionally they commented on their frustration about not being able to eat foods rooted in their cultural gastronomy due to the negative health impacts which many were coping with in the form of diabetes and high blood pressure. Two related and notable themes were disdain for the "flavorless" produce available in the area and a group wide interest in being able to grow food for themselves. Results indicate that any food security intervention strategy should focus on incorporating and navigating intricate Hispanic and Latinx cultural norms like machismo and the centrality of faith based organizations in individuals identify as their "community".

The Buford Highway Corridor is a unique space in Atlanta's metro area because of its cultural diversity. A diversity which is easily observed through the plethora of multicultural restaurants and small grocery stores. Based on the findings in this report, the community which calls this space home would benefit from improved pedestrian infrastructure, Spanish municipal engagement and education around the roles cities hold in community development, and renter supports like rent controls and affordable housing due to housing cost burden. Supporting the diversity of the corridor and the food culture it has created will differentiate the space and facilitate the implementation of sustainable policy, systems, and environmental changes for a healthier, more food secure community.

2. Methods

This study adds new information to the knowledge pool which individuals and organizations require to understand and improve the food security status of the Metro Atlanta area's Hispanic community. This information is provided through a mixed methods asset based method, wherein the UN FAO's definition of food security is adopted. This definition of food security and the status of its four requirements for food security are explored in a case study community:

¹ Food Action Research Center. 2020. Implementation of the New Department of Homeland Security (DHS) Public Charge Rule: FAQs for Anti-Hunger and Nutrition Stakeholders. [PDF]. Retrieved from: <https://frac.org/wp-content/uploads/faq-new-dhs-public-charge-rule.pdf>

- Availability: The availability of sufficient quantities of food of appropriate quality.
- Access: Access by individuals to adequate resources for acquiring appropriate foods for a nutritious diet.
- Utilization: Utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met.
- Stability: To be food secure, a population, household or individual must have access to adequate food at all times.

This model was implemented as the lens through which study methods were formulated. Access has also been taken to include environmental factors beyond the individual level including financial and physical considerations like the cost of food and distance. These factors influence individual food security and consumption of healthy foods.

The research question guiding this project is a clear response to information sought by community partners who sought to understand the food needs of their constituents, “What is the food security status of the Buford Highway Corridor’s Hispanic community?” This question was asked because no other research had yet been observed to provide information on the status of the area’s Hispanic community or direct municipal efforts to address such challenges.

The following objectives were developed to answer the proposed research question and guide the research project

1. Develop an understanding of the socio-economic conditions of the study area and how those conditions influence food security of the resident Hispanic community;
2. Understand how gaps in transportation infrastructure modal choice facilitate and reduce the accessibility of community food resources;
3. Develop an understanding of Hispanic community member perspectives of food security in their community; and
4. Understand what gaps exist in policies and programs that can be addressed with community partners and government intervention.

To answer the stated research question and meet the above objectives, this study developed a holistic understanding of food security facilitators and barriers through a range of complimentary qualitative and quantitative strategies. Quantitative methods included: geospatial information system analysis of the food landscape, demographic analysis of the case study community, a community member survey, and a nutrition environment measures survey. Qualitative methods included a focus group discussion and stakeholder interviews. These methods will be discussed in more detail in the following section, section 2.2.

2.1 Methodology

This research project implemented a mixed methods strategy by combining qualitative and quantitative tools. Mixed methods research is defined as

“The class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study” (Johnson & Onwuegbuzie, 2004, p. 17).

The authors argue for the utilization of mixed methods research claiming

In many situations, researchers can put together insights and procedures from both approaches to produce a superior product... often mixed methods research provides a more workable solution (Johnson and Onwuegbuzie, 2004, p. 17).

The utility of mixed methods research strategies has been discussed in detail in the scholarship of food access in multiple studies (Walker *et al.*, 2010; Chavez, 2013; Barrett, 2013; Taylor and Lovell, 2014). Furthermore, by incorporating both qualitative and quantitative methods, a deeper understanding of local context, issues, barriers and opportunities relating to the local food system may be gained (Barrett, 2013). For these reasons a mixed methods study was undertaken.

2.1.1 Quantitative

Quantitative methods enable the development of an objective understanding of the known and unknown variables, such methods have been used extensively in food security research. To understand the objective realities of food security along the Buford Highway corridor, a quantitative assessment of the food landscape was undertaken. This assessment explored the number and types of food outlets located in the community, the distance between those outlets and consumers, the quality and price of foods available in grocery stores, a demographic analysis of the community, and a community member survey regarding food security. The information in this GIS analysis and demographic analyses, are summarized herein and provide a full detailed report in Atlanta Regional Commission's Buford Highway Food Security Technical Memorandum. The nutrition environment measures surveys were completed by a team of graduate public health student researchers at Emory University.

GIS Analysis

To understand the community food landscape, a GIS analysis was undertaken by ARC to create an inventory of the food landscape's assets and determine the physical accessibility of those assets. Leveraging GIS to visualize a community food landscape the project management team explored potential physical barriers to food access through a method proven valuable to community food systems planning and food security researchers across North America. These analyses are able to leverage granular data into strategic food systems insights.

The GIS mapping process included implementing the USDA ERS assessment of the case study community's food desert status by exploring the agency's Food Access Research Atlas. An urban "food desert" is functionally understood to be a community with limited access to fresh foodstuffs and a lead indicator to potential food access challenges. Technically, a "food desert" is defined by the USDA ERS as a census tract which is characterized by two qualifiers simultaneously²:

- 1) It is a census tract which is "Low Income," meaning:
 - a) The tract's poverty rate is 20% or greater; or
 - b) The tract's median family income is lesser than or equal to 80% of the state-wide median family income; or
 - c) The tract is in a metropolitan area and has a median family income less than or equal to 80% of the metropolitan area's median family income.
- 2) It is a census tract which is "Low Access," meaning:

² <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/>

- a) Low-income census tracts where a significant number (at least 500 people) or share (at least 33 percent) of the population is greater than ½ mile from the nearest supermarket, supercenter, or large grocery store for an urban area or greater than 10 miles for a rural area;
- b) Low-income census tracts where a significant number (at least 500 people) or share (at least 33 percent) of the population is greater than 1.0 mile from the nearest supermarket, supercenter, or large grocery store for an urban area or greater than 10 miles for a rural area;
- c) Low-income census tracts where a significant number (at least 500 people) or share (at least 33 percent) of the population is greater than 1.0 mile from the nearest supermarket, supercenter, or large grocery store for an urban area or greater than 20 miles for a rural area.

To make this assessment congruent with the USDA ERS food desert status assessment, a nationally recognized standard, the case study community's food landscape was assessed on the census tract level while leveraging granular neighborhood-level information. Consideration of city limits was made for visual delineation for municipal partners involved in the research process. The USDA ERS method was built upon by including additional food access point types beyond supermarkets and supercenters. To reflect the case study community's food landscape more completely, small grocery stores, community gardens, food pantries, fast-food restaurants, convenience stores, and farmers markets were added to the analysis.

When considering the intricate analysis of physical barriers possible with GIS, one method for measuring physical distance was observed to be the most meaningful for reaching the stated research objectives; network analysis. Distance measurements through Euclidian assessments, or "as the crow flies," without consideration to the built landscape in a community, is a documented weakness of the USDA ERS method of food access assessments because it can provide an underestimation of distance. Network analysis overcomes the weakness of Euclidian distance measurement by measuring distance through the built landscape, navigating roads or sidewalks from a starting point to a destination. In the case of this research project, distance was measured from residential dwellings to food access points within the Buford Highway corridor, thus providing a more accurate representation of the physical considerations to food access at the community level. To reflect the low car ownership rates observed in the community, distance in the network analysis was calculated through roads to reflect vehicle based transit, as well as by sidewalks where existing data made this possible, to reflect observed and anecdotal pedestrian food access habits. Figure 3 below provides an example to visualize the practical difference between the two distance measurement methods.

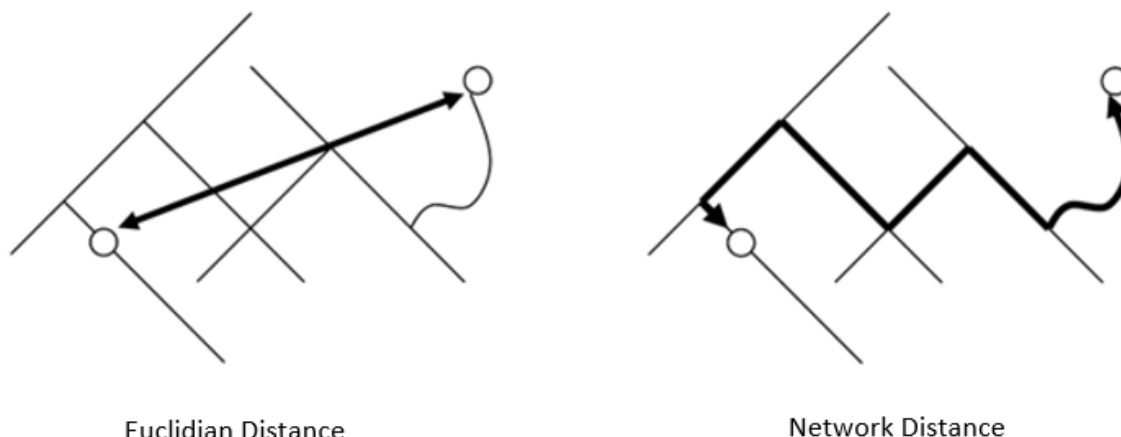


Figure 3. Euclidian distance (left) and network distance (right) (ARC 2020).

Based upon the food access points added to the evaluation, an exhaustive list of food access points in the case study community was compiled to successfully evaluate the food landscape through the network analysis. Data was gathered on the case study community's existing food landscape assets from the USDA, ARC, Esri Business Analyst, Wholesome Wave Georgia, We Love BuHi, and the Atlanta Community Food Bank. Once identified, assets were counted and then mapped within the case study community, and a network analysis was undertaken to assess the physical accessibility of those assets through distance-based measures via street and sidewalk access.

Demographic Analysis

The ability of an individual or a household to afford the food they need is a cornerstone of the food access conversation as conveyed in the UN FAO definition of food security. Therefore, a socio-economic demographic analysis of the case study community's residents was necessary to assess the food security status of the area's population. The consumer pool's capacity to buy the food on offer in their area is very important and it can be influenced by their income, cultural background, educational attainment, poverty status, SNAP participation, English fluency, and housing status. This research project was focused on determining the food security status of the case study community's Hispanic population. Therefore the demographic analysis assessed this specific community's socio-economic characteristics against other racial and geographic communities, where possible, to provide clear benchmarking and understand any potential socio-economic factors which could influence food security within the case study community.

To understand the demographics of this community, ARC assessed the following parameters: race, Hispanic/Latino heritage, median income, unemployment, educational attainment, poverty rate, household size, and SNAP participation. Home ownership type was also assessed and included owner-occupied, renter-occupied, and cost burdened, and renters cost burdened. Data was gathered for these parameters from The United States Census Bureau American Community Survey, American Community Survey, and ESRI Business Analyst.

Community Member Survey

To add context to the focus group discussion's qualitative data, additional information was sought from focus group discussion participants in the form of a paper survey. This survey was developed in English

and translated into Spanish by the project director. The Spanish translation was assessed by native three (3) Spanish speakers for potential errors and alternative interpretations of questions and responses before being approved for use. Administered before the discussion began, the survey was designed to be completed by participants individually. Questions covered a range of topics related to the focus group discussion's aims, including household size, the number of grocery store trips per month, average cost per trip, desirable food characteristics, SNAP enrollment and awareness of SNAP doubling programs, and the two USDA food security screener questions: *In the last 12 months I was worried whether our food would run out before we got money to buy more.* And: *In the last 12 months the food I bought just didn't last and I didn't have money to get more.* Completed surveys were collected before the beginning of the focus group discussion, and results were entered into excel for coding and analysis.

Nutrition Environment Measures Survey

Food availability is a key consideration in the United Nations Food and Agriculture Organization definition of food security (FAO 1996). Therefore, a holistic assessment of a community's food security should involve an assessment of the food available to community members. The Nutrition Environment Measures Survey (NEMS) is a tool used to understand the variety, healthfulness, price, and quality of foods available at food access points. This research tool has been used widely throughout food landscape and nutrition and built environment research. To reach the stated research objectives it was determined to be the most useful tool for this step of the research process because it enabled an assessment of the area's grocery stores' affordability, quality, and availability of healthy and culturally relevant food.

The NEMS tool compares food access locations through a points-based ranking system influenced by the availability of staple food items in the food access locations. These staples include cereals, ground beef, bread, beans, milk, fruit, vegetables, and more. The list of foods assessed in the NEMS analysis is included in Appendix C. Overall scores were calculated based on points allocated in the store visit based on the presence or absence of an item from the predetermined list provided in Appendix C, variety of options available, quality of options available, and the price of options available. A higher score signifies a greater availability of high quality and affordable healthy food at the location in question.

The NEMS tool has been adapted to culturally appropriate foods and the NEMS MX adaptation was utilized for this research project to include consideration for culturally relevant foods within Latinx culture such as chayote, jicama, papayas, and mangoes. While food access points were randomly selected for assessment within the case study community, grocery stores were primarily given priority by the researchers involved due to the frequency which community members reported using them in the focus group discussion.

2.1.2 Qualitative

Rich context of the case study community can be cultivated through qualitative methods focused on incorporating qualitative methods focused on incorporating the perspectives and experiences of lived realities. Qualitative research relies heavily on empirical information and materials such as detailed descriptions and interviews, rather than an epistemological orientation utilizing statistics and numerical data characteristic of quantitative research (Patton, 1990; Johnson and Onwuegbuzie, 2008). Qualitative research has been described as the set of methods which enable the study of things and phenomena in their natural setting, in a way which attempts to interpret them in terms of the meaning people bring to them (Denzin and Lincoln, 1994). Due to the complex nature of barriers to food access, a research

paradigm which enables the researcher to explore dynamic processes, respond to local situations, conditions, and stakeholder needs, is foundational to constructing a clear image of the phenomena and developing practicable solutions. In this study, these methods include focus group discussion and stakeholder interviews.

Stakeholder Interviews

Ensuring a holistic perspective of the challenges faced by community members required community stakeholder interviews; to gain a top-down perspective from the organizations which have influence over the community's food security status directly or indirectly. Potential interviewees were identified by the research project director and project manager through purposive sampling and snowball sampling. Stakeholders were defined as workers or members of NGOs or government agencies in and around the Buford Highway, Brookhaven, Chamblee, and Doraville communities. Stakeholders were not given any incentives for participating. Some of the identified stakeholders were members of well-known groups that serve the area, such as We Love BuHi, Latin American Association, and the US Department of Agriculture. All interviewees either worked for a business, a non-profit, a local municipality, or a governmental agency that engaged either directly or indirectly with the case study community's food security. These individuals were contacted by the research assistant via email in February 2020. Seven individuals confirmed their interest and availability. Of the 7 participants, only 3 were members of the communities in question. The rest of the participants had loose ties to the communities in question. It is unclear if any of the participants are direct members of the Latino communities along Buford Highway in the communities of Brookhaven, Chamblee, or Doraville. Telephone-based interviews were completed between February and March 2020.

The project management team designed the 9-question survey that was administered to all participants. Please see Appendix A for a copy of the interview guide. Interviews were structured and all interviewees were asked the same 9 questions in the same order. A copy of the questions can be found in Appendix A. Responses were documented in Microsoft Word during the interviews and assessed afterwards. Responses were assessed for content and themes.

Focus Group Discussion

Little public knowledge is currently available to inform decision makers about the drivers which motivate the Buford Highway Hispanic community's food decisions and how their community food landscape influences their food experience. Due to this lack of information, this research project was determined to be formative and therefore an understanding of case study community member experiences and perceptions was desired to meet the stated research objectives. Focus group discussions were thus determined to be an acceptable, if not ideal, tool for this step of the research process following previous research undertakings (Boateng 2012, Dubowitz *et al.*, 2006, Food Empowerment Project 2014, Gill *et al.*, 2008).

The experiences and perceptions of community members were prioritized in this phase of the research. The drivers and motivators behind food decisions and how the food landscape influences community members' food experience was the focus of this research step. Therefore, the following research question was asked to guide this step: *What drivers motivate the food decisions for members of Buford Highway's Hispanic Community and how does the food landscape influence their food experience?*

To the extent of answering the research question presented, three (3) aims were identified to develop the focus group discussion questions.

