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NAVIGATING FOOD DESERTS: A GEO-ETHNOGRAPHY OF ATLANTA RESIDENTS'
EXPERIENCES, ROUTINES, AND PERCEPTIONS

by

LAKEISHA TATE

Under the Direction of Deirdre Oakley, PhD.

ABSTRACT

Food deserts and food access have increasingly become topics of concern in many urban and rural areas. Food deserts are areas in which there is relatively poor access to healthy and affordable food and/or areas where such available establishments are separated by great distance making them difficult to access. Lower income, racially segregated neighborhoods have fewer healthy food choices and higher rates of disease related to diet. Much of the research has focused on the health disparities and how there is an increased risk of unhealthy lifestyles among people who do not have access to healthy foods. The focus has been mainly on factors related to race or socioeconomic status. The purpose of this study is to shift the focus from examinations of urban environments and available resources to residents' experiences living in such areas as well as

their perceptions of food resource availability. Previous research appears to neglect these personal experiences, thereby missing a key component in helping to solve the issue of food deserts. To provide context of how food deserts in Atlanta formed, this study begins with an overview of the structure of Atlanta. Atlanta's history of residential segregation and institutional racism, which have thereby contributed to unfavorable conditions in certain neighborhoods and formation of food deserts, is highlighted. Using ethnographic methods and geographic information systems (GIS), the study focused on food deserts and how the residents living in them navigate their lives to obtain the food resources they need. The use of GIS allowed for the identification of these particular food desert areas and identification of the neighborhoods from which the participating residents were recruited. GIS also helped highlight participants' activity spaces (home, work, and shopping locations). Questionnaires and qualitative interviews allowed for a better understanding of residents' experiences living in Atlanta area food deserts. I highlight lived experiences and activity spaces within the context of disadvantaged neighborhood characteristics and resources. Variables such as finances, transportation, neighborhood factors, preference, availability, and convenience emerged as being most impactful in residents' experiences accessing food.

INDEX WORDS: Food deserts, food access, lived experiences, interviews, GIS, activity space

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by

LAKEISHA TATE

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

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Georgia State University

2018

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Lakeisha Tate
2018

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May 2018

DEDICATION

This dissertation is dedicated to my parents, Gerry and Sun. Thank you for all your hard work and love to help me become the person I am. I could not have done this without you and I hope I made you proud.

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Thank you to my wonderful committee: Dr. Deirdre Oakley, Dr. Amy Spring, and Dr. Katherine Hankins. I appreciate all your time, feedback, and guidance throughout the process. I admire the strong, intelligent, and determined women that you are. I would also like to thank all my friends and family who have been so patient and understanding through my whole academic journey; you know who you are. This research could not have been done without the cooperation of my participants and I thank you for your time and willingness to see it through with me.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	V
LIST OF TABLES.....	XI
LIST OF FIGURES.....	XII
1 INTRODUCTION	1
1.1 A Brief Background on Food Access	3
1.2 Theoretical Framing.....	6
1.3 Statement of Purpose.....	8
1.4 Leveraging Community Activism to Effect Policy Changes	9
1.5 Overview of Dissertation	11
2 THEORETICAL FRAMEWORK.....	13
2.1 Applying a Politics of Resourcefulness and Scholar-Activism.....	13
<i>2.1.1 Ethical Scholarly Research and Activism.....</i>	<i>13</i>
2.2 Applying a Critical Race Lens	15
<i>2.2.1 Role of Institutional and Systemic Racism</i>	<i>17</i>
<i>2.2.2 Role of Residential Segregation.....</i>	<i>19</i>
2.3 The Case of Atlanta, Georgia.....	22
<i>2.3.1 Population Shifts.....</i>	<i>23</i>
<i>2.3.2 Store Closings.....</i>	<i>24</i>
3 LITERATURE REVIEW	26

3.1	Accessibility Factors	27
3.1.1	<i>Types of Available Food Stores, Neighborhood Disadvantage, and Health</i>	27
3.1.2	<i>Race/Ethnicity</i>	32
3.1.3	<i>Transportation and Routes</i>	33
3.1.4	<i>Shopping Behaviors</i>	35
3.1.5	<i>Geographic Problems & Perception</i>	37
3.2	Conclusion	40
4	METHODOLOGY	43
4.1	Research Questions	43
4.2	Research Design.....	43
4.3	Data Collection	45
4.3.1	<i>Spatial Analysis with GIS: Study Area Qualification</i>	45
4.3.2	<i>Sampling Procedures & Recruitment.....</i>	48
4.3.3	<i>Initial Communication with Participants</i>	50
4.3.4	<i>Sample Demographics.....</i>	51
4.4	Analysis of Interviews Using Grounded Theory Methods (GTM):	56
4.4.1	<i>Open Coding.....</i>	58
4.4.2	<i>Axial Coding.....</i>	61
4.4.3	<i>Selective Coding: “Convenience” as Core Variable and Principal Story...62</i>	

4.4.4	<i>Conclusion</i>	63
5	CONCEPTUALIZING THE FOOD DESERT	72
5.1	Defining Food Desert	73
5.1.1	<i>How Participants Define Food Desert</i>	75
5.1.2	<i>Applying the Institutional/Administrative Definition of Food Deserts</i>	77
5.1.3	<i>Just Part of the Neighborhood</i>	78
5.1.4	<i>Just Another Fancy Name</i>	80
5.2	Conclusion	81
6	EXPERIENCING FOOD DESERTS	83
6.1	Finances	83
6.2	Transportation Issues/Limitations	85
6.3	Neighborhood Factors	88
6.3.1	<i>“That’s not my neighborhood”</i>	89
6.4	Preference/Choice of Food Store	90
6.5	Availability of Food Stores	93
6.6	Convenience	94
6.7	Conclusion	97
7	NAVIGATING FOOD DESERTS: ACTIVITY SPACES	98
7.1	Mental Maps, Geographic Awareness, and Activity Space	98

7.2	Where Shopping Happens and Why: Home-Work-Grocery Store Routine	106
7.2.1	<i>“Closer-to-Home” Shoppers</i>	107
7.2.2	<i>“Closer-to-Work” Shoppers</i>	112
7.2.3	<i>“Other/In Between” Shoppers</i>	125
7.2.4	<i>Food Service and Shopping Alternatives</i>	129
7.3	Conclusion	131
8	APPLYING A POLITICS OF RESOURCEFULNESS AND SCHOLAR- ACTIVISM	133
8.1	Resourcing	134
8.1.1	<i>Local Food Networks</i>	134
8.1.2	<i>Community Activism: It Takes a Neighborhood</i>	139
8.2	Conclusion	143
9	CONCLUSION & IMPLICATIONS	145
9.1	Summary and Discussion of Research Findings	146
9.1.1	<i>Conceptualizing and Experiencing Food Deserts</i>	146
9.2	Implications	149
9.2.1	<i>Racialization of Food</i>	149
9.3	Limitations of Study	151
9.4	Suggestions for Future Research	153

REFERENCES157

APPENDICES175

Appendix A: IRB Approval Letter175

Appendix B: Recruitment Flyer177

Appendix C: Recruitment Script.....178

Appendix D: Questionnaire179

Appendix E: Semi-Structured Interview Guide182

LIST OF TABLES

Table 4.1 Participant Information	64
Table 4.2 Food Access Questionnaire Responses (N=35)	65
Table 4.3 Variable-Concept-Indicator Model (subset of concepts and indicators)	66
Table 8.1 Operating Food Pantries in Atlanta	136

LIST OF FIGURES

Figure 4.1 central Atlanta (downtown) food store locations	68
Figure 4.2 Atlanta area food deserts in low income communities.....	69
Figure 4.3 Overlay of food stores with average household income by Census block group	70
Figure 4.4 Targeted research areas for participant recruitment	71
Figure 4.5 Hot spot analysis of fast food locations.....	72
Figure 7.1 Locations of all study participants' home, work, and shopping locations	100
Figure 7.2 B. Owens' mental map representation	102
Figure 7.3 L. Thomas's mental map representation.....	103
Figure 7.4 K. Rodriguez's mental map representation	103
Figure 7.5 G. Johnson's mental map representation.....	104
Figure 7.6 B. Owens' activity space	108
Figure 7.7 M. Clark's activity space	109
Figure 7.8 G. Johnson's activity space.....	110
Figure 7.9 W. Gardener's activity space	110
Figure 7.10 L. Jackson's activity space.....	111
Figure 7.11 J. Johnson's activity space	111
Figure 7.12 W. Brown's activity space	112
Figure 7.13 E. Byrom's activity space	113
Figure 7.14 F. Lopez's activity space	114
Figure 7.15 B. Garner's activity space	116
Figure 7.16 B. Murphy's activity space.....	117
Figure 7.17 A. Watson's activity space.....	118