1. Understand the preferences and drivers which motivate community member's food decision making processes.
2. Understand barriers and facilitators which influence access to preferred food options within the community food landscape.
3. Determine community level perceptions of the occurrence of food security and potential solutions.

The one and only focus group discussion completed for this research project was held in November 2019 in a safety net clinic that is well-known within the area Hispanic community located in the City of Chamblee. A second discussion was planned for February at a second Hispanic community serving non-profit located within the case study community, however due to COVID-19-related restrictions, that focus group discussion was cancelled.

Focus Group Guidelines and Process

Mercy Care Chamblee, a safety net clinic within the case study geography with a predominantly Hispanic client base, was a key partners throughout the research process and served as a liaison in the recruitment of focus group participants. To recruit participants, Spanish speaking community outreach staff at the clinic directly engaged with Spanish speaking clients while they were at the clinic seeking services. Participants were given lunch and a \$35 Visa gift card to compensate them for their time.

Before the discussion began, participants were provided a hard copy of the consent form in Spanish for all to understand, this form was read aloud by the facilitator (Appendix B). Consent was gained for use of data gained from the discussion in this report. Verbal consent was gained from participants permitting recording of the discussion. Additionally, the contact information and additional copies of the consent form were provided to all participants at the conclusion of the discussion. Before the discussion began, a paper survey was administered, completed, and collected by all participants present (Appendix A). This aided in collecting some demographic characteristics, discussed more in the quantitative methods section below.

The discussion was facilitated by the author of this report, a native English speaker who is fluent in Spanish. Notes were taken during the discussion by a native Spanish speaker volunteer.

Data Analysis and Security

After the discussion, the recording was transcribed in Google Docs by the facilitator through the application's voice to text function. Application-based errors such as missed or incorrect words were corrected during transcription. Once transcribed, the transcript was translated by the facilitator into English, and content and content analysis began. Coding was completed in Excel to facilitate thematic analysis.

Due to sensitivity regarding documentation and immigration status within the community and to maintain confidentiality, participants did not provide their names during the focus group discussion. Responses were, by default, deidentified. Participants were identified by the differences in their voices, and each participant received a number during transcription. A copy of the discussion recording was kept on the facilitator's phone and the laptop. These will be deleted when the final report is delivered to, and accepted by, the project management team.

2.2 Limitations

Multiple limitations were noted during the course of this study which could limit broad application and generalizability. The below themes were observed which were related to this understanding:

1. ARC noted in their technical memo that underreporting data is common in immigrant-concentrated areas. Immigrant populations may not complete surveys or underreport answers because of language barriers or government distrust. While statisticians do their best to address this problem, ACS and other data may not reflect the area's true conditions, particularly at a granular level³. For instance, much of the data specific to the Hispanic population has a substantial margin of error, and therefore, data specific to the Hispanic population contain significant variability. Because Buford Highway is home to a large immigrant population, the data presented in the following section is subject to underreporting errors and high variability. (2020).
2. While two focus group discussions were planned to add value to this research project, only one was undertaken. COVID-19-related challenges pertaining to community engagement including the statewide shelter in place order executed on April 2nd, 2020 eliminated the possibility of community-based research from March 2020 until the end of the research project in July 2020.
3. As with any GIS based evaluation of the food landscape which imposes paper or digital borders upon a community, a grain of salt must be taken in the analysis. These borders represent delineations necessary for such analyses but are rarely observed to directly influence individual mobility and agency. Additionally, this limits the number of food access points and distance from homes in the network analysis because only food access points within the boundary were included. Future research could superimpose a buffer of ½ to 1 mile around the study area to account for these shortcomings.
4. Focus group participants may not be completely reflective of the overall community because of their age and gender. The senior female perspective is only one of many in the community, and inclusion of additional younger and male perspectives would provide critical information in future research.
5. The nutrition environment measures survey only assesses the availability of beans, chicken, and beef for proteins at food outlets and does not include pork, lamb, and fish.
6. In the stakeholder interview study, none of the participants self-reported being Latino or belonging to the Latino community through familial ties. Furthermore, four (4) of the participants do not have any direct connection to the communities in question. Their opinions and insights cannot be taken into consideration, and if they are, it should be done with caution. Though they might not have direct interaction with the communities in question, there is a possibility for indirect actions that could be influencing the food security of community members in the areas of question. There is a need to assess what, if any, indirect influences might be. An earnest attempt was made throughout the duration of this project to include Latinx leaders of local Hispanic community serving agencies however they were unable to participate due to ongoing schedule conflicts.

³ Farah Z. Ahmad and Christian E. Weller. "Reading Between the Data: The Incomplete Story of Asian Americans, Native Hawaiians, and Pacific Islanders." (2014)

3. Results and Discussion

3.1 GIS Analysis

The GIS analysis of the case study community's food landscape considered three aspects: the food desert status, food access points present in the community, and the network analysis. This collection of analyses created a wealth of information from a bird's eye view of the Buford Highway Corridor. The full corridor begins in the City of Brookhaven, runs through the City of Chamblee and Doraville, and runs north east away from Atlanta. For the sake of this study these analyses were limited to the segment from the City of Brookhaven to the City of Doraville, illustrated in Figure 4 below.

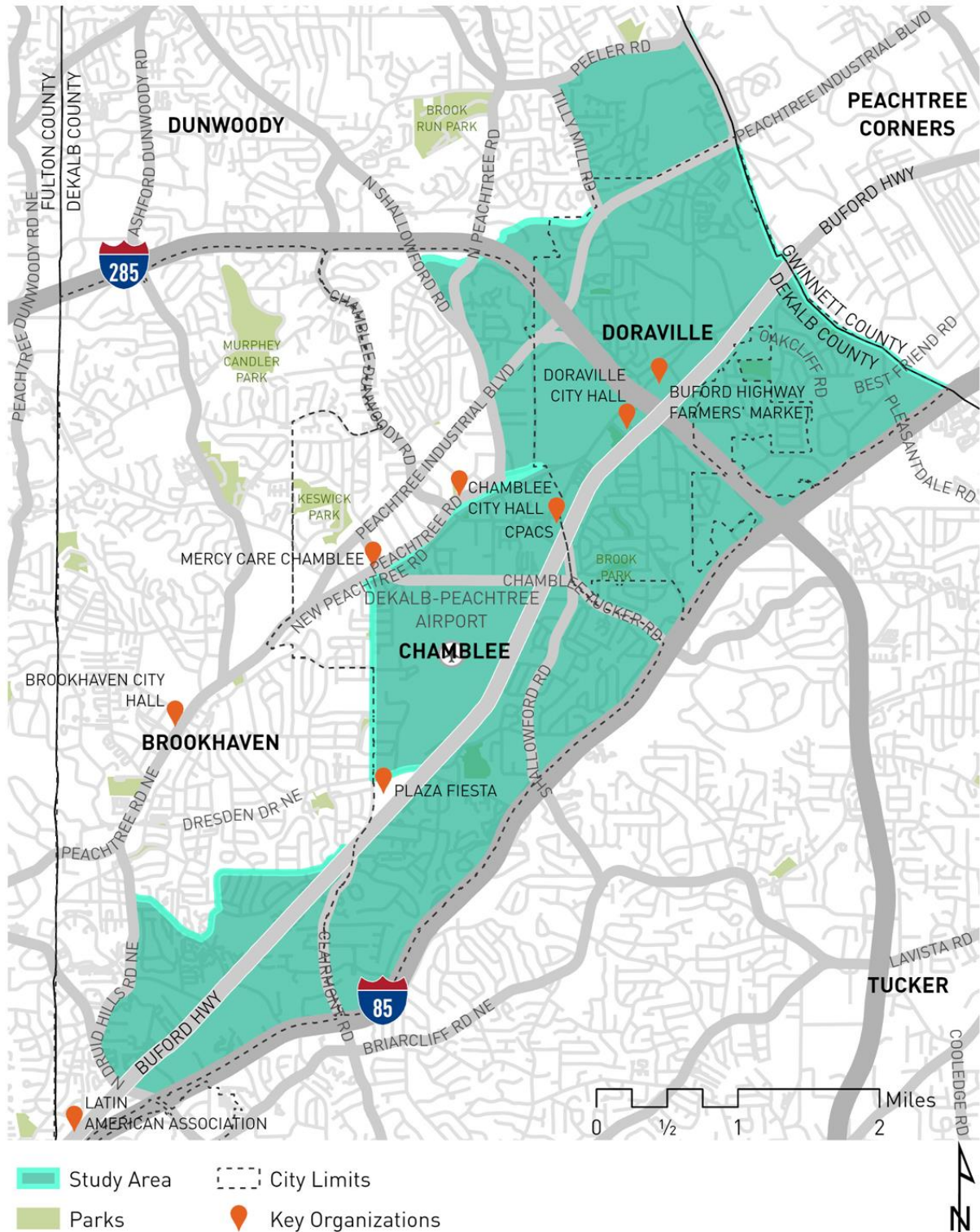


Figure 4. Case Study Geography: Buford Highway Corridor including the Cities of Brookhaven, Chamblee, and Doraville

The food desert status, also referred to as a LILA area (low income and low access), as determined by the USDA ERS, of the case study community was identified first. A USDA food desert is a census tract-

level qualification which utilizes two criteria: community income, and access to supermarkets. Against that standard, as shown in Figure 5 below, the case study community is almost entirely a food desert with just the south western corner escaping this classification. This initial assessment indicates a low degree of food accessibility within the case study community.

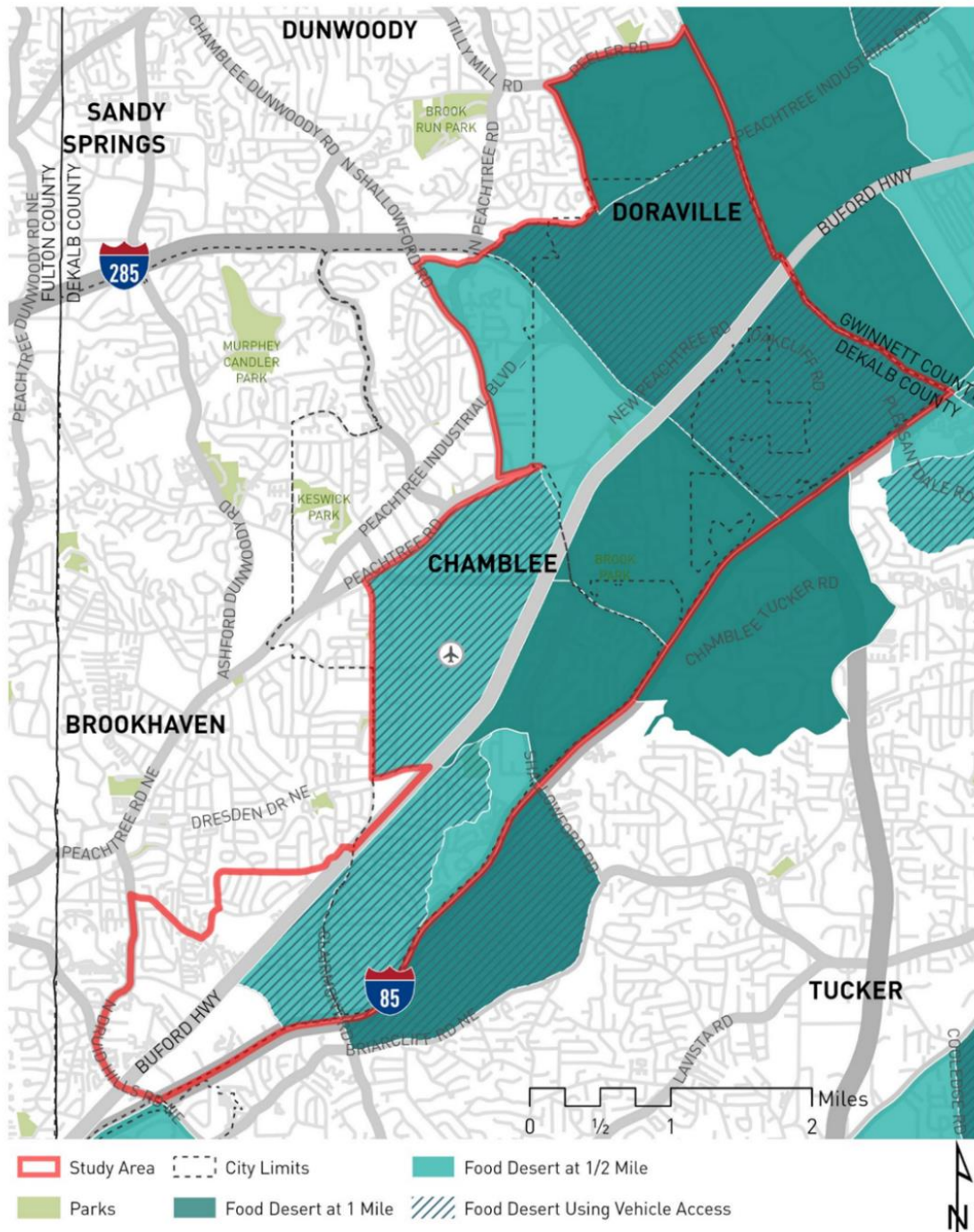


Figure 5. Buford Highway corridor food desert status (ARC 2020)

The food landscape asset inventory compiled by ARC revealed that the Buford Highway Corridor is home to a profoundly diverse and rich food landscape. Table 1 below summarizes the findings, illustrating the case study community's food landscape diversity. There exist 185 restaurants, 59 fast-food restaurants, 53 small grocery stores, 14 convenience stores/gas stations, 11 farms/gardens, 9 food pantries, and 8 supermarkets. Some could infer that this community is not so much of a food desert, but more of a food swamp. A food swamp, as compared to a food desert is more characterized by an overabundance of unhealthy food options like fast-food restaurants (Cooksey-Stowers *et al.*, 2017). With 185 restaurants and almost 60 fast food restaurants located in the community, there is a very high density of generally unhealthy food options available to community members. These are usually associated with long-term adverse health outcomes (Cooksey-Stowers *et al.*, 2017). The distribution of these food access points is visualized in figure 6 below.

Community Food Access Points	
Supermarkets	8
Small Grocery Stores	53
Gardens/Farms	11
Food Pantries	9
Farmer's Markets	0
Convenience Stores/Gas Stations	14
Fast-Food Restaurants	59
Restaurants	185

Table 1. Food landscape asset inventory (ARC 2020).

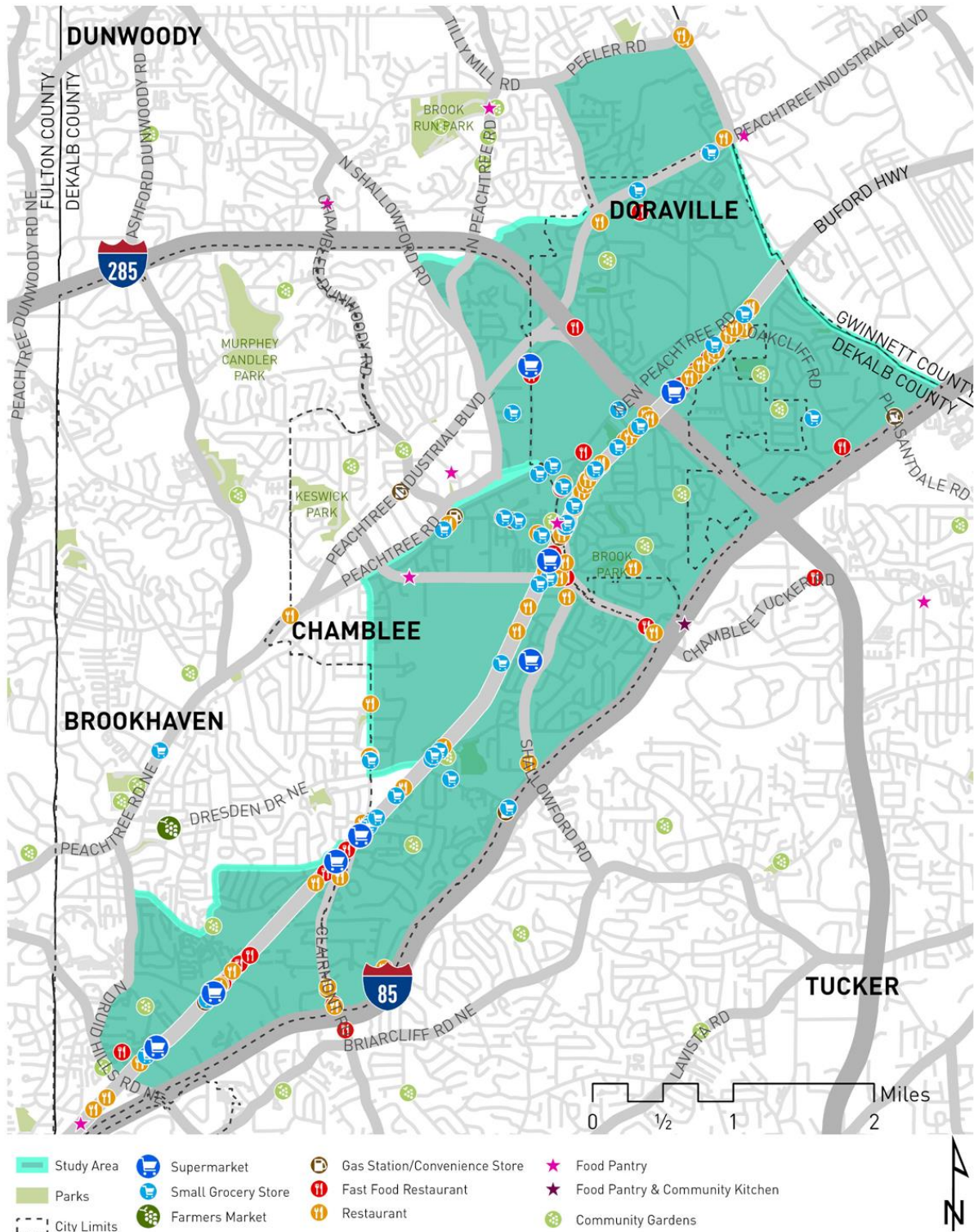


Figure 6. Buford Highway corridor food landscape assets (ARC 2020).

The USDA food access research atlas does not assess physical distance to food outlets. However, distance has been cited as a barrier to food access, especially in communities with low vehicle access

rates. Therefore a network analysis, which does calculate distance through the built landscape, was undertaken to calculate the distance from residential plots in the community, to identified supermarkets and small grocery stores. This analysis was based upon pedestrian walking times to the two kinds of food access points as illustrated in figures 7, 8, and 9. Though the corridor has a rich collection of food access points, only supermarkets are considered in figure 7, and supermarkets and small grocery stores are considered in figure 8. Figure 8 illustrates the 7 supermarkets in the corridor and the large swaths of the community which are not considered within walking distance to those supermarkets. Figure 8 provides an insight into how much more accessible food is when considering the 53 small grocery stores which also usually very culturally relevant. Under the scenario in figure 7 the community's food access points could be deemed "walkable" because a significant portion of the area is within a 15 minute walk to those stores. When considering access options accessible through sidewalks, as shown in Figure 9, choices become more limited and many spaces in the community are not accessible due to gaps in pedestrian infrastructure. Such gaps in sidewalks can hinder pedestrian access to food outlets and thus prove to be a barrier to community nutritional well-being in areas with low car ownership rates. For example within the case study community 11.8% of households do not have access to a vehicle (ARC 2020).

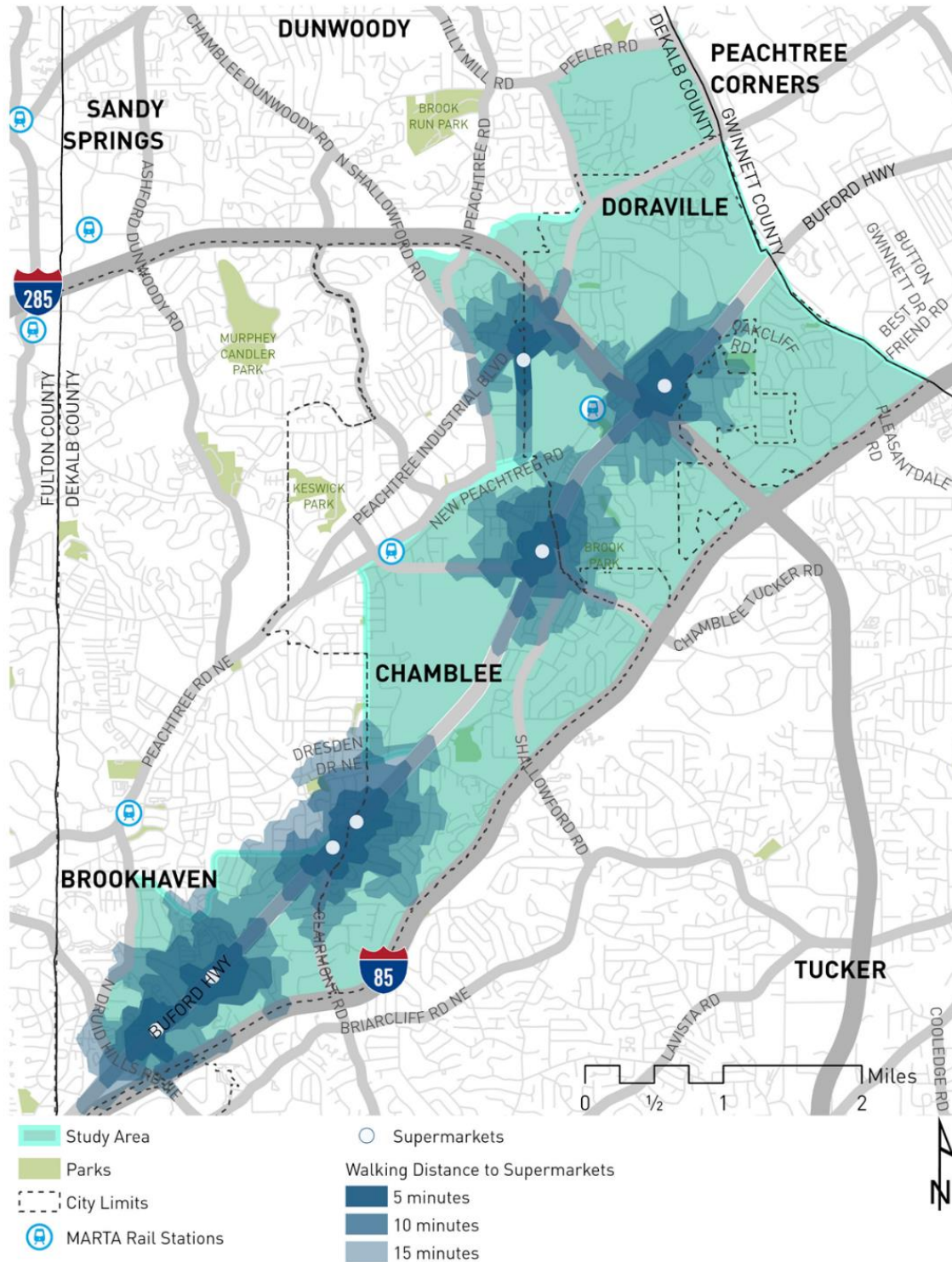


Figure 7. Buford Highway corridor access to supermarkets via street network, measured by walking time (ARC 2020).

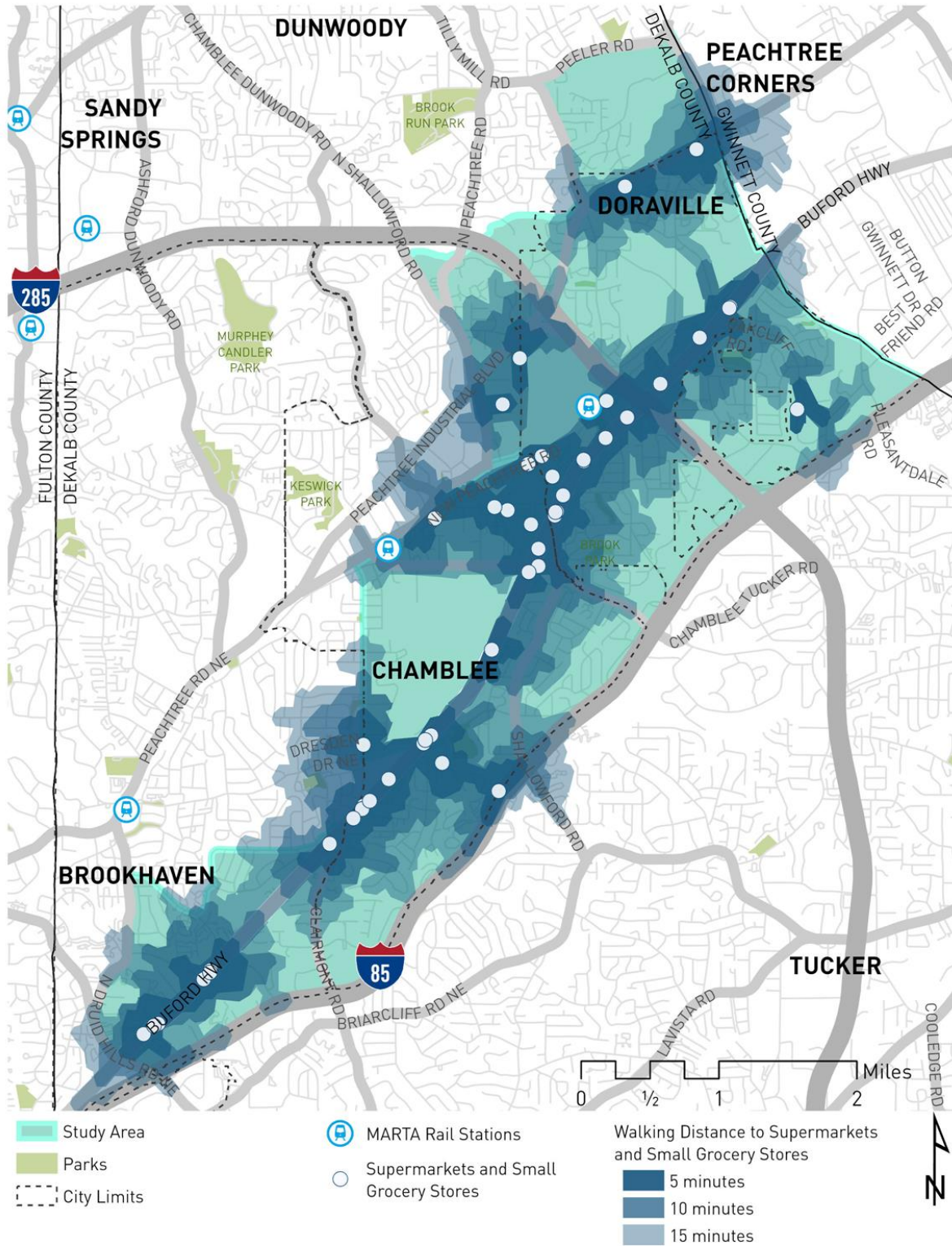


Figure 8. Access to supermarkets and small grocery stores via streets (ARC 2020).

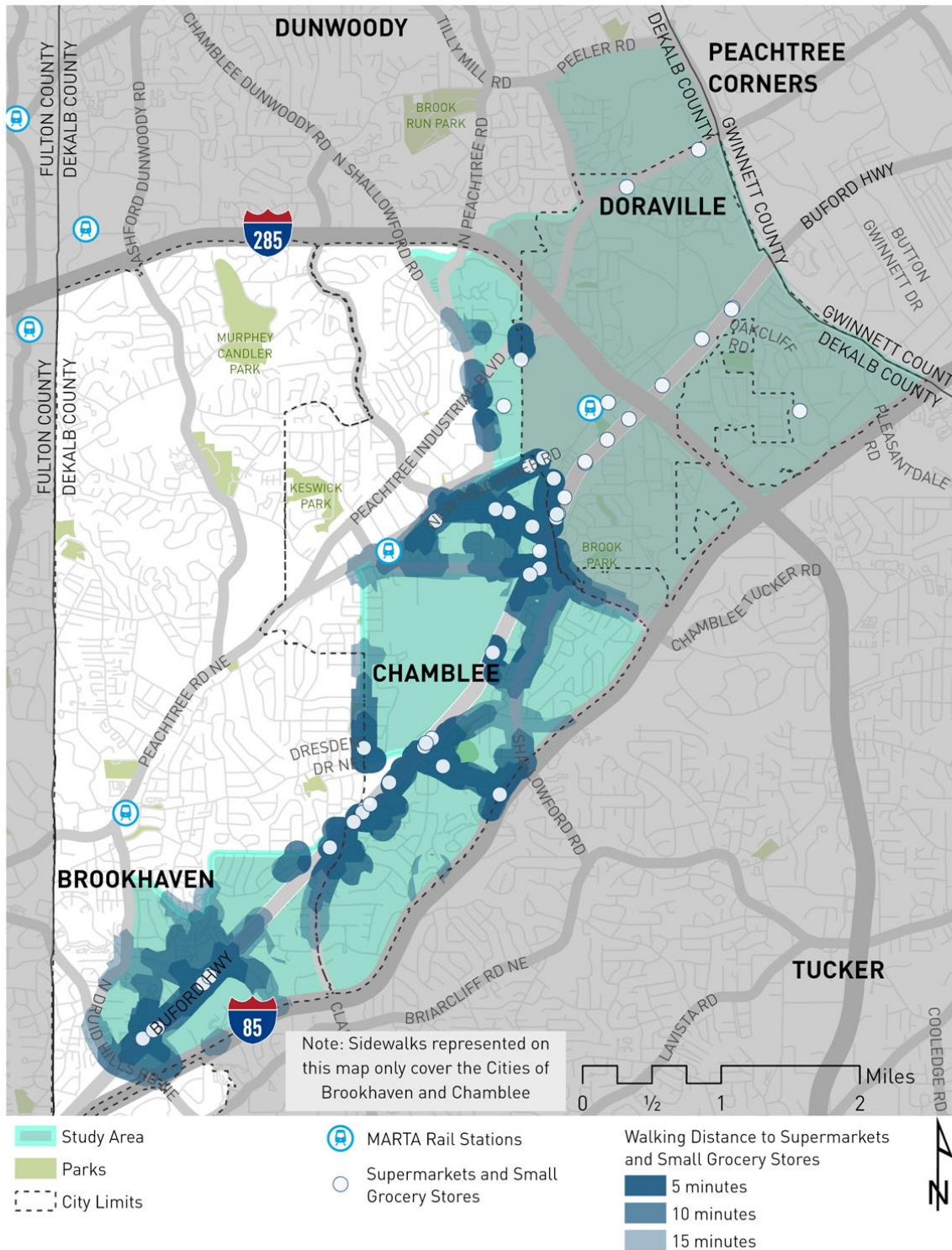


Figure 9. Access to supermarkets and small grocery stores via sidewalks (ARC 2020).

3.2 Demographic Analysis

Atlanta Regional Commission's demographic analysis assessed the case study community's racial composition, heritage, median income, unemployment, educational attainment, poverty rate, household size, home ownership, owner-occupied, renter-occupied, cost burdened, renters cost burdened, and SNAP participation. Table 2 illustrates the racial and ethnic composition of the case study community against the county in which it is located and compared to the Atlanta Metropolitan area. As seen below, the case study area's population is 54% Hispanic, which is well above the county and metro-area levels by comparison. Furthermore, at 67.2%, the majority of Hispanic or Latinx individuals in the case study community are of Mexican heritage, with the second largest contribution belonging to Guatemalans at 14.6% (ACS 2018). Many additional Latin American countries are represented in the community's culture, including Honduras, El Salvador, Puerto Rico, Nicaragua, Peru, Cuba, The Dominican Republic, Colombia, and Argentina. Please note that not all races, ethnicities, and countries of origin are not included in the below table for the sake of focusing on the case study community. Therefore not all columns total out to 100%.

Race & Ethnicity			
Indicator	Study Area	DeKalb County	Atlanta Region
Total Population	59,076	736,066	4,441,998
By Race			
White	38%	32%	44%
Black	16%	54%	40%
Asian	12%	7%	8%
Other	28%	4%	5%
Ethnicity			
Hispanic	54%	9%	12%

Hispanic or Latino Origin	Percentage
Mexico	67%
Guatemala	15%
Honduras	5%
El Salvador	5%
Puerto Rico	2%
Other	2%

Table 2. Case study community demographics: racial and ethnicity breakdown (Esri Business Analyst: ACS Estimates 2013-2017).