Figure 7.18 C. Carter's activity space	118
Figure 7.19 K. Rodriguez's activity space	119
Figure 7.20 R. Jenkin's activity space	119
Figure 7.21 M. Turner's activity space	120
Figure 7.22 T. Hill's activity space.....	120
Figure 7.23 N. Sloan's activity space.....	121
Figure 7.24 K. Smith's activity space	121
Figure 7.25 L. Thomas's activity space	122
Figure 7.26 N. Butler's activity space.....	122
Figure 7.27 L. Butler's activity space	123
Figure 7.28 M. Freeman's activity space	123
Figure 7.29 M. Kirksey's activity space	124
Figure 7.30 M. Jones's activity space	124
Figure 7.31 S. Williams' activity space (shopping location is also location of second job).....	125
Figure 7.32 F. Martinez's activity space	126
Figure 7.33 M. Reyes' activity space.....	127
Figure 7.34 D. Perry's activity space	128

1 INTRODUCTION

The United States Department of Agriculture's (USDA's) Economic Research System defines food deserts as those areas having the criteria of low-income and low-access, as indicated by Census tracts and location of food stores (USDA 2009). Additionally, food deserts are defined as being low-income communities that are located more than one mile from a reliable source of healthy foods, especially fresh fruits and vegetables (USDA 2015). Many people may be living in a food desert and not even realize it. A number of studies have highlighted severe disparities among minority, lower-income groups in access to healthy food (i.e. fresh fruits and vegetables) (Glantz 2009, Lewis et al. 2005, Nord et al. 2005). Studies of urban areas also show that disadvantaged majority minority neighborhoods are most likely to have less access (Block and Kouba 2005, Zenk et al. 2005). Powell et al. (2007) found there are significant differences by neighborhood income in the availability of food stores across urban areas in the United States. Atlanta, Georgia displays this phenomenon, especially in the central portion of the city (see Figures 1, 2, and 3).

In addition, fast food chains are more likely to be located in non-poor zip codes areas (Chung and Myers 1999) and studies have shown that neighborhoods with a higher proportion of lower-income African American residents have fewer healthy food options along with a disproportionately high number of fast food restaurants (Lewis et al. 2005, Morland et al. 2002, Papavasiliou et al. 2007). As food access by its nature has a geographic component, adding to the problem of food access is the issue of perceived distance among residents. Research in geographic or spatial studies have increasingly been examining the role perception plays in where and how people move (Kwan 2000a). Perceived distance is a major factor in how people access resources, such as healthcare (Hawthorne and Kwan 2013, Kwan 2000b)

and food (Barnes et al. 2015) and many people tend to misperceive distances and possibly miss out on closer opportunities or resources from which to access their food.

However, little research to date has focused on the lived experiences of people living in food deserts. Such experiences include residents' routines, perceptions, and overall agency in navigating their lives within the structural context of food deserts. This study will add to current research by filling in those gaps: including empirical data from actual residents that live in a food desert through in-depth interviews and the use of geographic information systems (GIS).

Previous research has also employed different qualitative methodologies (Freedman and Bell 2009, Galvez et al. 2007, McEntee and Agyeman 2009)—most specifically focused on economics, self-reported health, and health-related statistics. Therefore, this study will add to current information concerning the overall lived-experience of the food desert. In addition, this research will take on a mixed-methods approach, interviewing residents from at least two of these particular neighborhood areas in the Atlanta, Georgia area and using GIS to assist in the spatial analysis. These selection criteria are discussed in more detail in the methodology portion later.

By interviewing select participants who qualify under these same criteria (African Americans who fall within the lower income group, living in areas of fewer food options) my hope is to gain a better understanding of the day-to-day experiences and actions involved in food access and living in a food desert. What do participants experience while accessing food? How do they access food? What are their perceptions of their neighborhood in terms of availability and types of food resources? In order to better understand this, the theoretical framing of resourcefulness will be used as both an ethical practice of scholarly research and the

inclusion of participants in order to identify their needs and priorities (Derickson and MacKinnon 2015). The framework of resourcefulness is still relatively young and as its proponents MacKinnon and Derickson suggest, should be examined more in social science research.

If there is any concern about food deserts and the people living within them and if there is to be any alleviation to the problem of food deserts, researchers need to consider how the people are currently affected as well as what could be done to help bring any change in the future. It is important that a better understanding of residents' experiences is developed to capture the missing pieces of the issue of food access. The overall goal of this research is to answer the question, "What are residents' experiences in accessing food in a food desert?" and to propose a path forward to policymakers and the business community. Expanding this research in a sociological framing will greatly benefit underserved areas as it will hopefully shift the direction and focus of remedying food deserts onto some structural and policy changes in the future.

1.1 A Brief Background on Food Access

There are multiple ways to define and measure access to food and there has not been one consistent way in doing so. For this research, the concept of food access encompasses the circumstances discussed below—food deserts, food environment, and food insecurity. This will include how residents access or obtain their food; what types of food are accessible outside their home and neighborhood. An important question in this research is not so much where the participants might access their food, but *how*? The USDA's measurement or qualification of a food desert is somewhat arbitrary if the factors such as transportation and work routes are not taken into account. The qualitative interviewing process addresses this

aspect. Later, in the methodology portion, access is also referred to as the reasonable distance the person would have to travel in order to obtain their food. Though “reasonable distance” can vary by person, I will adhere to the USDA’s qualification of a reasonable distance in accessing food, which is one mile, in order to delineate those areas in Atlanta that would qualify as a food desert. A Euclidean distance measurement of a one mile radius from a supermarket is used—discussed later—and is also the most common measure for the food environment.

The term “food desert” has been used in recent years to describe areas with relatively poor access to healthy and affordable food (Cummins 2007, Mead 2008, Beaulac et al., 2009, Wrigley 2002). The U.S. Department of Agriculture’s Economic Research System defines food deserts as those areas having the criteria of low-income and low-access, as indicated by Census tracts and location of food stores (USDA, 2009). In terms of distance, food deserts have been defined as areas where supermarkets with healthy and affordable food are many miles away (Shaw 2006)—this can be for either rural or urban areas. Food deserts and food environment go hand-in-hand. Food environment, like the general definition of access, is also defined as a walkable distance to food stores or stores within a one mile radius (Freedman and Bell 2009). Food environment is often included in studies on food access as it is inclusive of the area discussed as the food desert; describes what the overall area is composed of in terms of food stores. Also, that there is a lack of food stores within the environment qualifies it as a food desert.

Most studies indicate the food environment as being the environment of food stores—which includes grocery stores, supermarkets, food pantries, restaurants, cafeterias at work or school, and vending machines. Environment could also be determined by surveys or questionnaires, in which the participants are asked what they consider to be their food

environment, or spatial analytical methodologies such as GIS. Previously defined food accessibility measures include: diversity (in the types of stores with a given area), proximity (of the nearest distance to food stores), and/or variety (the different types of food stores as well as their prices) (Apparcicio et al. 2007).

Another popular definition is that food deserts are areas of relative exclusion; there are physical and economic barriers for people in their access to healthy food (Reisig and Hobbiss, 2000). Additionally, food deserts have been specifically defined as affecting people of lower socioeconomic status. This is usually the case as food deserts characteristically are found within larger urban areas where there already tends to be a higher percentage of low-income residents (though there are rural food deserts, they are beyond the focus of this study).

Originally, a public sector housing resident in Scotland used the term “food desert” in the early 1990s to describe poor access to an affordable and healthy diet (Cummins and Macintyre, 2002). As Cummins and Macintyre (2002) noted, a particular resident’s use of the term was used to “capture the experience of what it was like to live in a deprived neighborhood where food was expensive and relatively unavailable” (p. 2115). While Cummins and Macintyre note the issue of capturing experiences of the residents when examining the existence of food deserts, this has been done minimally in recent years.

Lastly, food insecurity is defined by the United States Department of Agriculture as the experience of periods of time when there is uncertainty of having, or the inability to acquire enough food for all household members because there is insufficient money and other resources for food—it is not always necessarily linked to having enough money to purchase the foods. It is also seen as the limited availability of nutritionally adequate and safe foods or uncertain ability to acquire food in socially acceptable ways (Hamilton et al., 1997). Freedman

and Bell (2009) found that participants reported high rates of food insecurity. Nord et al. (2005) state that one in ten households in the United States experiences food insecurity and this trend has remained consistent since 1995. In 2002, 11.1% of households in the United States experienced food insecurity (Economic Research Service, 2004) and it appears to be a growing trend.

Food deserts have also been described as a mechanism by which poverty and social inequality cause health disparities (Acheson, 1998). This is especially relevant and evident to the field of sociology. The term continues to be used in various ways, but especially to highlight poverty, social exclusion, areas with poor food availability or poor food retail provisions (Acheson 1998, Larsen and Gilliland 2008, Smith et al. 2009). There are major implications on a person's health in regard to the availability of healthful foods. The obesity epidemic is one of the main topics researchers tend to focus on as there is higher consumption of fast food likely due to the abundant availability and easy accessibility of these food items. Other health issues, that may be more inconspicuous, are starting to be examined in much more depth. The major findings in much of the research are that the local food environment greatly influences the public's health (Glantz 2009, Lewis et al., 2005, Nord et al. 2005).

1.2 Theoretical Framing

The theoretical lens to be used in this research will be centered around an emerging body of research on resourcefulness. As "resourcefulness is meant to problematize both the uneven distribution of material resources and the associated inability of disadvantaged groups and communities to access the levers of social change," (MacKinnon and Derickson 2012: 11), it seems especially appropriate for examining residents' experiences living in a food desert. Resourcefulness will act as the guiding perspective in this research. A politics of

resourcefulness is a critical theoretical perspective that concerns itself with empowerment of and activism from marginalized communities. Additionally, critical race theory—a theoretical framework focusing on the intersections of race and power in society, will complement the application of resourcefulness.

MacKinnon and Derickson highlight what they term a politics of resourcefulness, or an initial framework they feel should be expanded in further research. The major aspects of resourcefulness to be used in this research will be centered on activism and advocacy. This theoretical lens will be used as an advocacy perspective which will shape the types of questions to be asked of the participants, inform how the data are collected and analyzed, and provide a call for action or change (Creswell 2009). Resourcefulness involves an activist dimension that can hopefully apply to policy makers in remedying the problem of food deserts. “A politics of resourcefulness highlights the material and enduring challenges that marginalized communities face in conceiving of and engaging in the kinds of activism and politics that are likely to facilitate transformative change” (MacKinnon and Derickson, 2012: 13). In a similar vein, critical race theory will also be used in conjunction with resourcefulness as a lens in which to examine food access issues among the selected participants--non-white, lower income groups.

This research situates itself in just the same setting: marginalized communities in which there are challenges faced by the residents—challenges in accessing everyday food items in a disadvantaged neighborhood or social setting. The hope is to identify how residents navigate through these challenges and to propose a path forward using the politics of resourcefulness and by enacting a type of food justice or food social movement. Food social movements have become increasingly more popular in recent years in sociology and geography. Food social

movements are designed to not only focus on the landscapes of retail consumption but also focuses on sovereignty and community food security (Heynen, Kurtz, and Trauger 2012) and to help people out of the negative situation.

To provide a better foundational understanding of this research as well as the application of the theoretical lens of resourcefulness, I will highlight some of Atlanta's urban history and how it has been plagued by institutional racism, to include residential segregation, and neighborhood decline. Discussion of these factors aids in the positioning of the marginalized groups in Atlanta, highlight the shaping of the city, and reveals how its formation or urban structure contributed to the food desert issue that can be seen today. These issues together highlight a way in which the food production systems are interwoven in race and class relations (Mitchell 2013, Minkoff-Zern 2012, 2014). The theoretical aspects of residential segregation and institutional racism are discussed to highlight Atlanta's structure and situate the problem of food deserts and unequal access to food in Atlanta. This research is not intended to generate new sociological theory but to make observations and present descriptive research of what is actually happening and to also use the resourcefulness framework to suggest how to move beyond problems of unequal access to food.

1.3 Statement of Purpose

Little attention has been paid to the experiences of people living in food deserts. Much of the research usually focuses on the health disparities associated with lack of access to healthy foods and higher rates of fast food consumption. In the words of Sadler et al (2016), a lack of consensus in food desert research and definition suggest further methodological investigation is needed. The intent in this research is to focus on the people and their experiences, a missing component in much of the food desert research. The intent in applying

the framework of resourcefulness is to examine the problem in a different way. In examining the food desert issue through a politics of resourcefulness, this research should stand apart from other food access research in that the people's voices are of most importance and will be included as the cornerstone for the research. The participants' voice will be acknowledged and can hopefully shed some light on the same kinds of issues in other major cities with food access issues.

I will be focusing on what actions Atlanta food desert residents take and/or experience, to gain a better understanding of their day-to-day lives in accessing food. What issues do residents have accessing food? What are those limits and freedoms that shape the actions of the residents? How do residents evaluate and choose their course of action when accessing food? Most importantly, how do they access their food? Gaining this knowledge can hopefully allow for some remedy of food deserts and food access issues in urban areas (though it can also be applied to rural food deserts).

While previous research consistently examined the spatial make-up of food deserts, the experiences of the residents still have not quite been adequately captured and my goal was to do so in this study in Atlanta. The results of this study should influence both the scholarship in food accessibility studies—taking in account more than just the variables of location of stores and residents—as well as policy decisions regarding where food stores should be placed and what can be done about the areas already affected.

1.4 Leveraging Community Activism to Effect Policy Changes

By conducting this research on food access, the goal is to call attention to gaps in previous research that leave out people's lived experiences while also providing suggestion on how to move forward with the information gathered. Derickson and MacKinnon's work (2015)

on environmental issues in a West Atlanta watershed involved community engagement and collaboration, which were key to addressing the environmental problems faced by an underserved neighborhood. Similarly, the plan for this research is to “resource” the individuals living in the food deserts. For Derickson and MacKinnon, a board of stewards, which consisted of the affected residents as well as other advocates, was established in order to inform and influence various processes and agencies within the city.

Another influential example in how this collaborative community research is appropriate is in how Case and Hawthorne (2013) resourced the community and conducted a study on site suitability of social services in Atlanta using GIS. The knowledge from the community, such as individual experiences and integration of local knowledge, helped to provide strong anecdotal evidence to policy makers and community based organizations. For my study, the goal is to provide evidence in the same way to community based organizations and policy makers, in hopes of starting a food social movement and more activist practice and bringing about change for these communities. This study will provide the initial stages for a more developed plan of action to present to appropriate parties. The resulting analysis and objectives from this study will be presented to community based organizations and city council at regular meetings and gatherings.

To date, and to my knowledge from doing this initial research on food access in Atlanta, there have been no proposed solutions suggested to policy makers or various organizations on alleviating the issue. To ensure this research sets itself apart from other research done on food deserts and food access, suggested possible solutions to the situation have been put forth only after completion of research and collaboration with the affected citizens, as this is a major distinctive component of this project. Caruso and Myers (2016) have

recently suggested solutions such as state-run grocery stores and military commissary-type stores, though this specifically focused on just two low-income neighborhoods in New York City, New York. Ongoing research such as this is indicative of the problem of food access being recognized and addressed, but to point out again, what affects one community and is the solution to one community's problems might not be the same for another. After this research concludes, a more detailed picture of Atlanta's food access issues (at least for a select area within the city) will aid in being able to properly suggest a plan forward.

1.5 Overview of Dissertation

Chapter two provides background on the relevant theoretical perspectives aiding this research, social structural background elements of the city of Atlanta, and how they relate to food access in general. Theoretical aspects of institutional racism in relation to economic domination and impoverishment as explained by Joe Feagin (2006) will be discussed. I will also highlight Massey and Denton's aspects of residential segregation (1993) as they relate to social structure in Atlanta and help to illustrate its lasting effects and relationship to urban poverty. The theoretical framework of a politics of resourcefulness and its application in this research will be detailed. The role of the residents and community will be examined through a critical race perspective and the methodological approaches—such as interviews and participant involvement, discussed later—will help to fill in the gaps in previous research. Chapter three will cover the literature relevant to this food access study. While there is expansive coverage of literature on food deserts and food access, the literature included will be focused more on the themes and methodological implications applicable to this research. This will include accessibility factors, shopping behaviors, and issues related to geography and perception. Chapter four will outline the data and methodology—using Census tract data in

conjunction with store locations, qualitative interviewing, and GIS. The resulting experiences and stories from participants will comprise chapters five, six, and seven. Finally, in chapter eight, I discuss the importance of this study to the fields of sociology and geography especially, but including broader implications for further research in multiple fields as well.