Table 3 below illustrates key household level indicators including median income, poverty, unemployment, and cost-burdened households. Cost burdened households are those which are estimated to spend 30% or more of household income on housing costs (U.S. Department of Housing and Urban Development 2019). As can be seen in the table, median income is slightly lower than the county average and significantly lower than the metro-area average. The number of households living below the poverty line is understandably higher in this community as compared to the county and metro-region averages, by 11 and 12% respectively. Curiously, however, the unemployment rate is slightly lower in the case study community as compared to the county and the metro-region average, indicating lower wages for those who are employed.

Furthermore, not only do a greater number of households rent their homes, the overwhelming majority of those who rent are cost burdened and thus likely expending most of their income on housing, leaving fewer financial resources for food and other expenses. Where elevated poverty levels and high rates housing cost burden intersect, a high SNAP participation rate could be expected however this is not the observed in the case study community.

Household Data			
Indicator	Study Area	DeKalb County	Atlanta Region
Number of Households	19,061	273,614	1,588,494
Median Income	\$ 53,284	\$ 55,876	\$ 67,625
Below Poverty Line	26%	15%	14%
Average Household Size	3.1	2.5	2.7
Unemployment	4%	5%	5%
Owner-Occupied	28%	54%	39%
Renter-Occupied	72%	46%	39%
Cost Burdened	27%	42%	33%
Renter Cost Burdened	52%	52%	43%
SNAP Participation	14%	15%	12%

Table 3. Case study community household data (Esri Business Analyst: ACS Estimates 2013-2017).

Educational attainment in the case study community, as shown in Table 4 below, is polarized and indicates educational disparities. The portion of individuals who do not have a high school diploma is almost equal to the number of individuals who have a bachelor's degree or higher.

Educational Attainment			
Indicator	Study Area	DeKalb County	Atlanta Region
No High School Diploma	30%	10%	9%
High School Diploma	22%	18%	22%
Some College	16%	25%	27%
Bachelor's Degree or Higher	33%	44%	42%

Table 4. Case study community educational attainment (Esri Business Analyst: ACS Estimates 2013-2017).

The demographic analysis of the case study community indicates that it is home to a majority of individuals of Hispanic heritage, above average rates of poverty, below average income, high rates of renter-occupied households, low rates of educational attainment, and an alarming amount of cost-burdened renters. The case study community in question could certainly be considered low income, and food security barriers related to economic factors could be common.

3.3 Community Member Survey

Before the focus group discussion began, a paper survey was administered to ascertain information on household size, the number of grocery store trips per month, average cost per trip, desirable food characteristics, SNAP enrollment and awareness of SNAP doubling programs, and the two USDA food security screener questions:

1. *In the last 12 months I was worried whether our food would run out before we got money to buy more. And;*
2. *In the last 12 months the food I bought just didn't last and I didn't have money to get more.*

All 25 respondents were female, and the average age was determined to be 62, and the ages ranged from 25 to 81 years old. All respondents were native Spanish speakers. Heritage was not asked of participants in the survey. Individuals reported shopping for groceries almost 3 times per month, on average. A few reported going weekly, while an equal number reported that grocery shopping was a once per month endeavor. Reported household size varied between 1 and 7, with an average of 3.5 people per household. When comparing household size against self-reported grocery expenditure, larger households frequently reported spending an equal amount in total, to smaller households. This leads to a lower cost of food per person and indicates that just because a house or apartment is home to more people, the food budget does not necessarily increase to accommodate the nutritional needs of more occupants. Table 5 below summarizes these findings.

Survey Responses	
Grocery Trips per Month	
Maximum	4
Minimum	1
Average	2.7
Cost per Trip	
Maximum	\$ 300
Minimum	\$ 75
Average	\$ 174
Household Size	
Maximum	7
Minimum	1
Average	3.5

Table 5. Survey results: grocery trips, expenditure, and household size

Individuals were asked to rank a variety of food characteristics which they believed influenced their food decisions from most important to least important on a scale from 1 to 11. The characteristics ranked included: flavor, price, nutrition, ease of preparation, quality of food (fresh appearance), variety, brand, expiration date, cultural familiarity, or another unlisted factor. Overall only 4 characteristics were ranked most important including price, nutrition, quality, and “other.” Participants ranked price as the most important factor far more frequently than any other characteristic, 7 times to be specific. Nutrition and quality came in as the second most frequently ranked first, with 3 each, followed by “other,” which was not specified by respondents. Figure 10 below presents these results.

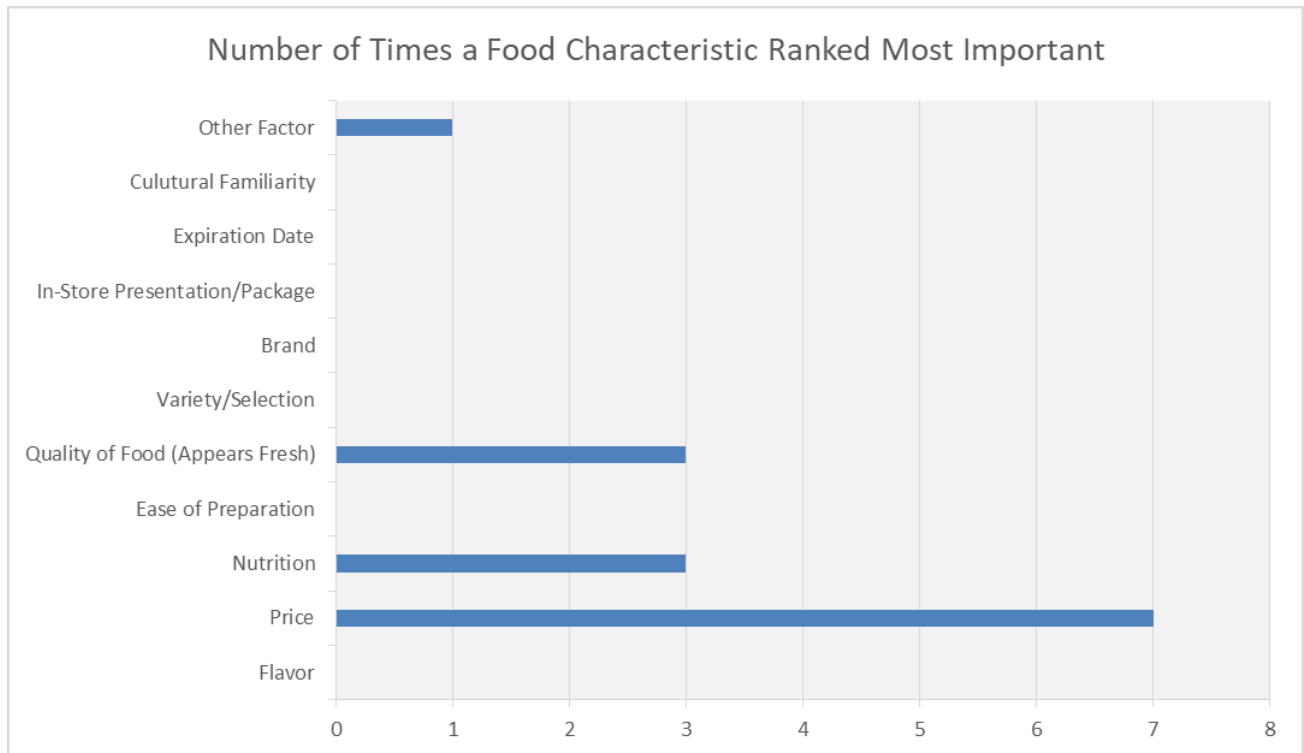


Figure 10. Food characteristic importance ranking.

Participants were asked if they were currently using or had previously used the Supplemental Nutrition Assistance Program (formerly known as Food Stamps EBT) as well as their level of awareness around SNAP doubling programs at local farmers markets. Figure 11 below illustrates that of the 25 respondents, 5 had previously or were currently using SNAP benefits. The same figure also illustrates the finding that only 4 individuals were aware that SNAP doubling programs existed at local farmers markets. In the group of 25 respondents, 5 confirmed that they had previously, or were currently using, SNAP benefits. At a rate of 20%, community member utilization is 6% higher than the reported community average rate according to ARC's analysis. In any future research, it would be helpful to distinguish between those individuals who have previously used SNAP benefits, from those whom are currently using SNAP benefits.

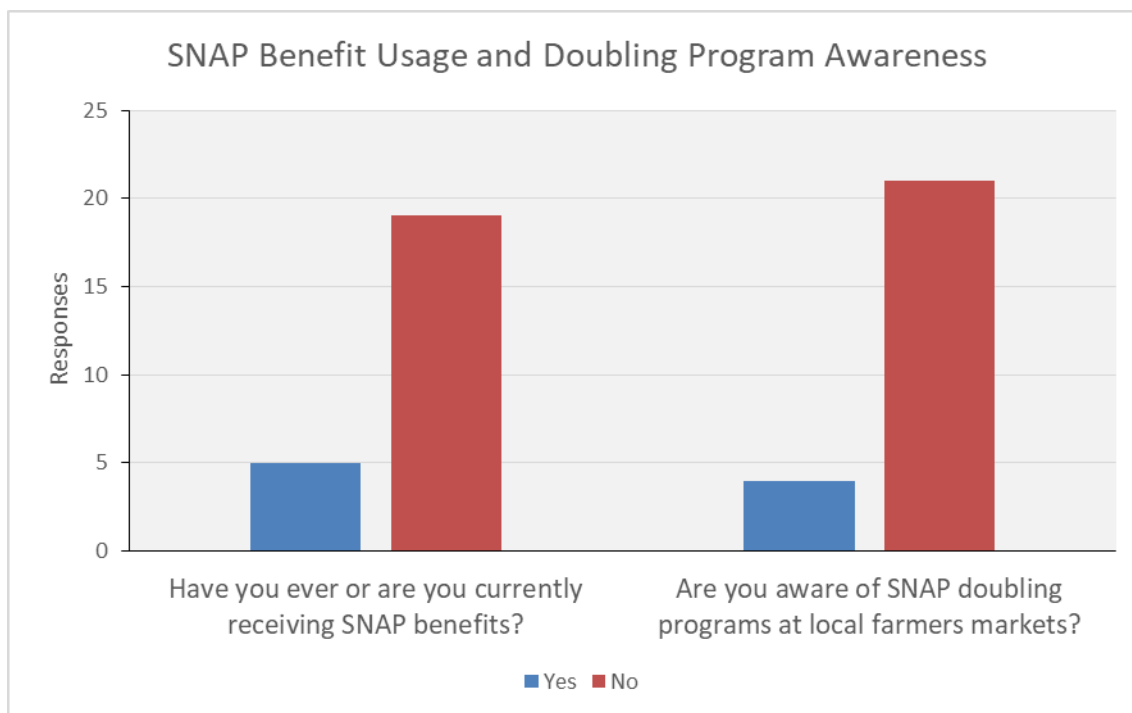


Figure 11. SNAP benefit usage and awareness of SNAP doubling programs survey results.

Two of the USDA's validated food security screening questions were included in the survey. These questions are posed as statements, and respondents are encouraged to answer in accordance to the frequency which they felt it was true for themselves. The first is *"I worried whether our food would run out before we got money to buy more,"* and the second is *"The food that we bought just didn't last, and we didn't have money to get more."*⁴ Two thirds of participants responded, "Sometimes" to both questions, with 1/3 responding "rarely". Alarmingly, 8% responded "frequently" to the second food security screening question. The average rates of food security in the United States, Georgia, and DeKalb County are 12.5%, 14%, and 17.9%, respectively. Therefore this community is well above average in food insecurity (Feeding America 2017). In accordance with USDA recommended data interpretation methods for these questions, the responses below indicate a low level of food security among respondents (USDA ERS 2002). Figures 12 and 13 below offer a visual representation of the results to these food security screener questions.

⁴ USDA ERS, 2002. Community Food Security Assessment Toolkit. PDF.

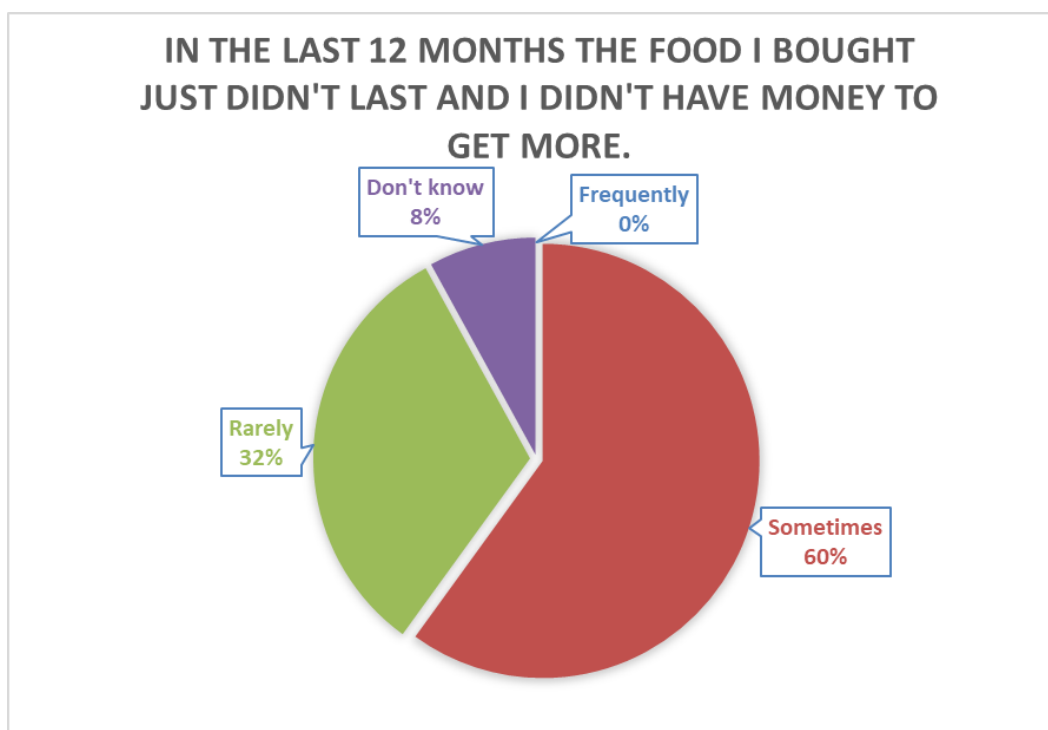


Figure 12. Survey result: USDA Food security screener question 1.



Figure 13. Survey result: USDA Food security screener question 2.

3.4 Nutrition Environment Assessment Surveys

Assessing the food available for purchase within the case study community in combination with the other methods implemented, offers an opportunity to make this food security assessment more holistic.

In the NEMS assessment, four food access points were visited, all 4 were large supermarkets. All 4 were assessed in February 2020. The surveys completed in February 2020 included plans for an additional assessments of one more supermarket outside of the case study community to create a benchmark to compare the cost of foodstuffs with a food access point outside of the corridor. However, social restrictions and availability challenges of foodstuffs due to COVID-19 made those additional visits impossible and unlikely to produce useful data.

Food access outlets in the community were surveyed by Emory University researchers for affordability, quality, and availability of healthy and culturally relevant foods. In total, 4 grocery stores which had been identified in the GIS analyses were assessed. Stores visited are listed in Table 6 below. Fifty percent of grocery stores in the corridor were assessed through this research step with the culturally adapted NEMS MX tool. Scores were calculated based on points allocated in the store visit based on the presence or absence of an item from a predetermined list, Appendix C, variety of options available, quality of options available, and the price of options available. A higher score signifies a higher availability of quality and affordable healthy food at the location in question.

Store Name	Store Type
Buford Highway Farmers Market	Large Supermarket
City Farmers Market	Large Supermarket
Mercado Fresco	Large Supermarket
Kroger	Large Supermarket

Table 6. Food access points assessed through the Nutrition Environment Measures Survey

[Buford Highway Farmers Market](#)

Due to the high quality and excellent availability of foodstuffs at the Buford Highway Farmers Market, this supermarket gained high marks in those fields. While some processed foods were unavailable at the store, fresh fruits and vegetables were abundant and included many all culturally relevant options added to the NEMS analysis through the MX amendment. The produce department occupies a large space within the store and had multiple specials on offer during the visit. The prices of low fat and reduced fat items were equal to or higher than conventional items when compared. Reduced fat options were not available for relevant items including baked goods and chips. A limited availability of whole wheat breads was also noted in the store. A summary score is provided in Table 7 below, and the complete scoring sheet is available in Appendix C.

Buford Highway Farmers Market NEMS Score	
Availability	27
Price	0
Quality	6
Total	33

Table 7. Buford Highway Farmers Market NEMS Score

[City Farmers Market](#)

Food quality at the City Farmers Market was high and only marginally lower than the quality observed at the Buford Highway Farmers Market. A wide selection of fresh fruits and vegetables was available in the produce section of this grocery store. Only one vegetable on the NEMS MX list was not found - chayote.

Lean beef options were not available nor were frozen dinners or low fat potato chips. Food pricing was competitive and similar to the Buford Highway Farmers Market, albeit slightly better. Granting it a one point price advantage. As with the Buford Highway Farmers Market, low and reduced fat options were either the same price or more expensive as regular items, or not available. A summary score is provided in Table 9 below and the complete scoring sheet is available in Appendix C.

City Farmers Market NEMS Score	
Availability	26
Price	1
Quality	6
Total	33

Table 8. NEMS Score, City Farmers Market

Mercado Fresco

Of the 4 grocery stores visited in this assessment Mercado Fresco had the lowest availability score due to a technicality in the NEMS MX tool requiring fat content labeling on certain items which had not been labeled at this store. Lean meats were omitted from the scoring for this store because meats in the store were not labelled for fat content. Likewise, baked goods from the store's bakery were not labeled for sugar or fat content. Fresh produce quality and availability were high and comparable to what was observed at the Buford Highway Farmers Market and the City Farmers Market. Like the City Farmers Market, chayote was absent from Mercado Fresco's produce section. Prices for healthy foods were equal to or lower than regular items. This pricing helped Mercado Fresco earn the technically highest price score of the four grocery stores analyzed. However comparisons should be limited due to the pricing weight which was removed from the score because lean meat options and baked good options were omitted due to labeling technicalities. If an item was omitted due to this technicality, it resulted in zero points, rather than a negative point adjustment. A summary score is provided in Table 9 below, and the complete scoring sheet is available in Appendix C.

Mercado Fresco NEMS Score	
Availability	23
Price	4
Quality	6
Total	33

Table 9. NEMS Score, Mercado Fresco

Kroger, Buford Highway

Kroger's location on Buford Highway earned the highest overall marks for this assessment due primarily to produce availability and consistent nutrition labeling. Prices were usually higher for healthier items; however, and the size of the produce department was the smallest of the four stores visited. The produce department also had fewer varieties of produce and fewer specials. Produce quality however was comparable to the other grocery stores. A summary score is provided in Table 10 below, and the complete scoring sheet is available in Appendix C.

Kroger, Buford Highway NEMS Score	
Availability	31
Price	2
Quality	6
Total	39

Table 10. NEMS Score, Kroger, Buford Highway

The results of the nutrition environment measures Survey (NEMS) indicate high rates of food availability within the case study community with healthier options usually priced equally to or greater than, conventional options, like low fat and whole milk, for example. All supermarkets assessed scored high marks for quality and had many culturally relevancy fresh produce options available, which is very encouraging. Based on this analysis, it appears that the availability of foodstuffs at supermarkets in the corridor is currently supportive of a food secure community.

3.5 Stakeholder Interviews

The 7 stakeholder interviews each lasted 15 - 20 minutes, but a few were as short as 3-5 minutes if they participants felt that they could not speak to food insecurity in the areas in question, or if they felt they could not speak to the issue given their job restrictions.

Analysis of the results uses ecological theory as a way to name and discuss the different factors that contribute to food insecurity along the areas of interest. “Ecological theory of human development identifies four levels of influence families face as they attempt to maximize their well-being: 1) microsystem (e.g., individuals and families), 2) mesosystem (e.g., social networks), 3) ecosystem (e.g., community), and 4) macrosystem (i.e. larger cultural context).

With regard to food security, the levels are reciprocal and interrelated; the elements of each level affect the ability of a family to meet its daily food needs” (Sano et al., 2011). While conducting interviews, it was apparent that there were distinct levels at which people could point to and name as the reason members of the Latin community might be experiencing food insecurity. This is not to say that each person or family unit only experiences food insecurity at one particular scale; these scales can often build on one another to intensify the problem. Three emergent themes were discovered when analyzing responses from the interviewees.

1. Documentation Status

One of the main issues that participants identified as being a contributor to the lack of food security in the Latino community was the lack of legal status. One participant pointed out that immigrants without a legal right to be here lack access to important social benefits, such as IDs and drivers’ licenses, which can affect their ability to receive benefits such as SNAP and healthcare and navigate a car-centric landscape. A restricted ability to be involved in the larger community affects their mental health as well because of underlying fear of deportation that is ingrained in every decision community members without documentation or a clear legal status make. Furthermore, stakeholders identified anti-immigrant sentiment in the U. S. government at the federal level as “trickling down” into these communities. That anti-immigrant sentiment has led to biased legislation and xenophobia that affects the immigrant communities of Brookhaven, Chamblee, and Doraville.

2. Language Barriers and a Lack of Representation in Government and Housing

Participants mentioned that they believed that language barrier contributes to larger issues beyond social integration. Without proper knowledge and comprehension of the English language, members of the Latin community are further left out of possible programs that can help them achieve food security. An example of this which was provided by an interviewee was that community members can be unaware of their qualification for SNAP benefits and how they can seek out and apply for those benefits. Furthermore, their inability to communicate with the local government has impeded their participation in City Council meetings as well as the city planning process. City council and planning efforts to improve community engagement with their Spanish speaking residents would be very meaningful. Lack of representation has intensified the transportation barriers these communities face as well and has been associated with increases in rent prices seen in this area. Without proper access to reliable and consistent transportation services, such as MARTA, members of this community can face challenges when trying to reach grocery stores. In terms of housing insecurity, one participant stated that housing insecurity leads to food insecurity.

3. Community Assets

Despite the various obstacles the Latin communities in and along Buford Highway face, one thing that stood out across all participants was their willingness to provide support or to be part of this conversation for the benefit of the communities at hand. This is significant because stakeholders represented a wide range of industries, private, public, and non-profit. A stakeholder that's a prominent land owner along Buford Highway explained that although food security is not an issue he is familiar with, "if there are things that we can be doing as a landlord and property owner in this community, we are open to dialogue." This is a clear example showing just how much support is behind this community to catalyze action towards solutions. Other stakeholders suggested providing support to organizations that are already invested in food security or interested in investing in this arena but have been unable to due to a lack of knowledge or resources. Stakeholders pointed out that the large number of Latin-owned and immigrant-owned businesses are also a huge asset to this work because these are established trusted networks by those frequenting their establishments. Aligning this work with those businesses could help organizations quickly gain the trust of the community. Lastly, stakeholders want to see more intersectional work being done by the three different cities to tackle the issue of food security and the issues associated with it, addressing the lack of public transportation and increasing costs of housing. One participant pointed out the Georgia Department of Transportation also needs to be involved in these conversations.

The variety of community food security dynamics were apparent to interview participants. One participant expressed their belief that food security was not an issue; however, in elaborating, they revealed issues they'd seen around nutrition and food access within their Hispanic community members. Access challenges are closely associated with food insecurity, and some individuals simply may not be aware of the connection and definition of food insecurity. Their responses suggested three focal areas which they saw, from their perspectives, could be exerting significant influence over the food security status of the area's Hispanic community: individual documentation status, the language barrier, and community assets. An individual's documentation and legal status and a lack of awareness of public benefits can hold individuals back from accessing all of the benefits they may qualify for. Uncertainty and fear stemming from their documentation status can impart significant anxiety and other mental health issues upon individuals as well. Where possible, and depending upon municipal comfort, any civic engagement programs focused on collaborating with Hispanic communities should not require

individuals to provide documents to be involved. Furthermore, building upon that point, civic engagement programs should align with leading grassroots non-profits and organizations which support the Hispanic community in their native language and events would see higher attendance if they were located at sites recommended by these agencies. This research step has shown that there is interest among local and regional organizations to alleviate the food insecurity which members of the Latin community might be experiencing within and beyond the Buford Highway corridor. This research has provided a list of organizations and individuals that can be tapped for resources, such as knowledge, time, or technical assistance.

3.6 Focus Group Discussion

Against turnout expectations, 25 participants attended the focus group discussion at Mercy Care Chamblee; more than double the recommended size for this kind of discussion. However just 12 actively engaged throughout the hour and a half long discussion, thus providing a more manageable sample size and more fluid discussion flow than would be expected with a 25 person discussion. All participants were female, and the average reported age was 65. The clinic's client pool lives in the surround counties, but most within the zip codes around the clinic. While none provided their addresses, it is understood that all participants were patients of the clinic and thus lived in the area of Buford Highway itself or within feeder communities to the corridor.

Food Access Influencers: Facilitators and Barriers

Through thematic analysis, it was determined that multiple levels of the social ecological model influence community member's food decision making process. The social ecological model is a multi-level framework which considers the complex interplay of individual, interpersonal, organizational, community, and public policy level factors upon decision-making processes⁵ (Figure 14). Most notably throughout the course of the focus group discussion, individual, community, and environmental level considerations were identified.

⁵ CDC. 2020. The Social-Ecological Model: A Framework for Prevention. [Web Page]. [Retrieved on 8/15/202]. Available online at: <https://www.cdc.gov/violenceprevention/publichealthissue/social-ecologicalmodel.html>



Figure 14. Social Ecological Model.

The presentation method of the identified themes in figure 15, below, should not convey a hierarchical importance or ranked level of significance; they are ranked in no particular order. Considerations are understood to carry a level of interconnectivity. Further research will be needed to undertake a deeper relational analysis of the below factors and their interconnected influence over long-term community food security and health outcomes.

Psychological considerations

- Stress and anxiety related to food resources
- Food preferences and perceptions

Resource considerations

- Money
- Transportation

Health considerations

- Existing chronic health conditions
- Weight management
- Nutrition Habits

Figure 15. Individual level food decision influencers.

Psychological Considerations

Anxiety

When discussing how participants shopped for food, initial comments conveyed sentiments of anxiety induced planning for some. This appears to stem from stress about wasting money on food that they cannot eat.

“I have anxiety about buying more than I need, you know?”

Food Preferences and Perceptions

Organic food was perceived to be higher quality in all regards in comparison to non-organic foods. This perception carried with it a shared understanding that it is healthier, more flavorful, and more expensive than non-organic foods. The below exchange summarizes the most characteristic exchange had around organic foods.

Respondent X “And the flavor that a tomato has, a flavor...”

Respondent Y “That’s because it’s organic.”

Respondent Z “Because they’re more natural... They’re more natural.”

Respondent X “And they’re more expensive.”

One participant deeply expressed their views on organic foods by explaining:

“So, I imagine that organic foods are healthier because, as I understand, that the businesses that raise chickens... that animal could be very relaxed and of high quality from the very beginning. In a pasture with a normal diet where it is sleeping well and waking up when it normally would... And also the insecticides, they don’t apply those in organic food, and all that food is natural.”

Beyond the organic seal, quality was also associated with flavor and appearance. Many respondents explained that flavor is severely lacking in many kinds of produce here in the United States.

“The bell peppers here don’t taste like anything. The majority of bell peppers here don’t taste like anything at all. In Venezuela, I remember, when you opened up a bell pepper...the color, the smell, it is mysterious... The flavor is indescribable. I mean, here, some of the bell peppers, the really big ones that are so beautiful look plastic; they don’t look real and they don’t taste like anything.”

Another added to that statement by explaining how their arrival to the United States impacted the disparity in flavors by saying

“When one arrives here, the truth is that everything tastes differently. From the meat to the tomatoes. When one arrives here, the difference in flavor is incomparable.”

Rounding out perceptions of quality, one participant shared the below perception.

“And one has to ensure the quality of their food. The price. The presentation... People say that you eat with your eyes. So, you need to see to the quality of the product, the brand, and the price all have a lot of influence.”

Resources

Some participants alluded to the influence their resources had around eating and grocery shopping. The key limiting and facilitating resources discussed were ultimately categorized as time, money, and transportation.

Time

While many of the participants appeared to be retired, one who was working to support her family made this comment that many participants were sympathetic of;

“When one works a lot... and when you work, all you can have is a sandwich from Subway that has a lot of fried things and I have to eat while I work... That’s what gave me my diabetes. I was eating many things like this. I was eating healthy things, but at night, when I had to eat just to eat or eat nothing... something at midnight. Obligated to work.

Money

This was not a subject that was readily approached by the group at the beginning of the conversation. Some comments were made to allude to tight budgets and the motivation of saving money when buying food, as the conversation progressed.

“Always looking for something cheap!”

“I have always enjoyed [Kroger’s] specials. I want to buy one but it is generally after I need, it and the coupons are essential for helping me with my purchases.”

Transportation

The majority of participants reported that they travelled to the grocery store either on foot or in a taxi. Few reported driving themselves, and even fewer reported utilizing public transit for such a trip. Some reported that they did not drive themselves because of the anxiety they felt about driving on local highways.

“I walk but also I take taxis to a Kroger nearby.”

“I walk or take a taxi.”

“I drive there myself.”

“I’ll go by bus when my husband is busy... on the weekends.”

Health Considerations

Existing Chronic Health Conditions

A significant number of participants made comments about how their diet has changed to manage a diagnosed chronic health issue or to reduce their risks of developing a future chronic health issue. The facilitator noticed many participants in agreement with the following statement.

“Us Venezuelans, I have been here for four years. I am different now because of my age, but also the sickness we all experience. Like high blood pressure.”

Another participant provided an extremely insightful perspective into the epistemology of her dietary knowledge and explained her understanding of how she and her parents came to be diabetic.

“The situation in which we find ourselves in the cultural reality which many times leads us to say *“my diabetes was from my mother.”* But it is not that we believe that the disease is from our parents, but rather the ignorance sometimes which they had from lacking someone to teach them how to eat. So this situation is that not only am I eating how they taught me to eat, I have been learning from them my since I lived with them as a child. So we continue eating the same things and so we continue having the same problems as my mom and dad due to the same tendencies.”

Wherein the problem is understood to be a lack of education, she sees opportunity to reinforce positive habits through the same tool:

“So because a child or a senior... not just that they eat differently it’s a cultural question from childhood. But we can and need to teach our kids very early on. Teaching them how to eat so that they can continue being healthy as adults.”

Another added these comments in regards to diabetes,

“[If you eat] too many sweet things... too much bread... there you will have a problem with diabetes because following this... flour, sugar and all of the carbohydrates... but the sugar all of these are problems for us.”

Weight Management

Several participants shared their ambition to lose weight, the importance of physical activity and nutrition in this pursuit, and either lamented in their lack of progress towards their goal or celebrated their success. One who had experienced some success with this desire shared her journey with weight loss and nutrition by explaining:

“When I started to receive nutrition, I was 186 pounds, today I am down to 156. I have maintained this weight for three years now. I always try to balance everything I eat. For example, with my plate, there is a piece of salmon I have a little bit of brown rice and salad.”

Nutrition Habits

Many participants reported eating a variety of foods, including fruits and vegetables and non-red meat protein sources. “Balance” was one of the key words respondents used most frequently in describing a healthy diet.

“It’s not a good idea to feed yourself the same food every day. You will have an imbalance in your body. Therefore we need to have discipline for variety.”

When asked what “balance” meant to participants one responded by explaining:

“Balance is when you eat chicken today tomorrow you should have another diet day after day... the balance is what it will do to you and your health. Because if you don’t eat with balance for example, too many sweet things... too much bread... there you will have a problem with diabetes.”

Another associated the term “balance” with the United States Department of Agriculture’s MyPlate explaining:

“This plate [MyPlate] always has to be what we are talking about, balanced. You have to have protein, you have to have some carbohydrates, and it must have vegetables and fruits as well.”

Furthermore, some participants exhibited a deep awareness of their own nutritional needs, some basic nutritional principals, such as the body’s need for carbs, and the connection poor diet has to chronic health issues.

“I believe that you need to reduce the amount of carbohydrates you eat that would be good and something one must do. But the body needs carbohydrates. But you know that the portions you need to have in mind for a balance.”

Several participants mentioned that they, or their family members, utilize the nutritional facts label to find the healthiest options, especially in light of their perception that foods filled with preservatives are unhealthy:

“Look at [the nutritional facts label] always for the sodium, the carbohydrates, and all of that too and the calories.”

“[My husband] calculates the quantity of sodium that the ham has, and he looks for smaller concentrations and portions; he always compares ham. Which brand has the least sodium, this is what he looks for. I believe that for us at our age this is very important to keep in mind.”

“Well I don’t like broths but they have a lot of preservatives. They have a lot of preservatives they add a lot of preservatives. And this is why I believe that you need to pay attention to the things that come in cans.