2 THEORETICAL FRAMEWORK

2.1 Applying a Politics of Resourcefulness and Scholar-Activism

The key theoretical lens to be used in this research will be that of resourcefulness, or a “politics of resourcefulness” as put forth by MacKinnon and Derickson (2012). MacKinnon and Derickson developed a politics of resourcefulness as an alternative to the popular resilience thinking, noting resilience policy falls short in ways, namely in that it does not adequately address uneven access to material resources and levers of social change (p. 3). Resilience is also conservative in that rather than transforming existing systemic relations—such as what resourcefulness should do, it privileges them (p. 11). While resilience in the social sciences is centered on how people overcome various disadvantageous obstacles in institutions or society, resourcefulness takes an extra step forward to include an ethical practice of scholarly research and an activist dimension. These two combined could hopefully bring about changing the problematic situation for a marginalized group.

2.1.1 *Ethical Scholarly Research and Activism*

This research focuses on two major tenets of a politics of resourcefulness; the practice of ethical scholarly research and activism, which will function jointly. The practice of ethical scholarly research includes involving the particular community being researched as collaborators, not just research subjects. The idea is to coproduce knowledge with the participants as opposed to just conducting research on them (Derickson and Routledge 2015). Resourcefulness is the process by which these groups can go about bringing meaningful and significant change; informing and motivating policymakers and making voices heard.

MacKinnon and Derickson’s (2012) politics of resourcefulness highlights community activism as a major component and is meant to problematize the uneven distribution of

material resources (p. 11). “Resourcefulness focuses attention upon the uneven distribution of resources within and between communities and maintains an openness to the possibilities of community self-determination through local skills and ‘folk’ knowledge” (MacKinnon and Derickson 2012: 15). By centering the research on the participant residents, including them in the various aspects of the research, and making them collaborators (Derickson and MacKinnon 2015: 311), the research will be achieving some of the beginning stages of the practice of ethical scholarly research. The participants will essentially be resourcing this research on the very groups they belong.

Most importantly and highly applicable to this study, “...resourcefulness is aimed at designing research questions, processes, and practices in ways that are always informed by the concerns, desires, objectives, and needs of historically marginalized communities” (Derickson and MacKinnon, 2015: 306). As Derickson and MacKinnon (2015: 311) further explain:

“...resourcefulness as a practice of scholarly research entails ‘triangulation’ of the research question to consider not only the advancement of scholarly knowledge but equally the needs and priorities of the communities with which we work, as well as the political projects that are advanced by the findings of the research.”

With this objective in mind, the goal of this research was to employ the use of the politics of resourcefulness to raise empirical questions and frame the empirical research around the selected communities living in food deserts. This research will serve as the initial stage of what should hopefully continue on through the community activism that can take place. I observed, interacted with, involved, and engaged the community affected. This involvement will allow for a better understanding of the needs and wants of the people. The goal was to have participants from the community tell their story and this acts as an initial stage of that

story-telling. The resulting findings will be used to suggest alternative agendas for policy-makers and food store companies; inform the powers that be of the concerns of the people.

2.2 Applying a Critical Race Lens

In conjunction with using the theoretical lens of resourcefulness, I also approached this research through a critical race perspective. Critical race theory (CRT) is built around scholars and activists interested in “transforming the relationship among race, racism, and power” (Delgado and Stefancic, 2001:2) and critical race theorists attempt to inject the cultural viewpoints of people of color who have in common a history of oppression (Barnes 1990, Coello et al. 2003). Critical race theory and scholarship are unified by two common interests; 1) understanding how a regime of white supremacy and its subordination of people of color have been created and maintained in American culture and 2) the desire to not just understand the connection between the law and racial power, but to change it (Crenshaw et al. 1995).

Collins (2005) explains critical race theory similarly as theory that constitutes theorizing about the social defense of economic and social justice; it encompasses the bodies of knowledge and sets of practices held within institutions that grapple with central questions facing groups of people that are differently placed in specific political, social and historical contexts (p. xiv). In developing a new critical race or social theory, Collins suggests that it include analyses that affect people’s everyday lives—the idea in this study of residents’ experiences living in food deserts. Barnes (1990) also posits that “distinguishing the consciousness of racial minorities requires acknowledgement of the feelings and intangible modes of perception unique to those who have historically been socially, structurally, and intellectually marginalized in the United States” (p. 1864).

“Critical race theory aims to reexamine the terms by which race and racism have been negotiated in American consciousness, and to recover and revitalize the radical tradition of race-consciousness among African-Americans and other peoples of color...” (Crenshaw et al., 1995: xiv). Within critical race theories there exists analysis of how race and racism became products of a social structure and how they perpetuate in various social arrangements and institutions (Bell et al. 1995, Delgado and Stefancic 2001).

Also notable about CRT is that at its core, there is an activist dimension, similar to resourcefulness. CRT will allow me as the researcher to understand the social situation taking place, and to try to invoke change. In doing this research, I will get a better understanding of what residents experience as well as an understanding of another way our society is organized along racial lines and hierarchies. These ideas are, as Delgado and Stefancic (2001) note, a primary attribute of CRT. With this information at hand, one can then hopefully make transformations for the better.

Previous research on food deserts has not taken on a critical race perspective and this research aims to fill in that gap. Shannon (2016:199) explains, “...in treating food access as a primarily distributional problem, much food desert work ignores racial and economic landscapes that shape everyday mobility. In other words, the problem of food deserts...lies not as much in the distribution of supermarkets as it does in more fundamental processes of urban life.” With the help of participants in the study and in doing this research in such a critical way, I hope to provide a meaningful contribution to the field of sociology and society as a whole. Applying a critical race lens, in conjunction with resourcefulness, to the issue of food deserts in Atlanta will hopefully acknowledge the unheard or dismissed voices and for policy suggestions and changes in the future.

2.2.1 Role of Institutional and Systemic Racism

Institutional racism plays an important role in food access and the food environment in Atlanta, in that the structure of the city presents examples of institutional racism which thereby affect the make-up of the disadvantaged area. The analysis of institutional and systemic racism should be considered when analyzing the existence of food deserts in Atlanta as well as the overall influence of those institutional practices on the city. Atlanta clearly exhibits some of the characteristics and these structural effects are significant to the presence of food deserts. Institutional racism illustrates how racial disadvantage is in the social structure and “create or reproduce hierarchical social structure based on essentialized racial categories” (Winant, 2004, 126).

The link of racism to urban poverty had also been notably mentioned by Glasgow (1981) in which it was noted that the reasons blacks in America were disadvantaged were related to the practices of institutional racism. Glasgow (1981) noted that racism is likely the most basic and prominent cause of the underclass condition and this was evident when examining the state of institutions such as education, the overall economy, the welfare system and the government. It has also been argued that bureaucratic practices and activities have often been influenced by racism that led to a continuing situation of blacks in poverty (Pinkney 1984, Glasgow 1981) and the race problem has been a chief reason why poverty has become a major issue in America (Glazer 1965:20). These conditions continued to perpetuate their underclass status.

Joe Feagin (2006 & 2010) presents theoretical perspective of systemic racism and explains that systemic racism is a part of everyday life. Systemic racism is embedded in all the institutions we live in and are a part of, and that it often goes unnoticed to most; it is

institutionalized. Feagin notes that the core racist realities are manifested in each of society's major parts (p. 6). "Systemic racism includes a diverse assortment of racist practices; the unjustly gained economic and political power of whites; the continuing resource inequalities; and the white-racist ideologies, attitudes and institutions created to preserve white advantages and power" (Feagin 2010: 16).