Food resource management was top priority for several participants. One explained the steps they take before going grocery shopping to save money.

“I at the very least make my purchases based on what I see that I need for dinner after I check the refrigerator. What do I need? And from there I make my shopping trip because at least I won’t buy what I don’t need... I only buy what I need... just what I need because one also needs to make sure that its within your budget and the budget of the people you live with if you are the one making the purchases.”

Another participant explained their frustration with their own poor food resource planning management:

“I make two large trips and I always forget something. But it’s always something... spending more than I wanted to when I went.”

Aside from forgetting goods on their shopping list, many participants made it clear that they intentionally make trips to specific stores for specific items. One participant even explained that they visit up to 4 different stores. They know what they want, and they know where it is. But, many experience challenges when trying to get to where they want to go, and sometimes, affording the food itself. For some, they choose to buy different goods at different stores due to their perceptions of price, quality, and availability differences.

“I buy at the Kroger... Water, yogurt, cheese, eggs, and the vegetables I buy at the farmers market. All of the vegetables at the farmers market.”

“I also like to go to Kroger and Wal-Mart.”

Because of the challenges they can face getting to the store, many shop where is nearest to their place of residence, instead of the places they would prefer to go. Many participants reported that they either walked to the grocery store, or took a taxi. Few reported driving themselves, getting a ride with a friend, or taking public transportation

“Well for me in my case, it comes down to the closeness of a store.”

“If it is close. I really like the fruit at the store which is further away, the one participant 9 mentioned, but for me it is far away.”

“I definitely like to go to Kroger because I consider what is near where I live”

It is clear that many internal, personal, factors influence the food decisions participants make. Some experience stress induced by the idea of letting food, and money, go to waste. Many have deep seated preferences and perceptions around the quality of food that drive them to make multiple trips.

No participants explained this process as one which is easy. Seeking food comes across as a laborious undertaking; a task in need of time, energy and focus. Additionally, the usage of SNAP was not discussed, even though a handful of participants reported using it. One was clearly timid when they explained that they use the program, so there could very well be a high level of sensitivity around this subject.

Physical environmental considerations

- Food access point location
- Food access point quality

Social environmental considerations

- Cultural norms and traditions
- Social integration

Figure 16. Environmental considerations by category.

Physical Environmental Considerations

Food access point location

The location of food access outlets within the community in relation to their place of residence was one of the most obvious and frequent considerations participants communicated through phrases like.

“I consider what is near where I live.”

“Yes, I don’t just visit supermarkets. I go where is nearby where I live...”

“Well for me in my case, it comes down to the closeness of a store”

“Now, the problem I am left with, when I buy herbs, I am far away. If I was a little closer there would be other ways to walk there.”

“If it is close. I really like the fruit at the store which is further away, the one participant 9 mentioned, but for me it is far away”

Grocery stores frequented by participants were explained to meet most of their demands for culturally diverse products, especially the Buford Highway Farmers Market. But, it does not appear that every store, serves every food-based purpose. As explained previously, many participants mentioned utilizing between 1 and 3 stores on a regular basis to seek out the best food available in the community. The Buford Highway Farmers Market, which, is a brick and mortar store, not the conventional farmer’s market, was mentioned consistently for the store’s high quality fresh produce, and range of culturally diverse products.

“I buy at the Kroger... Water, yogurt, cheese, eggs, and the vegetables I buy at the farmers market. All of the vegetables at the farmers market.”

When asked about the Buford Highway Farmers Market, participants shared these thoughts

“This market it has European products, it has Peruvian products, it has Columbian products...”

“It has things which one really knows.”

“The problem... the Kroger has everything. Everything. Everything fresh and everything good. But there are things which I can’t find that they don’t sell, like some vegetables. But the Farmers Market does sell them.”

“Well it seemed to me, to me it appears Latin because I look at it and it looks like there are a lot of varieties of fruit and there is so much variety”

Many grocery stores were mentioned in the discussion indicating that the participants, at the individual level, utilize a variety of food outlets, but almost exclusively supermarkets. The vast majority reported the need to visit more than one store and elaborated on the physical, distanced based, challenges of accessing their preferred food access point, price disparities at different stores, and quality disparities in the United States as compared to their countries of origin. The below remarks summarize the general sentiments held by the group:

“Yes, I don’t just visit supermarkets. I go where is nearby where I live or I am going. There, I will go into the store and see if it is convenient and meets my needs... I like Kroger [but] the prices aren’t always the same in different Kroger’s. Many chain stores are like this... depending on where you live there are different prices.”

“The bell peppers here don’t taste like anything. The majority of bell peppers here don’t taste like anything at all. In Venezuela, I remember, when you opened up a bell pepper – They’re perfect. Because of the earth. The color, the smell, it is mysterious. The little sweet ones that aren’t spicy. The flavor is indescribable. It’s a characteristic flavor no? I mean, here, some of the bell peppers, the really big ones that are so beautiful look plastic they don’t look real and they don’t taste like anything.”

Many first generation immigrant participants do not only know exactly what they want, but also where they can find it. Getting to those places appears to be the challenge for many, especially considering that not all stores carry the culturally specific ingredients which they so seek. Additionally, they appear to have a high standard for produce quality. These preferences, in combination with the food available in the community, can drive them to make multiple trips to multiple stores seeking out specific ingredients.

Social Environmental Considerations

Cultural Norms and Traditions

Many participants directly communicated their status as a first generation immigrant, an immigrant who arrived in the country they reside in during their lifetime. Second generation immigrants, in contrast, were born in the country of residence after their parent(s) immigrated. Differences in food experience-based habits and preferences may exist between generations due to acculturation, integration, and connection with their heritage. Whatever those differences could be, it was clear that the focus group discussion participants hold deep cultural value to their food. While participants were generally reminiscent of their home countries, this was most apparent when discussing food. Food is integral to their cultural roots. In fact, references to specific dishes were made multiple times throughout the discussion in conjunction with comments about the individuality of each country's gastronomy. Participants consistently identify their food with their heritage, both with pride and a sense of disappointment. As apparent in the discussion, disappointment stems their recent inability to eat those same foods because of age, time in the US, and the lack of flavors in fruits and vegetables here in the US. They also identified the origins of their chronic health issues, with those same cultural foods.

"So my point is that the food one eats because of their culture's culinary traditions, from the country they come from, they cannot eat because of their age and the illnesses they have they can't have that food anymore"

"When one arrives here, the truth is that everything tastes differently. From the meat to the tomatoes. When one arrives here the difference in flavor is incomparable. No, no, but what I want to clarify is that it doesn't taste like anything, the bell pepper doesn't taste like a bell pepper it doesn't have flavor. Yeah I am going to buy here but I know that it isn't going to taste like anything."

"The land... at the least in Venezuela, the land is Caribbean and it has... it's like a cup of gold."

While participants spoke freely of their fondness for their culture's cuisine, they were initially reserved to speak out about the negative aspects of one unfortunate cultural norm in particular; machismo. Machismo, in essence, is known by many in the United States as "toxic masculinity." This has direct mental well-being impacts for women and nutritional impacts for men most succinctly explained by one participant (Catalan *et al.*, 2018)

"I think, from what I understand of your question... I have family who, it is the part of my family on my husband's side. They eat every single weekend... grilling steaks and things like that. Sometimes I'll tell them this... That that is bad for your health, that it's unhealthy I want you to change this. And they become angry..." [They'll say] "You look better with your little mouth shut."

“This is harmful, I want to tell them. And they get mad at me... And there they are smoking and drinking and they eat and they eat... No thank you. With my experience, I worry about the rest. Because of high blood pressure.”

Social Integration and Acculturation

Many participants insinuated that they were first generation; one dated her time in the US at 4 years, another at 30 years. Over time many immigrants assimilate into the society which they find themselves living in, providing social connectivity. But this is only possible if they speak the same language as the community they are integrating into. A language barrier can hinder such integration and the communication of key information as explained below by a participant.

“Bad information comes to the people... the language is a real impediment. Because at least, I don’t speak English so how can I relate with people who don’t speak Spanish?”

Some felt a sense of isolation and expressed the rejection of white people when they come into the community based on socio-cultural beliefs.

“It’s bad, culturally speaking... this idea that *the gringo is different*. You can’t just throw a gringo in, to say something. Look, this is just very different.”

Faith Based Organizations

Culturally speaking, religion is a cornerstone in Latin American societies. This is reflected in the community’s concentration of religious establishments and was mentioned later in the conversation as people began to open up about their community and ideas they had about connecting people in need, with food resources. It is clear that churches, in particular, are central in the participants’ perceptions of community and the best place to reach people.

“In this same church we can share these moments... there is so much bad information out there. And not everybody has this information but if we are there we can say “look there to that location they have information about this and that. I, as one of your neighbors in church.””

“I think the community is in the church.”

“I propose something through my church. Something... to help give people classes and give them information to help them understand the many benefits we have here so that the people who live close by can understand.”

“Like in your fellowship.”

“So for the people who have difficulties, offer them also how we can help like by making food, seriously. Or, look I can help you.”

Supporting Themes

Home Food Production

Participants openly discussed the challenges they encounter in attempting to grow their own food at home, something many of them were very interested in doing because of the values they associated with it.

"I believe that it would be good for us to grow our own vegetables at home... No? I live in an apartment and we have a little window with a windowsill [where I grow] cilantro, parsley..."

Many explained that they live in apartments and how they have clashed with their landlords in the past when they have grown things on their patios that their landlords did not approve of.

"They don't allow us... They don't let us."

"They don't let us put anything on the porches. I say this because I had mint, rosemary, epazote... and they took photos of it. Now nothing."

"I am Brazilian and I believe that what this woman says is true. I was there a while ago and they were calling the people. So that their patio on the 3rd floor, they would kill their palm tree... they had mangoes growing where they had everything planted because it is very good and healthy. I mean, cooking what you've grown."

While it was clear that many at this discussion rented apartments in high density complexes, some explained their perceived need for a freestanding house to be able to grow their own food.

"Yes, in the house one can do that, like a garden as they need. In the apartment they need space for that."

"Those who have their own homes can grow things."

Community-led ideas

When asked what participants would do to help people who needed more food, they discussed the strategy of directly giving people food through faith based organizations. As previously mentioned, these same faith-based institutions are both central to their perception of "community" and now understood to be the primary means to reach people in need. These institutions also host ongoing food-based services as explained by several participants, indicating perceived nutritional needs within the community. These were some responses participants provided when asked how they would help.

"I think that, someone could give them advice. How they can eat better and everything like that. With rational people that, that are grateful for the help. But some people take that advice and they become very mad."

"Education." (Said by 5 participants one after another).

"I see a lot of, many organizations for example are now, acting, thanks be to god, they labor and make food and give it out in poor neighborhoods. I mean, many churches and lions clubs, have special meals to give to people."

Many thought that more advertising for educational programs through a variety of mediums would help as well.

"Publicize more, letters that tell me about this kind of thing."

"On the television? Over the radio? On MARTA?"

"Why not on Facebook? This is something we use a lot."

Community members' awareness of community development roles

Community members are unaware of the role of municipalities play in community development

Participants were made aware of the overarching project which the focus group discussion was informing. They were also told that local city officials were involved in the project as well. To understand community perceptions of municipal involvement in food access programs, the moderator asked “what kind of role do these agencies have in these programs?” “These programs” referred to the education and other needs based services mentioned previously during the discussion. Participants had this to say:

“No.”

“If you can have a television program so that people can listen and see, for example, a nutrition class.”

“We are always open to these like when someone, for example the firefighters do classes on CPR and stuff. Also sometimes the police they also educate kids on what to do when they see something suspicious or when they see them there.”

Participants did not see a role for policy makers, local government, and business in meeting community food needs. But, whether they realized it or not, they did explain their openness to educational workshops facilitated by public institutions, like the CPR workshop with the fire department mentioned above. Therefore, a public education campaign focusing on highlighting the role of local government in meeting transportation and food needs, explaining municipal public engagement in planning efforts, and the role cities have in moderating zoning for community assets like community gardens or permitting the production of food at sites zoned for high density residential use. If undertaken in Spanish, such a community education campaign could easily bridge this observed gap by leveraging existing partnerships, organizational assets, and community educational interests.

4. Conclusion and Recommendations

Results from multiple NEMS analyses exploring the availability of food in the Buford Highway corridor have illustrated significant amount of healthy foods offered many large grocery stores along the corridor. However, questions remain outstanding around barriers highlighted during the NEMS and other assessments – transportation (sidewalks and crosswalks), affordability, and the role of convenience stores in local community member food decisions.

The majority of surveys collected at the focus group served to support the motivation of the guiding research question: *“What is the food security status of the Buford Highway Spanish speaking community?”* as over 66% screened positively for low food security.

Based on this research, food security is certainly an issue within the Buford Highway Corridor’s Hispanic community. The direct quantified impact is hard to determine without granular information on related health issues like diabetes, heart disease, and obesity. The quantitative methods have enabled an objective assessment of the food security status and affirmed the initial impetus behind the study; observations of community members struggling to get to the grocery store.

Accessibility challenges exist primarily in the form of pedestrian infrastructure gaps and community income-based financial accessibility restrictions. Community financial resources are limited, and poverty rates are elevated when compared to the metro area and statewide averages. This financial strain is

further exacerbated by housing costs. Housing costs lead to high rates of renters who are cost burdened, leaving less money available for food and other resources.

Availability of food in the corridor is impressive and characterized by a wealth of assets like supermarkets, small grocery stores, and food banks; in spite of its classification as a USDA ERS food desert. The food available at four (4) of the grocery stores in the corridor was observed to be of high quality and competitively priced with few healthy and culturally relevant food items missing. There are, however, many food landscape liabilities with a large concentration of fast food restaurants within the case study area. Due to this concentration of unhealthy food options, the term food swamp could be applied.

Utilization of food resources by community members would be characterized as thrifty, planned, health conscious, and culturally rooted based on focus group discussion; many participants expressed a well-developed understanding of their nutritional needs and were happy to talk about their cooking skills.

Very significantly, over 65% of focus group discussion participants reported low levels of food security when asked two USDA food security screener questions about their food supply at home. Food security is clearly a challenge, especially among focus group discussion participants. SNAP benefits could be used as a tool to alleviate some of the pressures exerted upon their nutrition through food insecurity; albeit for those who qualify for the program and feel safe utilizing the program in light of the Public Charge⁶ ruling.

Stability of the food landscape was not assessed by this research study; it is a snapshot of the current status. Ongoing research should focus on this aspect as the community develops and this consideration should be included in city planning initiatives. Such initiatives could focus on bridging the gap between local government and community members who do not see the role which local government plays in community development and who also feel isolated from English speaking communities due to the language barrier.

The Buford Highway Corridor is a unique space in Atlanta's metro area because of its cultural diversity - a diversity which is easily observed through the plethora of multicultural restaurants and small grocery stores. Based on the findings in this report, the community which calls this place home would benefit from improved pedestrian infrastructure, Spanish municipal engagement and education, and renter supports like rent controls and affordable housing policies. Supporting the diversity of the corridor and the food culture it has created will differentiate the space and enable the implementation of sustainable policy, systems, and environmental changes for a healthier, more food secure community.

Based upon these findings, a diverse list of actions and recommendations has been developed to spur progress towards the food landscape development opportunities identified. The action items below suggest some policies and programs that begin to address the disparities identified by this research effort. They have been grouped into 5 categories including:

⁶ "Under the final rule, a public charge is defined as an alien who has received one or more public benefits, as defined in the rule, for more than 12 months within any 36-month period. However, receiving public benefits does not automatically make an individual likely at any time in the future to become a public charge." (USCIS 2020).

Food Access Policy and Programming

Approximately half of the study area residents who qualify for SNAP benefits are not taking advantage of the program. This discrepancy calls for specific food access policies and programming that are culturally relevant and can address language barriers.