Carmichael and Hamilton (2001) and Jones (2000) explain institutional racism similarly, as those practices which tend to reinforce racial inequality, white superiority, subordination of certain racial groups as they related to access to resources (highly relevant here), and differences in opportunities and power. Dominelli (1998) has defined institutional racism as routines that rely on public authority to ration resources and power in order to exclude racially inferior categories. Similarly, Camara Jones (2000) outlines different levels of racism and provides a theoretical framework for understanding racism.

Of these frameworks, Jones's (2000) seems the most fitting to the discussion of food access. Jones's framework includes three levels: institutionalized, individual, and internalized. Jones defines institutionalized racism as "differential access to the goods, services, and opportunities of society by race...it is normative, sometimes legalized, and often manifests as inherited disadvantage" (p. 1212). Jones also discusses material conditions that are affected by institutionalized racism. Examples given include different access to things such as education, housing, and employment. Though she does not mention food sources specifically, this dimension of the theoretical framework she posits is clearly evident in the issue of food access. The goods in this case are food, the services are the stores, and the opportunities are the availability. Jones also states that institutionalized racism is structural and often evident as inaction in the face of need. An example of inaction would be the fact that it is recognized that

there are disparities in food sources, but little to nothing has been done about it. This could be for various reasons however, though these reasons will not be the highlight of my research.

Jones (2000), Feagin (2006), Massey and Denton (1993), and Bowser (2006) discuss socioeconomic status in relation to race. There is an obvious association between race and socioeconomic status that is due to institutionalized racism in our country (Jones 2000). Feagin notes that “each institutional dimension of systemic racism is linked, directly or indirectly, to other major institutional dimensions” (p. 46). The analysis of food access in Atlanta highlights many aspects of institutional racism present within the city and there are even more telling examples, noted below.

2.2.2 Role of Residential Segregation

As mentioned above regarding institutional racism, especially in the case of Atlanta, residential segregation is evident in the structure of the city. Researchers have noted that having concentrated poverty in a particular geographic region is built into the everyday experience of urban blacks, and this is caused by racial segregation (Bane and Jargowsky, 1988; Hughes, 1990; Massey and Denton, 1993; Massey and Eggers, 1990; Wilson, 1987; Wilson and Aponte, 1985). As Massey and Denton note about ghettos, racial segregation is a structural factor that perpetuates black poverty in the U.S. and “residential segregation is the principal organizational feature of American society that is responsible for the creation of the urban underclass” (p. 9). Massey and Denton (1993) also note that segregation plays a key role in depriving poor black families of access to many goods and services. Racial residential segregation results in poor blacks who live in neighborhoods that typically lack rudimentary retail, health facilities, and other everyday establishments such as grocery stores, compared to other poor groups (Massey and Denton 1993).

Massey and Denton (1993) noted the different factors of racial segregation in metropolitan areas, Atlanta included. Segregation is present due to racist attitudes, behaviors, and institutional practices that disenfranchise blacks (such is the case with Atlanta's history), thereby leading to segregated housing markets. Logan, et al. (2004) found that though there has been a decrease in racial residential segregation over the past couple of decades, there is still substantial segregation taking place in the country. Though there was a decrease in segregation (Wilkes and Iceland 2004), Atlanta unfortunately fell among cities that became newly hypersegregated in 2000. Massey and Denton (1993) define hypersegregation as an occurrence when four of five dimensions are present: unevenness, isolation, clustering, concentration, and centralization of particular racial groups in a given area. Applying this framework of hypersegregation to Atlanta, one can identify these dimensions, especially as it relates to food deserts within the city. In overlaying the residential data with the availability of food resources (to be discussed below with regard to geographic information systems), one can get a more telling view of what is present or absent in the landscape. These dimensions of hypersegregation are definitely apparent when examining the food stores available in particular areas of Atlanta.

2.2.2.1 Impacts of Segregation: Concentrated Poverty

Some major impacts of residential segregation which revolve around the concentration of poverty are also important to include. The concentration of poverty has other impacts and consequences in itself. These topics have been largely discussed and debated in the field of sociology, though there is overwhelming evidence that they are indeed affected and caused by segregation. Again, Massey and Denton's (1993) research indicates that racial residential segregation is the principal organizational structural feature of American society responsible

for the perpetuation of urban poverty and represents a primary cause of social inequality in the United States. Increases in residential segregation are linked to the presence of inner-city neighborhoods, which have a defining feature of being poorer than the areas around them. Concentrations of poverty are one of the most notable features. The concentration of poverty brings about a few other societal detriments, especially a lack of resources, all linked back to segregation.

Researchers (Massey and Denton 1993, Patillo-McCoy 1999, Shapiro 2004) identify problems such as crime, violence, poorer health, family instability, welfare dependency, male joblessness, housing abandonment, fewer services, poorer education and low educational attainment. Placing emphasis on the link between segregation and increases in poverty helps us to understand the ability of non-poor blacks to escape segregation and its consequences, despite increases in class segregation in black neighborhoods (Jargowsky 1996).

Increased poverty also causes the neighborhood environment to fall apart, which then leads to individuals facing socioeconomic difficulties. Massey and Denton (1993) point out that when poverty concentrations rise, income is withdrawn and what results is dilapidation, abandonment, and physical decay that then spreads to outlying areas. This is evident in the issue of the supermarkets and larger grocery store closings that took place in Atlanta, discussed below. These negative circumstances can be detrimental to residents. Ross et al. (2000) found that the neighborhood instability and social isolation negatively affects the psychological well-being of residents, especially in poorer neighborhoods. Negative circumstances also contribute to a social-psychological dynamic, as Massey and Denton phrase it, in the development of a “culture of segregation” (p. 184).

Wilson (1987) argues that one consequence of concentrated poverty is that, for poor blacks, poverty undermines their life chances. This is evident when examining various aspects such as education and community resources—such as food stores. As stated earlier, with increased poverty leading to neighborhood environment falling apart and socioeconomic difficulties, this is essentially the cyclical “tangle” in neighborhood inequality (Sampson 2009). This tangle is prevalent in black neighborhoods and is self-perpetuating, leading to concentrations of structural, spatially defined disadvantage. While it is the case that poor white neighborhoods also experience disadvantage, the circumstances would have to differ greatly (i.e. by defining poverty in a much broader sense and ignoring the effects of segregation (Sampson 2009)). As whites do not have the same history of racial inequality or segregation, and therefore overall cumulative or concentrated disadvantage, they would not experience the typical disadvantage that blacks would (Sampson 1999, Sampson, Sharkey, and Raudenbush 1998, Massey and Denton 1993), and are therefore omitted from this study.

2.3 The Case of Atlanta, Georgia

Atlanta’s urban structure reflects the positioning and existence of resources, in particular food stores, though it has had a marked change in many industries. Historically, Atlanta’s urban core was a mix of different socioeconomic levels, races, and businesses. Atlanta underwent major economic and structural changes during the 1950s and 1960s. As Bayor (1996) explains, race helped to shape Atlanta’s urban structure in the twentieth-century. These major activities shaping Atlanta, through mostly race-based politics, came in many forms, including zoning, urban renewal and relocation, the building and placement of public housing, and city annexation. Also, racial agreements regarding particular land to be used for housing was prominent as well as transportation tactics—such as using highways and roads as

dividing tools. These tactics were all noted to be used as ways to separate the black population from the majority white city (Bayor 1996, Keating, 2001).

2.3.1 Population Shifts

As Keating (2001) noted, some changes to the Atlanta landscape included the shift to the northern (Atlanta) suburbs. This included the movement of residents, the dispersal of industrial space, and office and commercial space. This thereby affected the distribution of jobs among the population, shifting much of the economy to the northern part of the city. These activities, taking place after the Civil War, were efforts to regulate the mobility of the black population as well as to control the areas in which they lived (Bayor 1996, p. 54). This appears to still be the case, looking at the neighborhood disadvantage still prevalent in the city. As Bayor (1996) notes, on the racial residential pattern of Atlanta—it was significant in that it was “designed to manipulate black residential mobility, open up only certain sections of the city for black housing, and hold on to the white population” (p. 54). Some of these tactics and actions, as mentioned earlier, included the building of major roads and the interstate to go through black communities, the strategic placement and building of public housing, and zoning practices (Bayor 1996, Keating 2000).

Long-term problems were produced due to these maneuvers. One telling example of these obstacles include having north/south running streets terminated in order to prevent blacks from entering certain white neighborhoods (Bayor 1996). Another example is the use of highways or roads as barriers. Examining the location of the highways and major roads in Atlanta, along with the history of majority black neighborhoods, one can identify the strategic placement of these highways as a means to remove low-income blacks that lived near the central business district. The highways tore through black neighborhoods and displaced many

people (Bayor 1996, Keating 2001). Not only did the construction of the highways displace people, it in turn negatively affected businesses, such as grocery stores and supermarkets, and the area has since never fully recovered.

As Basmajian (2013) noted, approximately 70 percent of Atlanta's regional growth spread to its northern neighborhoods, mostly concentrated in Cobb and Gwinnett counties. In the 1990s, there became a significant racial and class divide (Basmajian 2013, Keating 2001). In association with this shift included new permits, offered by the city councils and county governments, to allow the building of commercial and residential spaces, to include strip malls and office parks (Basmajian 2013). This same development was not taking place in the inner-city Atlanta neighborhoods and the policy makers were not interested in inequalities in race and class when designing Atlanta's new development plan decades ago (Keating 2000, Basmajian 2013, Bayor 1996). In fact, it was just the opposite, as this was a designed pattern that tended to reveal the role of race-based policies in how the city was later designed.

2.3.2 *Store Closings*

With the move of higher-income, white populations to the northern suburbs of the city, urban services also had a dramatic shift, especially grocery stores, which followed that moving population (Bayor 1996, Bond Staples 2015, Winders 2009). "Over the past 5 decades, supermarkets have abandoned the inner city for suburban and exurban locations..." (Pothukuchi 2005). Stores predictably follow customers with money (Donohue 1997, Pothukuchi 2005) and while store sizes and market areas have increased, the number of stores has decreased (Public Voice for Food and Health Policy 1995). Many major grocery stores closed down within the central city due to lower profits and increases in costs to maintain those larger stores on costlier real estate per square foot (Winne 2008). Cotterill and Franklin (1995)

and Donohue (1997) highlight the gap in the central city supermarket presence in their studies. The lower profits of the stores were a result of many lower-income residents, the target consumers due to their location, not being able to buy very much on their little income. This is consistent with previous research that has noted fewer supermarkets in lower income urban neighborhoods (Zenk et al. 2005; Morland et al. 2002). Bigger stores moved away, leaving the smaller groceries to fill-in, many of which eventually also closed down (Bond Staples 2015, Winders 2009). “The populations shifted north, the supermarket wars and the shift north in grocery store locations came simultaneously, with each trend reinforcing the other...” (Winders, in Bond Staples 2015). Older urban stores became relatively less important to the chains’ success and the big-box formats targeted an auto-oriented population and inner-city markets were virtually abandoned by the leading chains (Pothukuchi 2005).

It is evident that the limited and poor access to food is a product of capitalism; the rescaling of retail food capital and how class and politics can influence the make-up of urban areas, to especially include food stores. In examining Atlanta’s current urban structure to include food/grocery stores, it can be noted that there are definite gaps within the city center, many left over from its past with notable changes to city structure. While the history of Atlanta is not the only factor to consider in residents’ food access issues, it is to be noted that the current make-up—having been influenced from previous events related to institutional racism and neighborhood decline—is a major factor that should be included in assessing how people are obtaining food in central Atlanta.

3 LITERATURE REVIEW

Residents' experiences and routines in accessing food while living in food deserts is the focus of this research. Much of the literature regarding food deserts and food access focus on people's health and the environment or neighborhood in which they are accessing foods. More recently, research performed in the arena of food also deals with its relation to health—namely obesity, routes taken in accessing foods, and shopping behaviors—i.e., what people buy when they go to food stores and where they go. Research on food deserts typically examines the environment that composes a food desert—neighborhood attributes and the demographic and socioeconomic characteristics—such as race and ethnicity and income associated with residents within a food desert.

Walker et al. (2010) performed an intensive review of the literature that focused on food deserts and indicated the common themes or categories in which the research qualified, some noted below. A seeming overall trend in food research tends to leave out qualitative data on the residents living within those areas researched. Participant routines and behaviors might be included, but as a small supplement to the overall research performed or briefly as a call for further research. The major categories or statements that resulted from Walker et al.'s (2010) findings from 31 empirical studies include access to supermarkets, racial/ethnic disparities, income/socioeconomic status, and differences in chain versus non-chain stores. In these reviewed studies, only 3 included interviews.

In reviewing the literature on food access, I highlight the studies regarding food access in relation to sociological factors, access in different environments, geographic issues, accessibility, as well as shopping behaviors—those most closely related to this study. I also

note the relevant methodology used. These factors are all related to the issue of how Atlanta residents access their food in an area with fewer resources.

3.1 Accessibility Factors

Access is related to socioeconomic factors, such as income and personal automobile ownership. Many lower-income households do not have access to a car and rely on public transportation to travel to a food store. The racial and ethnic make-up of neighborhoods are also major factors. Related to those factors are available food stores and a person's shopping behavior. People may depend on particular modes of transportation to shop, and this may also determine how they shop and what they buy. Depending on their neighborhood, certain groups of people may not have available stores at which to shop. The following section will address some of the previous research on food access in relation to these accessibility factors.

3.1.1 Types of Available Food Stores, Neighborhood Disadvantage, and Health

In various studies regarding access to food, types of stores available are closely examined as these can have serious sociological, geographical, economic, and health implications (Block and Kouba 2005, Chung and Myers 1999, Diex Roux et al. 1997, Jargowsky 1996, Lewis 2005, Zenk et al. 2005, Zenk et al 2006). It is important to note the types of stores available in particular areas as they of course vary depending on the surrounding socioeconomic variables of the neighborhoods. Chain versus non-chain grocery stores have been found more likely to be located in non-poor zip code areas (Chung and Myers, 1999). Studies have shown that neighborhoods with a higher proportion of African American residents have fewer food options as well as a disproportionate number of convenience stores (Moore and Diez Roux 2006, Block and Kouba 2006, Horowitz et al. 2004) and fast food restaurants (Wing et al. 2002; Lewis et al. 2005). Block et al. (2004) found in

their New Orleans, Louisiana study, fast-food restaurants are geographically associated with predominantly black and lower-income neighborhoods. As Block et al. (2004) found, fast-food outlets tend to be linked to an increase in obesity and researchers continue to hypothesize that the geographic location of these businesses potentially exposes socially disadvantaged groups to unhealthy choices of food.

Stores include national and regional chain supermarkets, discount chain supermarkets, independent supermarkets, independent groceries (such as a corner stores), chain drug stores, gas stations, liquor stores with food, chain convenience stores, dollar stores, and specialty stores (such as bakeries) (Block and Kouba, 2005). The majority of the studies were consistent in that they examined chain supermarkets, grocery stores and other food resources. The previous studies also used the Standard Industry Classification (SIC) codes to define the types of stores. Supermarkets were typically distinguished between chain and non-chain. Chain supermarkets are typically those stores that were either region-wide or nationwide and operated at high volumes (stores such as Kroger, Publix, Ralph's, Food Lion, Albertson's, etc.). Non-chain supermarkets were typically those stores specific to a certain city or neighborhood and often much smaller than the chain supermarkets. Other food resources include stores such as convenience stores that people would frequent for items other than groceries, such as alcohol and tobacco products. These stores also are not known to sell fresh fruits and vegetables, the main food types associated with access to healthy foods.

A study done by Chung and Myers (1999) indicated that non-chain food stores were up to two times less likely to sell fruits and vegetables than chain supermarkets. They also found that foods sold in convenience or non-chain grocery stores are often costlier than the same products in chain supermarkets. This definitely presents a problem if the majority of the stores

available to the residents are non-grocery stores and that quite a few within central Atlanta have closed down. Few residents are left with healthy alternatives and will turn to other forms of food shopping, such as fast food restaurants (Wing et al. 2002, Lewis et al. 2005, Block et al. 2004), because this might be all they can afford or all that is available to them.

Zip codes that had the lowest median household income were found to have fewer chain supermarkets, having only three quarters of the number of stores than what is available at middle-income neighborhoods. Also, low-income neighborhoods were found to have greater numbers of available non-chain supermarkets and grocery stores and more convenient stores in the urban areas (Moore and Diez Roux 2006). Higher-income neighborhoods were found to have fewer convenience stores. The results from this study are consistent with previous findings that indicated there are fewer supermarkets in lower income neighborhoods (Morland et al. 2002; Zenk et al. 2005).