1. Review and consider public policy interventions for incentivizing uses that offer healthy foods and/or distancing restrictions on uses that offer unhealthy foods.
 - There are several independent grocery stores as well as a few supermarkets along the corridor, but there are also several unhealthy food chains that characterize the study area as a 'food swamp.' The Cities of Brookhaven and Chamblee should develop public policy interventions that incentivize healthy food stores and restrict unhealthy food retailers.
2. Review and consider public policy interventions on healthy food street vendors.
 - Street vending provides opportunities for fresh, healthy food access. The Cities of Brookhaven and Chamblee should consider reviewing their policies concerning street vendors including permitting, locations, etc. Clarkston Food Initiative is involved in this space and should be contacted regarding related efforts in the Buford Highway area.
3. Support Community Farmers Markets' (CFM) endeavor to create a Fresh Marta Market along a Buford Highway bus line.
 - CFM is working with Fresh MARTA Market to increase fresh food access along transit lines. Though these markets are typically located at train stations, this venture hopes to locate a market along Buford Highway's popular bus route to bring fresh produce with SNAP-doubling benefits to bus riders. The Cities of Brookhaven and Chamblee should work with CFM and Fresh MARTA Market to support this endeavor and assist in identifying bus stop locations.
4. Develop and support a weekly farmers market in the case study community with SNAP doubling benefit (Wholesome Wave Georgia).
 - To increase both fresh food access and education, the City of Chamblee should work with Wholesome Wave Georgia and Community Farmers Markets to establish a SNAP-doubling farmers market in the study area. While there are existing access points, farmers markets also serve to build community and provide healthy food education opportunities. The city should develop the market to be culturally appropriate for the Latinx community. We Love Bu Hi is working to develop a plan for a night market in the Buford Highway area to support pop-up stall-based entrepreneurs, the organization expressed interest in discussing this further with potential collaborators.
5. Partner with nonprofit and faith-based organizations to educate the community about SNAP and the Supplemental Nutrition Program for Women, Infants, and Children (WIC) eligibility for program participation. Georgia's program SNAC (State Nutrition Action Coalition).

- Faith-based organizations are the cornerstone of the Latinx community, and local non-profits are engrained in the community. The Cities of Brookhaven and Chamblee should consider engaging these organizations in educating the Latinx community about federal SNAP and WIC eligibility and benefits as well as Georgia's SNAC. The cities should navigate this venture cautiously, as federal funds cannot be used to advertise federal assistance programs like SNAP.

Community and Home Gardening

Through focus groups, Latinx residents expressed their desire to grow their own food but often face challenges from their landlords and limited land access. The following recommendations serve to remove these barriers and thus increase food security through supporting community and home gardening. For all of these recommendations, the Cities of Brookhaven and Chamblee should engage with local non-profits to better engage the Latinx community.

1. Identify additional community garden locations to support.
 - While Buford Highway is highly commercial, 47% of the study area is residential, with about one third of that consisting of multi-family housing. The Cities of Brookhaven and Chamblee should identify city-owned property, willing faith-based institutions, or other appropriate locations for community gardens in close proximity to these residential areas, with particular focus on multi-family housing with limited growing space.
 - The cities should partner with local non-profits for financial support as well as to better engage with the Latinx community through community ties, Spanish-translated materials, etc. Furthermore, the cities should engage with faith-based institutions to gauge interest for community gardens on their properties, particularly those with predominantly Latinx congregations.
2. Offer community garden education, resources, and support in Spanish.
 - The Cities of Brookhaven and Chamblee should offer community garden support, particularly once additional community garden locations are identified and developed. This support could include gardening 101 classes, edible plant giveaways, etc. Any materials or classes held in the study area should also be available in Spanish. Global Growers, a Clarkston-based non-profit should be contacted regarding materials, strategies, and accessibility based on their specialization in this area.
 - Food Well Alliance offers community garden assistance throughout the Atlanta Metro area. The cities should consider partnering with this local organization in this endeavor. Specifically, the cities could collaborate with their Parks and Recreation Departments, Food Well Alliance, and other relevant organizations to create a best practice community garden guide in both Spanish and English for distribution.
3. Consider incentives or other assistance to encourage existing and proposed developments to incorporate community gardens and/or allow container gardens in individual residential units.
 - The Cities of Brookhaven and Chamblee should consider development incentives to both allow and encourage community gardens, particularly for multi-family or mixed-use developments that include apartments. The cities should also consider reviewing their zoning ordinances to include these incentives.

4. Review zoning codes or other applicable ordinances to identify and amend barriers to community gardens.
 - The study area cities should review their zoning codes to identify barriers for urban agriculture. This review should consider elements such as the districts in which community gardens are allowed as well as the minimum lot size of allowable community gardens.
5. Communicate with apartment managers to identify issues related to patio food plants so that they may be encouraged for tenants.
 - The Cities of Brookhaven and Chamblee should continue engaging with Latinx residents in the study area to further identify landlords who oppose food-producing patio plants. Once identified, the cities should hold a forum to discuss issues and explore solutions with these property owners, so that tenants can grow their own food outside their apartments. Organizations in the area including the LAA, We Love Bu Hi, and Los Vecinos de Buford Highway should be involved in this process.

Transportation and Pedestrian Infrastructure

With over 60 supermarkets and small grocery stores in the area, the question of food security is tied closely to the question of food access. Given the auto-centric nature of Buford Highway, relatively low car ownership rates in the surrounding communities, and high transit ridership on nearby bus routes, ensuring a safe and comfortable pedestrian environment is imperative in providing that access to food outlets.

1. Identify where sidewalks are missing and insufficient and develop a five-year sidewalk repair implementation program with special attention to food access.
 - The Cities of Brookhaven and Chamblee have completed sidewalk inventories in recent years, which should be used to identify gaps on the corridor. A simple walkability audit may be helpful in determining where sidewalks exist but are too narrow, contain obstructions that block the path, or have significant cracks and should be replaced. All intersections and crossings must have curb cuts that ensure accessibility for all.
 - Construction of sidewalks requires time and resources. Once the audit is complete, the cities should develop a 5-year prioritization scheme for sidewalk construction and repair that explicitly includes food access as a prioritization criterion.
2. Identify locations for the installation of safe crossings, pedestrian lighting, and other infrastructure improvements throughout the study area, and develop an implementation plan for these changes.

- In addition to continuous sidewalks on both sides of the street, a number of other elements are necessary to create a safe walking environment. In particular, regular marked crossings are crucial. These may be painted crosswalks or a type of signalized crossing, depending on the surrounding land uses, and should be used to connect key destinations, such as apartment complexes, grocery stores, and frequently used bus stops. Other improvements might include pedestrian-scale lighting, enhanced landscaping and buffers, and protected bicycle lanes. The cities should refer to ARC's Complete Streets Workbook for best practices.
3. Work with MARTA to add bus shelters, seating, and signage with route information to selected stops along Buford Highway.
 - Bus transit lines along Buford Highway have high ridership rates, but improved seating and signage could further increase ridership. The Cities of Brookhaven and Chamblee should work with MARTA to identify and provide needed bus shelters or seating to provide safety and comfort at the highest-use stops.

Housing Affordability

Housing costs pose financial challenges to Buford Highway families. Over 70% of households along Buford Highway are renters. Over half of these renters are cost burdened. According to HUD, cost burdened households are those that are paying 30% or more of their income on housing costs. These cost burdened families may have difficulty affording other necessities like food.⁷ Increasing housing affordability in the study area is, therefore, essential to effectively addressing food insecurity.

1. Complete a housing affordability inventory and study to inform new policies and programs.
 - Housing affordability is a complex issue that warrants further study. The Cities of Brookhaven and Chamblee should conduct a comprehensive housing inventory and study to better understand housing conditions and affordability issues. This process should engage the Latinx community and other diverse groups along the corridor to gain an understanding of their specific needs. From the results of these studies, the cities should develop housing affordability policies and programs that address these needs of the Latinx population and the other immigrant groups. Organizations in the area including the LAA, We Love Bu Hi, and Los Vecinos de Buford Highway should be involved throughout this process.

Education and Outreach

Inclusive education and outreach programs can specifically address food insecurity as well as more broadly address community engagement in local government decision-making. Half of the Spanish-speaking residents in the study area do not speak English. The following recommendations offer ideas on new education and outreach programs that aim to be inclusive of the Latinx community. These should be informed by and developed with local organizations serving the Latinx community.

1. Spanish-speaking park programming for active lifestyle.

⁷ US Department of Housing and Urban Development. "Affordable Housing." (2019). https://www.hud.gov/program_offices/comm_planning/affordablehousing/

- In addition to healthy eating, exercise is fundamental to public health. The Cities of Brookhaven and Chamblee should incorporate Spanish-translated materials into their parks and recreation programming to encourage active lifestyles.
2. Develop a Spanish-speaking outreach program to increase participation in local government decision-making and identify community liaisons.
 - In the focus group, Latinx residents expressed their unawareness of the role of municipalities in community development. Developing an outreach program to specifically engage the Latinx community in local government decision making can contribute to increased awareness and participation in local government decision-making. Within this program, the cities and local non-profits can work with the Latinx identify trusted community representatives to act as liaisons for continued outreach and coordination between the cities and the case study community. Organizations in the area including the LAA, We Love Bu Hi, and Los Vecinos de Buford Highway should be involved in this process.
 3. Provide government materials and documents in Spanish.
 - Planning documents and other local government material is often only available in English. The Cities of Brookhaven and Chamblee should consider producing documents in Spanish as well since there is a significant portion of the study area community that only speaks Spanish. Providing these translated documents would likely increase community awareness in local government activities as well as engagement in planning processes.

6. References

- Adams, E., Grummer-Strawn, L., Chavez, G. 2003. Food Insecurity Is Associated with Increased Risk of Obesity in California Women. *Journal of Nutrition*. Vol. 133, No. 4, Pp. 1070 – 1074.
- Baker, E., Schootman, M., Barnidge, E., Kelly, C. 2006. The Role of Race and Poverty in Access To Foods That Enable Individuals to Adhere to Dietary Guidelines. *Preventing Chronic Disease Public Health Research, Practice, and Policy*. vol 3, no. 3, Pp. 1 – 11.
- Barrett, S. 2013. Investigating The Local Food System: A Mixed Methods Study of Sustainability in Southwest Atlanta (Masters of Science). Atlanta, GA. Georgia State University. College of Arts and Sciences. 72 p.
- Block, J., Scribner, R., Desalvo, K. 2004. Fast food, race/ethnicity, and income: a geographic analysis. *American Journal of Preventative Medicine*. Vol. 27, No. 3, pp. 211 – 217.
- Chavez, M. 2013. Desert in the Springs: Ethnography of a Food Desert. (Masters of Arts) Tampa, FL. University of South Florida, College of Arts. 131 p.
- Cooksye-Stowers, K., Schawrtz, M., Brownell, K. 2017. Food Swamps Predict Obesity Rates Better Than Food Deserts in the United States. *International Journal of Environmental Research and Public Health*. Vol. 14, No. 11. Pp. 1366 – 1386.
- Davis, L. 2012. Transportation for America. [Cover image]. Retrieved on 8/17/2020. Available on the World Wide Web at <https://www.flickr.com/photos/t4america/6893170196/in/album-72157629725091393/>.
- Feeding America. “Map the Meal Gap: Food Insecurity in DeKalb County.” (2017) <https://map.feedingamerica.org/county/2017/overall/georgia/county/dekalb>
- Feeding America. “Map the Meal Gap: How We Got the Map Data.” (2017) https://www.feedingamerica.org/research/map-the-meal-gap/how-we-got-the-map-data?s_src=WXXX1MTMG
- Food and Agriculture Organization (FAO). 1996. Rome Declaration on World Food Security and World Food Summit Plan of Action. World Food Summit 13-17 November 1996. Rome.
- Gallagher, M. 2011. Examining the Impact of Food Deserts on Public Health in Chicago. Mari Gallagher Research and Consulting Group. Chicago, IL. Pp. 1 – 40.
- Johnson, R., Onwuegbuzie, A. 2004. Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*. Vol. 33, No. 7, pp. 14 – 26.
- Kwate, N., Yau, C., Loh, J., Williams, D. 2008. Fried chicken and fresh apples: Racial segregation as a fundamental cause of fast food density in black neighborhoods. *Health and Place*. Vol. 15, No. 1, pp. 364 – 373.
- Sano, Y., Garasky, S., Greder, K., Cook, A., & Browder, C. (2011). Understanding Food Insecurity Among Latino Immigrant Families in Rural America. *Journal of Family and Economic Issues*, 32(1), 111-123.

Shannon, J. 2014. Food Deserts: Governing Obesity in the Neoliberal City. *Progress in Human Geography*. Vol. 38, No. 2, pp. 248 – 266.

Shannon, J. 2015. Rethinking Food Deserts Using Mixed-Methods GIS. *Cityscape: A Journal of Policy Development and Research*. Vol. 17, No. 1, pp. 85 – 96.

Treuhaft, S., Karpyn, A. 2010. The grocery gap: How to access to healthy food and why it matters. PolicyLink & The Food Trust. Pp. 1 – 39.

US Department of Housing and Urban Development. “Affordable Housing.” (2019).
https://www.hud.gov/program_offices/comm_planning/affordablehousing/

Walker, R., Keane, C., Burkner, J. 2010. Disparities and Access to Healthy Food in the United States: A Review of Food Deserts Literature. *Health & Place*. Vol. 16, No. 6, No 5, pp. 876 – 884.

7. Appendix

7.1 Appendix A: Stakeholder Interview Questions

Produced by Open Hand, ARC, and Diana Altorre

Buford Highway Food Security Assessment

Stakeholder Interview Questions

1. What organization do you work for and what is your role?
2. Are you currently, or have you ever been, involved with the Hispanic community around Buford Highway area (i.e. Cities of Brookhaven, Chamblee, and Doraville)? If so, how are you/have you been involved?
3. Have you noticed food security challenges in your work with this community? Typical signs can include food access barriers like a lack of sidewalks and fresh food stores, food pantries, SNAP enrollment centers, diabetes, and/or heart diseases. If so, please describe.
4. If you have observed food security challenges, from your perspective what do you think are the most significant food insecurity considerations?
5. Specific to the accessibility of healthy food in the Buford Highway corridor, what barriers do you think/observe the Latin American community experiences?
6. What strategies have you seen or think could reduce the burden of these barriers and why?
7. That you know of, what current assets exist which support mitigating this community's food-related challenges? What opportunities do you see for support or expansion of these assets?
8. How do you think your organization could address these challenges? What is the biggest barrier to your organization doing that work?
9. Is there anything else you would like to comment on or add before we wrap up?

7.2 Appendix B: Focus Group Discussion Materials

Focus group discussion recruitment flyer



**COMIENDO
SALUDABLE
EN BUFORD
HIGHWAY**

LA ASOCIACIÓN DE AMERICA LATINA
FECHA: 24 DE ENERO
HORA: 9:30 A.M. - 11:30 A.M.

¡Únete a nosotros para bocadillos y refrescos saludables y
comparte sus pensamientos sobre su comunidad!

¡Recibe una tarjeta de regalo y la oportunidad de ganar
otros regalos para su tiempo!



Consent Form (translated into Spanish)

Formulario de Consentimiento para el Grupo Focal

Propósito

Usted ha sido invitado a participar en un grupo focal soportado por Open Hand Atlanta y Mercy Care bajo la dirección de Evan Daily. El propósito de este grupo focal es entender sus preferencias con respecto a la comida, sus hábitos en la compra de comida para su casa y/o familia, y las motivaciones y las motivaciones que influyen sus experiencias alimentarias. La experiencia alimentaria es definida como “los momentos y procesos que influyen nuestras decisiones alimentarias.” Nosotros queremos conocer y aprender de sus experiencias sobre este tema. La información que usted comparta con nosotros será muy valiosa y esperamos transmitir esta información a políticos, empresas, y organizaciones locales con recursos y ganas de empoderar las comunidades en el área de Buford Highway. Estas organizaciones quieren escuchar su voz y conocer su perspectiva para mejor servir a su comunidad. La información que se compartirá hoy será completamente anónima y confidencial.

Procedimiento

Estamos estudiando la seguridad alimentaria al nivel de la comunidad. Parte de esta investigación es una discusión en un grupo focal con todas las personas aquí hoy. Un moderador facilitará la discusión les harás preguntarán sobre varios aspectos de su experiencia alimentaria. El moderado grabará la discusión a través un dispositivo. También una escriba tomará notas sobre la conversación. Sus respuestas serán confidenciales y anónimas. Su nombre no se va será incluido en ningún informe o producto compartido con nuestro comité de trabajo o en publicaciones públicos. Una transcripción va ser escrita siguiendo la grabación de la conversación de hoy para nuestro análisis de la información. La transcripción no incluirá nombres de participantes en la conversación. La transcripción y información adicional va ser guardada en una memoria flash cifrado y solo el moderado tendrá acceso. Usted puede elegir participa en el grupo focal o no y se puede salir en cualquier momento. Por favor tome nota de que no hay respuestas correctas o incorrectas en esta discusión. Mercy Care y Open Hand quieren escuchar todos los puntos de vista y pide que todos contribuyan sus pensamientos y opiniones. Por favor con respeto no interrumpen otras personas. Sin embargo por favor siempre sea honesto aunque sus respuestas están contra de las respuestas de otras personas en el grupo.