Previous studies indicate the relationship between neighborhood disadvantage and health (Massey 1996, Robert 1998, Ross and Mirowsky 2001) and there are suggestions that neighborhood disadvantage may negatively affect residents' health. Disadvantaged neighborhoods are those that lack economic and social resources, and in general, are characterized as being in an unfavorable condition for success (Massey 1996, Ross and Mirowsky 2001, Wilson 1996). Powell et al. (2007) conducted a national study for the United States and found there are significant differences by neighborhood income in the availability of food stores in urban areas.

Neighborhoods do not just show differences in food store types; there are differences in the types of foods available within them, namely foods considered healthy (i.e. fresh fruits and vegetables) versus unhealthy foods (highly processed foods, foods with high caloric count and

fat content, etc.). Observing food store availability in different neighborhoods, in Baltimore, Maryland, Franco et al. (2008) indicated there are substantial differences by income composition in neighborhood healthy food availability. Higher-income neighborhoods showed greater availability than lower-income neighborhoods. There were also notable differences at the city and county level, with county neighborhoods showing better healthy food availability than city neighborhoods. White (2007) researched food access and obesity and noted that the nutritional quality of dietary intake is strongly patterned socioeconomically; that a range of healthy food deficits are more commonly found among those in lower socioeconomic groups.

Disparities in access to healthy foods or higher quality foods put certain communities at higher risk for illnesses. If there are barriers to obtaining the recommended variety of healthful foods due to the lack of availability, this can adversely affect dietary patterns and contribute to the risk of obesity (Powell et al. 2007). Conversely, the availability of supermarkets has been associated with more fruit and vegetable intake, more healthful diets, and lower rates of obesity (Morland et al. 2006). Even with available stores, there is evidence that the pricing schemes are different depending on neighborhood, which can thereby exacerbate the food insecurity issues already faced by residents (Winne 2008, Powell et al. 2007, Block and Kouba 2005).

Powell et al. (2007) found that low-income households face higher food prices in large part as a result of a lack of supermarket availability as well as having higher prices. Powell et al. stress the importance of food (in)security in their study on food store availability and neighborhood characteristics in the United States. People that are living in already disadvantaged areas might have access to a food store, but now the issue of higher prices is added to the problem. Similar to these findings, Black and Kouba (2005) conducted a study of

Chicago neighborhoods and found that the price at chain convenience stores was at least 10% higher than at chain supermarkets for 48 items. Discount supermarkets were at least 10% cheaper than chain supermarkets for the vast majority of the items that they carried. As also noted by Block and Kouba (2005), given the situation of the neighborhood and food environment, the price, availability and quality of the food at these stores could greatly affect the food security of Austin residents, where they conducted their study. This pattern is seen throughout many U.S. neighborhoods: neighborhood disadvantage is reflected by the lack of available stores in the particular area, thereby affecting the residents' food situation, which can in turn affect their health.

Lewis et al. (2005) examined the availability of restaurants and food options in different areas of Los Angeles county California. They observed differences between the more affluent and less affluent areas of the county. An analysis of zip codes was used to obtain the results. The findings indicated that urban neighborhoods in the United States differ dramatically by race and socioeconomic factors in their out-of-home dining options. The actual act of shopping at supermarkets was found to be associated with more frequent fruit and vegetable consumption (Zenk et al. 2005), but also associated with the higher income neighborhoods.

There is increasing evidence linking the role of neighborhood context and health disparities (Block and Kouba 2006, Lewis et al. 2005, Morland et al. 2002, Richards and Smith 2007). Diez Roux et al. (1997) noted that neighborhood socioeconomic deprivation is associated with heart disease in the United States. Jargowsky's (1996) research found that poor neighborhood context is linked to increased health disparities, particularly among people of lower socio-economic status and racial minorities that are segregated. Researchers have mainly

taken these available numbers/statistics and interpolated the likelihood of people shopping at these particular areas and noting the health outcomes. But there has been very little empirical evidence indicating that the people are actually shopping at these locations or a list of reasons why they might and what they might buy. Studies consistently link neighborhood environment to these health disparities. If the majority of the stores available to the customer in their given neighborhood are convenient stores, it is not difficult to see how this can eventually affect their health if their main food purchase options are unhealthy foods. Even if the stores carry the necessary healthier foods within their neighborhoods, there is a great chance that they still will not be able to afford them. These studies again highlight intersectionality of factors of inequality contributing to the issues in access food and food availability in larger urban areas.

3.1.2 *Race/Ethnicity*

Specifically pertaining to race and ethnicity, poorer neighborhoods with a higher percentage of African American residents, again, had fewer choices and more fast food restaurants. Lewis et al. (2005) also found that those restaurants promoted unhealthy food options to attract residents to eat in their restaurants and they were significantly less likely to promote healthy items than restaurants in their counterpart group. These findings were consistent with what previous researchers have found—that African American communities are sites for promoting foods that do not support a healthy lifestyle (Block and Kouba 2006, Horowitz et al. 2004, Lewis et al. 2005, Sallis et al. 1986).

Results in Powell et al.'s study (2007) showed significant differences by racial and ethnic characteristics and also found large disparities by race in the availability of chain supermarkets, even after controlling for differences in neighborhood income. Their study found that the availability of chain supermarkets in African American neighborhoods was only

52% of their counterpart white neighborhoods and only 41% of that which was found in white urban areas. The results are consistent with findings in other studies such as Lewis et al. (2005), Block and Kouba (2005) and Zenk et al. (2005) that show lower supermarket availability in predominantly African American neighborhoods.

3.1.3 Transportation and Routes

Another major component in this research is to include the residents' mode of transportation between their homes and the food stores. Researchers have noted a link between a person's health and not having access to his or her own personal vehicle; that having no vehicle but needing to access food outside of his or her own neighborhood can be detrimental to their health (Kirkup et al. 2004, Lake and Townshend 2006, Walker et al. 2010). If limited to public transportation and not having their own personal vehicle, how does this influence what types of food are purchased from where and why? As LeClair and Askan (2014) note, although residents might be able to gain access to food stores, they might be doing so by use of public transportation, which can be expensive as well as difficult—in terms of obtaining all the foods they need. If reliant on public transportation, many people will tend to buy only the groceries immediately needed, versus being able to buy more and transport them in the trunk of a car, for instance.

In a qualitative study by Alkon et al. (2013) in a neighborhood in Chicago, Illinois, transportation issues were a chief concern in how the participants accessed their food. The study highlighted that depending on available transportation—whether it was having their own car, using public transportation, or getting a ride from a friend or family member—participants based their grocery shopping on the availability of that mode of transportation. If able to obtain a ride to a preferred store, residents would wait for that specific opportunity in order to shop at

that particular store. Also noted is that some residents would shop at locations farther from them (up to seven miles in one particular case) instead of the store nearest them due to the situation and makeup of the train station or platform being more accommodating (i.e., having an elevator to assist in the trip). Alkon et al. highlight that proximity is not the only variable in how and why people access their food. Rose and Richards (2004) also take into account the ownership of a car as well as the person's difficulty in getting to the store. Most of the participants shopped for their food within a mile of their home and of those, those who owned a car consumed more healthy foods than their counterparts—those who did not own a car.

Rose and Richards's study (2004), highlights the issue of the types of food people will buy and in what quantity. If people have to rely on public transportation and its routes, they will either be limited to certain areas and stores, certain times, and also the amount of food they would be able to bring back home on a given trip. Having a personal automobile may be taken for granted by the majority of the population in that we could potentially pile in as many groceries as our vehicle can fit; this is not the case when relying on public transit. People will buy as much as they can carry and make more frequent trips, or again, seek other alternatives.

A study by Widener et al. (2013) examined how automobile commuting patterns affect spatial accessibility to food stores in Cincinnati, Ohio. Though the research examined the use of automobiles in the urban food desert setting, it mainly focused on time available to travel, commuting costs, as well as routes taken from work, not just home-based. Widener et al. suggest there are more factors to take into account—specifically that research should account for how a population's movement throughout the course of a day may constrain their level of access. Much of the previous research on food deserts has focused on the trip from home to a store, discounting the worksite environment and route. McKinnon et al. (2009) did a

comprehensive review of the food accessibility literature and noted that though many studies research specific populations (low-income groups, rural populations, racial/ethnic minorities) and their correlation to having greater health risks, “relatively few instruments have been developed that specifically target the environments in which these populations live and work” (p. S129). Essentially, people may have more access to food stores based on other routes taken in the day, i.e. from work to supermarket to home and again, this is also dependent on their mode of transportation.