Beneficios y Riesgos

Su participación puede beneficiarle a usted y otras personas viviendo en y alrededor del corredor de Buford Highway a través de mejoramientos en la disponibilidad de comida, la disponibilidad de servicios relacionados al acceso de comida, y transitabilidad. No hay riesgos anticipados fuera de los experimentados en cualquier conversación normal. Esta conversación no se impactará negativamente la calidad o el tipo de servicios que se recibe por Mercy Care, Open Hand, o SNAP y WIC.

Confidencialidad

Si elige participar nosotros pedimos que usted se respete la privacidad de los otros miembros del grupo por no revelando el contenido de las conversaciones del grupo focal en público. El moderador analizará los datos sobre la conversación pero como mencionado anteriormente sus respuestas son confidenciales y ningún nombre será incluido en informes escritos usados en la investigación.

Contacto

Si tiene preguntas o preocupaciones con respecto a la investigación por favor contacte a

Evan Daily

Open Hand Atlanta



Yo entiendo la información escrita arriba y estoy de acuerdo con participar completamente bajo las condiciones presentadas.

Firma su nombre: _____

Imprime su nombre: _____

Fecha: _____

Focus Group Discussion Matrix

Study objective		
<i>What drivers motivate the food decisions for members of Buford Highway's Hispanic Community and how does the food landscape influence their food experience?</i>		
Aims	Study Questions (Guide -- Main Questions)	Domains (Guide -- Follow Ups)
Aim 1: Understand the preferences and drivers which motivate community member's food decision making processes	Q1. What are your favorite meals?	Insight into participant dietary preferences through explanations of preferred meals
	Q2. How does that compare to your everyday food?	Insight into the reality of their dietary habits
	Q3. What makes something healthy or unhealthy?	Perception of nutrition and awareness/influence in their food decision making
Aim 2: Understand barriers and facilitators which influence access to preferred food options within the community food landscape	Q1. When you shop for groceries, where do you go and how do you get there?	Type, number, and location of food access points visited in their shopping habits, mode of transportation
	Q2. What kinds of food are accessible where you shop?	By accessible I mean, of the desired quality and priced within your budget.
	Q3. Are you satisfied with the locations you shop for food at?	Food access point cleanliness, available food quality, food affordability, physical accessibility of the access point
	Q4. Who else's preferences do you consider when shopping?	What family dietary preferences and needs do community members consider in addition to their own when seeking food?
Aim 3: Determine community level perceptions and occurrence of food security	Q1. Imagine you have the opportunity to do something in the community to help people get the food they want or need more easily. What would you do?	Community member perception of needs and means to satisfy those needs
	Q2+C17:C18. What do you think the community, including local government, businesses, and non-profits, could do to make it easier for people to get enough food?	Community member perceptions of opportunities for engagement/food landscape development

7.3 Appendix C: Nutrition Environment Measures Survey

All documents in this section were produced by Avery Elloway, Becca Herring, Carolina Escobar, and Hannah Bunting

Blank Scoring Card

Item	Availability of Healthier Item	Total Points	Price	Total Points	Quality	Total Points
MILK	YES low-fat/skim = 2 pts Proportion (lowest-fat to whole) ≥ 50% = 1 pt		Lower for lowest-fat = 2 pts Same for both = 1 pts Higher for low-fat = -1 pt			
FRUITS	0 varieties = 0 pts < 5 varieties = 1 pt 5-9 varieties = 2 pts > 10 varieties = 3 pts				25-49% acceptable = 1 pt 50-74% acceptable = 2 pts 75%+ acceptable = 3 pts	
VEGETABLES	0 varieties = 0 pts < 5 varieties = 1 pt 5-9 varieties = 2 pts > 10 varieties = 3 pts				25-49% acceptable = 1 pt 50-74% acceptable = 2 pts 75%+ acceptable = 3 pts	
GROUND BEEF	YES lean meat = 2 pts 2-3 varieties ≤ 10% fat = 1 pt > 3 varieties ≤ 10% fat = 2 pts		Lower for lean meat = 2 pts Higher for lean meat = -1 pts			
HOT DOGS	YES fat-free = 2 pts Light, not fat-free = 1 pt		Lower for fat-free or light = 2 pts Higher for fat-free or light = -1 pt			
FROZEN DINNER	YES all 3 reduced-fat types = 3 pts YES 1 or 2 reduced-fat types = 2 pts		*Lower for reduced-fat = 2 pts Higher for reduced-fat = -1 pt Lower for low-fat (per piece) = 2 pts Higher for low-fat (per piece) = -1 pt			
BAKED GOODS	YES low-fat items = 2 pts					
BEVERAGES	YES diet soda = 1 pt YES 100% juice = 1 pt		Lower for diet soda = 2 pts Higher for 100% juice = -1 pt			
BREAD	YES whole grain bread = 2 pts > 2 varieties whole wheat bread = 1 pt		Lower for whole wheat = 2 pts Higher for whole wheat = -1 pt			
BAKED CHIPS	YES baked chips = 2 pts > 2 varieties baked chips = 1 pt		**Lower for baked chips = 2 pts Higher for baked chips = -1 pt			
CEREAL	YES healthier cereal = 2 pts		Lower for healthier cereal = 2 pts Higher for healthier cereal = -1 pt			
BEANS	YES dry available = 2 pts		Lower for dry = 2 pts Higher for dry = -1 pt			
TORTILLAS	YES corn tortillas = 2 pt		Lower for corn = 2 pts Higher for corn = -1 pt			
CHORIZO	YES beef chorizo available = 1 pt		Lower for beef = 2 pts Higher for beef = -1 pt			
CHICKEN	YES Chicken Breasts Boneless Skinless = 2 pts		Lower for skinless = 2 pts Higher for skinless = -1 pts			
Availability Subtotal		0	Price Subtotal	0	Quality Subtotal	0
TOTAL NEMS STORE SCORE						

NEMS Availability of Healthier Items: Store Summary

Neighborhood: Buford Highway

Healthier Item:	Store #1: MF	Store # 2 City	Store #3 FM	Store #4 B-Kroger	Total # Available	Total # of Stores	% Total
1) Skim milk	1	1	1	1	4	4	100%
2) Fruit							
Bananas	1	1	1	1	4	4	100%
Apples	1	1	1	1	4	4	100%
Oranges	1	1	1	1	4	4	100%
Grapes	1	1	1	1	4	4	100%
Cantaloupe	1	1	1	1	4	4	100%
Peaches	1	1	1	1	4	4	100%
Strawberries	1	1	1	1	4	4	100%
Honeydew Melon	1	1	1	1	4	4	100%
Watermelon	1	1	0	1	3	4	75%
Pears	1	1	1	1	4	4	100%
Papayas	1	1	1	1	4	4	100%
Pineapple	1	1	1	1	4	4	100%
Limes	1	1	1	1	4	4	100%
Mangos	1	1	1	1	4	4	100%
3) Vegetables							
Carrots	1	1	1	1	4	4	100%
Tomatoes	1	1	1	1	4	4	100%
Sweet Peppers	1	1	1	1	4	4	100%
Broccoli	1	1	1	1	4	4	100%
Lettuce	1	1	1	1	4	4	100%
Corn	1	1	1	1	4	4	100%
Celery	1	1	1	1	4	4	100%
Cucumbers	1	1	1	1	4	4	100%
Cabbage	1	1	1	1	4	4	100%
Cauliflower	1	1	1	1	4	4	100%
Avocado	1	1	1	1	4	4	100%
Chayote	0	1	1	1	3	4	75%
Mexican Zucchini	1	0	1	0	2	4	50%
Spinach	1	1	1	1	4	4	100%
Onion	1	1	1	1	4	4	100%
Nopales	1	1	1	0	3	4	75%
Jicama	1	1	1	1	4	4	100%
Cilantro	1	1	1	1	4	4	100%
4) Lean meat	0	0	1	1	2	4	50%
5) Fat free/light Hotdogs	1	1	1	1	4	4	100%
6) Reduced fat frozen dinners	1	0	1	1	3	4	75%
7) Low fat baked good	0	1	0	1	2	4	50%
8) Beverages							
Diet soda	1	1	1	1	4	4	100%
100% juice	1	1	1	1	4	4	100%
9) Dry Beans							

NEMS Availability of Healthier Items: Store Summary

Neighborhood: Buford Highway

Healthier Item:	Store #1: MF	Store # 2 City	Store #3 FM	Store #4 B-Kroger	Total # Available	Total # of Stores	% Total
Pinto Beans	1	1	1	1	4	4	100%
Black Beans	1	1	1	1	4	4	100%
Red Beans	1	1	1	1	4	4	100%
11) Corn Tortillas	1	1	1	1	4	4	100%
12) Beef Chorizo	1	1	1	1	4	4	100%
13) Chicken Breast Available	0	1	1	1	3	4	75%
10) 100% whole wheat bread	1	1	1	1	4	4	100%
11) Baked chips	0	0	0	1	1	4	25%
12) Low sugar cereal	1	1	1	1	4	4	100%
Total # of NEMS healthier items per store (max. 55)	43	44	45	46			

NEMS Availability of Healthier vs. Regular Items: Store Summary

Neighborhood: Buford Highway

Item:	Store #1 (MF)		Store #2 (City)		Store #3 (BHWY Kroger)		Store #4 (Farmers Market)		Total # Healthy Available	Total # Regular Available	Total # of Stores	% Total Healthy	% Total Regular
	Availability:	healthy	regular	healthy	regular	healthy	regular	healthy	regular				
1) Milk		1	1	1	1	1	1	1	1	4	4	100%	100%
2) Fruit													
Bananas		1		1		1		1		4	n/a	4	100%
Apples		1		1		1		1		4	n/a	4	100%
Oranges		1		1		1		1		4	n/a	4	100%
Grapes		1		1		1		1		4	n/a	4	100%
Cantaloupe		1		1		1		1		4	n/a	4	100%
Peaches		1		1		1		1		4	n/a	4	100%
Strawberries		1		1		1		1		4	n/a	4	100%
Honeydew Melon		1		1		1		1		4	n/a	4	100%
Watermelon		1		1		1		1		3	n/a	4	75%
Pears		1		1		1		1		4	n/a	4	100%
Limes		1		1		1		1		4	n/a	4	100%
Papayas		1		1		1		1		4	n/a	4	100%
Pineapple		1		1		1		1		4	n/a	4	100%
Mangos		1		1		1		1		4	n/a	4	100%
3) Vegetables													
Carrots		1		1		1		1		4	n/a	4	100%
Tomatoes		1		1		1		1		4	n/a	4	100%
Sweet Peppers		1		1		1		1		4	n/a	4	100%
Broccoli		1		1		1		1		4	n/a	4	100%
Lettuce		1		1		1		1		4	n/a	4	100%
Corn		1		1		1		1		4	n/a	4	100%
Celery		1		1		1		1		4	n/a	4	100%
Cucumbers		1		1		1		1		4	n/a	4	100%
Cabbage		1		1		1		1		4	n/a	4	100%
Cauliflower		1		1		1		1		4	n/a	4	100%
Avocado		1		1		1		1		4	n/a	4	100%
Mexican Zucchini		1		0		0		1		2	n/a	4	50%
Chayote		0		1		1		1		2	n/a	4	50%
Spinach		1		1		1		1		4	n/a	4	100%
Onion		1		1		1		1		4	n/a	4	100%
Nopales		1		1		0		1		3	n/a	4	75%
Jicama		1		1		1		1		4	n/a	4	100%
Cilantro		1		1		1		1		4	n/a	4	100%

5) Beef Meat	0	1	0	1	1	1	1	1	1	2	4	4	50%	100%
6) Hotdogs	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
8) Reduced fat frozen dinners	1	1	0	1	1	1	1	1	1	3	4	4	75%	100%
9) Low fat baked good	0	1	1	1	1	1	1	0	1	2	4	4	50%	100%
10) Beverages														
Diet soda	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
100% juice	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
11) Beans														
Pinto Beans	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
Black Beans	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
Red Beans	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
13) Tortillas	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
14) Chorizo	1	1	1	1	1	1	1	1	1					
12) 100% whole wheat bread	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
13) Baked chips	0	1	0	1	1	1	1	0	1	1	4	4	25%	100%
14) Low sugar cereal	1	1	1	1	1	1	1	1	1	4	4	4	100%	100%
15) Chicken	0	1	1	1	1	1	1	1	1					
Total # of NEMS healthier/regular items per	43	16	44	16	46	16	44	16	16					

* In order to get the availability totals, type a 0 for no and 1 for yes

* No regular option for fruits and vegetables (shaded areas are not included in the calculations)

NEMS Point tallies - Availability, Cost, Quality

NEMS Stores Scoring Database						
Item	Point Value	Store # MF	Store # City	Store # B HWY FM	Store # BHWY Kroger	Store #
1) Milk						
Availability-						
Low-fat/skim	2	2	2	2	2	
Proportion >= 50%	1					
Price-						
Lower for lowest-fat	2					
Same for both	1	1	1	1	1	
Higher for low-fat	-1					
2) Fruit						
Availability-						
0 varieties	0					
< 5 varieties	1					
5-9 varieties	2					
10 varieties	3	3	3	3	3	
Quality-						
25-49% acceptable	1					
50-74% acceptable	2					
75%+ acceptable	3	3	3	3	3	
3) Vegetables						
Availability-						
0 varieties	0					
< 5 varieties	1					
5-9 varieties	2					
10 varieties	3	3	3	3	3	
Quality-						
25-49% acceptable	1					
50-74% acceptable	2					
75%+ acceptable	3	3	3	3	3	
4) Ground Beef						
Availability-						
YES Lean meat	2	0	0		2	
2-3 varieties	1			1		
> 3 varieties	2					
Price-						
Lower for lean meat	2				2	
Higher for lean meat	-1			(1)		
5) Hot Dogs						
Availability-						
YES fat-free available	2	2	2	2		
Light, but not fat free	1				1	
Price-						
Lower for fat-free, light	2	2		2		
Higher for fat-free, light	-1		(1)			
6) Frozen Dinners						

Availability-			0			
YES all 3 reduced-fat types	3					
Yes 1 or 2 reduced-fat types	2	2		2	2	
Price-						
Lower for reduced fat	2					
Higher for reduced-fat	-1					
7) Baked Goods						
Availability-						
YES low-fat items	2	0	2	0	2	
Price- (per piece/item)						
Lower for low-fat	2		2		2	
Higher for low-fat	-1					
8) Beverages						
Soda- Availability-						
YES diet soda	1	1	1	1	1	
Soda- Price-						
Lower for diet soda	2				0	
Juice Availability-						
YES 100% juice	1	1	1	1	1	
Juice Price-						
Higher for 100% juice	-1	(1)	(1)	(1)	(1)	
9) Bread						
Availability-						
YES whole grain bread	2	2	2		2	
>2 varieties whole wt bread	1		1		1	
Price-						
Lower for whole wheat	2					
Higher for whole wheat	-1	(1)			(1)	
10) Baked Chips						
Availability-						
YES baked chips	2	0	0	0	2	
>2 varieties baked chips	1					
Price-						
Lower for baked chips	2					
Higher for baked chips	-1				(1)	
11) Cereal						
Availability-						
YES healthier cereal	2	2	2		2	
Price-						
Lower for healthier cereal	2					
Higher for healthier cereal	-1	(1)	(1)		(1)	
12) Beans						
Availability-						
YES dry beans	2	2	2	2	2	
Price-						
Lower for dry beans	2			2		
Higher for dry beans	-1					

13) Chorizo						
Availability-						
YES beef	1	1	1	1	1	
Price-						
Lower for beef	2	2				
Higher for beef	-1					
14) Tortilla						
Availability-						
YES corn tortillas	2	2	2	2	2	
Price-						
Lower for corn	2			2		
Higher for corn	-1					
15) Chicken						
Availability-						
YES skin and boneless available	2		2	2	2	
Price-						
Lower for skin and boneless	2				2	
Higher for skin and boneless	-1		(1)			
16) Frozen Vegetables						
Availability-						
0 varieties	0					
< 5 varieties	1					
> 5 varieties	2			2		
		Possible	Store Totals	Store Totals	Store Totals	Store Totals
Total Points	69	31	31	35	40	0
Total Points Availability	32	23	26	24	31	0
Total Points Price	26	2	(1)	5	3	0
Total Points Quality	6	6	6	6	6	0