3.1.4 Shopping Behaviors

People’s shopping behaviors can also be telling in terms of what their habits or routines are. Many food studies examine the geography of where people shop. In a study performed by Cannuscio et al. (2013), residents’ shopping behaviors were examined in relation to their food environment; i.e., do residents shop at locations closest to their homes? Surveys were administered and mailed back and it was concluded that residents found it more important to shop at locations that offered more variety and healthful foods rather than what was more convenient in terms of distance. The study area was focused on one particular area in a densely populated city, with an active food advocacy and policy environment (p. 611). The study area would not be considered a food desert, though it did consist of a high percentage of African Americans, with only a little over a quarter living in poverty, as determined by the Census (Cannuscio et al. 2013, 607). Cannuscio et al.’s study highlights the importance of including people’s preferences as well as environment when accounting for their shopping behaviors.

The transportation factor is also closely related to shopping behaviors. Another consequential factor in the studies by Cannuscio et al. (2013), and Barnes et al. (2015) is that the majority of the participants (over 75% and 94%, respectively) used their own cars as their

mode of transportation to and from food stores, allowing them greater ease in choosing locations that provided more selection. Even in urban neighborhoods, the majority of the participants in Barnes et al.'s (2015) study did not walk to food stores, they traveled by car. Taking into account transportation mode is critical in examining the shopping behaviors of people; their shopping might depend on that mode of transportation.

In a study performed by Chen and Yang (2014), spatial and temporal data on where shoppers accessed foods were collected using social media, specifically "tweets" from Twitter. These tweets were analyzed to determine if there was an association between the people's surrounding overall food environment and the quality of the particular food they chose to purchase. What they found was that the prevalence of nearby stores selling fresh fruits and vegetables may have significantly influenced those individuals into making more health-conscious food choices. For those people that are able to purchase food away from home, be it groceries or fast food, proximity is important. Powell et al. (2007) found that 37% of African American shoppers travel one mile or less to their primary grocery store. Given that the nature of grocery shopping tends to involve transporting multiple shopping bags or making frequent trips, the problem becomes worse when certain populations do not have the means of transportation in order to accomplish this task.

The collection of shopping behavior data highlighted some overlooked or forgotten importance and utility in crowd-sourced data and this study allowed for a new way of collecting human subject activity patterns. Though this research on food access and shopping behaviors provided new insights on data collection and also highlighted the need for more studies to investigate food exposure at the household and workplace level, more investigation

was needed in order to understand certain activities of specific populations (composition of participants in the study was biased as they had to be Twitter users).

While Cannuscio et al. account for residents' shopping behaviors, they still call for greater research in food deserts, as behaviors there are affected by these variables, such as transportation and availability of food stores. Though Chen and Yang (2014) observe shopping behaviors through a new medium of examining social networking sites, like Twitter, their research subjects were any particular individual that happened to "tweet" their activity—not of any specified socioeconomic or demographic group.

3.1.5 Geographic Problems & Perception

In addition to issues in overall availability of food sources, there has been increasing attention brought to the geographic problems and perceptions a person may have regarding the geography in which they live and how they are affected by those area-based attributes within that geography. Perception of available resources becomes a geographic problem for people as they often misperceive what is around them. People's perceptions of a given environment play a major role in access studies. Many social science studies, particularly in behavioral geography, anthropology, and sociology have concentrated on the role of perception because it can have a profound effect on how people go about their everyday lives (Hawthorne and Kwan 2011, Curtis and Rees-Jones 1998, Freedman and Bell 2009, Richards and Smith 2007, Sampson and Raudenbush 1999).

Perception in this case of food access deals with people's perceived distance to the food resources nearest them as well as what is in their surrounding area or neighborhood. As noted by Hawthorne and Kwan (2011), most of the GIS studies in access and distance equate people's accessibility with distance. By this it is meant that the closer a person might be to a

particular facility, the more accessibility there is. But often people's perceptions are inaccurate, leading them to believe resources are inaccessible. Studies have shown that participants are more likely to perceive areas, such as neighborhoods and activity space—such as their work environment, as larger than they actually are and generally have imprecise perceptions of what is around them (Caspi et al. 2012, Crawford et al. 2014, Horner and Wood 2014, Festinger 1962). Additionally, Caspi et al. (2012) find that a person's food access tends to be the result of perception and not fact. Many residents in poorer neighborhoods are not aware of the proximity of food retailers (LeClair and Askan 2014) and could in turn be missing out on opportunities to access food. Another factor to consider is perception of safety. People's perceptions of neighborhood safety affect their interaction within the area. If people feel unsafe in a particular neighborhood and have an increased fear of crime associated with a particular area, they likely avoid these areas (Kawachi et al 1997, Acuña-Rivera, Brown, and Uzzell 2014, Sampson, Raudenbush, and Earls 1997).

Barnes et al. (2015) performed a study of the relationship between perceived and GIS-based presence of retail food outlets and examined the role of perception in relation to what retail food outlets people perceived were in their neighborhood. The research was geared toward finding out to what extent individuals were aware of the presence of food stores in their neighborhood and to determine if their perceptions were accurate. The methodological approach was GIS-based though these examinations were not performed in an area classified as a food desert; it included urban and suburban areas an 8-county section of South Carolina containing residents of various socio-demographic groups. While the research was not food desert specific, it points out the issue of people perceiving things differently in their different environments, many times to their detriment.

Caspi et al. (2012) examined low-income residents' perceived and objective measures of distance between their residence and supermarkets. Their examinations were of residents living within and beyond walking distance to the nearest supermarket, in turn trying to determine if this had any bearing on their fruit and vegetable intake. While surveys were provided in order to obtain much of the information, the concentration was on low-income residents living in the Boston, Massachusetts area, to later determine if they lived within a food desert—which they did not. Regarding perceived distance, results were inconclusive as other factors were thought to have some influence, such as neighborhood environmental factors and individual preference or tastes.

Chen and Kwan (2015) examined the neglected aspect of contextual influences on people's eating habits as well as interpersonal communications in individual experiences and propose a geographic problem: the uncertain geographic context problem (UGCoP) (initially discussed by Kwan, 2012). UGCoP refers to the fact that findings about the effects of area-based attributes (e.g. density of fast food outlets) on individual behaviors or health outcomes could be affected by how contextual units are geographically delineated (p. 1734). Put more simply, there are uncertainties in many datasets regarding the different factors of space and time in a person's behaviors in travel; that one must consider that there could be a number of other factors that affect a person's routine. This is essentially examining the various contexts that are associated with a person obtaining food.

Two types of uncertainty are involved in accessing contextual influences on people's food: 1) the traditional conceptualization of the food environment is very different from that which individuals actually experience and 2) food-related activities are affected by time constraints, including the flexibility of individuals' scheduling of activities and the temporal

availability of food outlets (Chen and Kwan 2015). The notion here is that one cannot merely examine where a person lives in relation to food sources and make conclusions about the places they shop because other factors come into play that are not seen by just examining the generalized variables. Generalization of the food environment, which comes about from this type of research, i.e., asking the participant to indicate their food accessibility, is a problem because it does not accurately capture the geographic areas and boundaries in which a participant shops for food. This is similar to Widener et al.'s study (2013) in which they call for more attention to be focused on routines around the work route, not just the home. Chen and Kwan (2015:1734) and Widener et al. (2013) highlight a valid point in noting that quantifying non-spatial mediators of food access is more difficult because the exact geographic context in which food is procured cannot be precisely delineated. However, their research still does not take that step further to include participants in the food access research, it is mainly a commentary or call for attention on the limitations of this type of research. Much of the previous food desert and food access research has not adequately taken into account this ecological fallacy. By neglecting to ask individual participants questions about where they specifically access their food, it is erroneous to assume that everyone in the same neighborhood would shop at the same stores. By interviewing individual participants about where they shop I will be avoiding this ecological fallacy.

3.2 Conclusion

As indicated above, much of the previous research in food access revolves around access to supermarkets, racial/ethnic disparities, income/socioeconomic status and includes people's perception, behaviors, and choice. Some are also studies that took place in different food environments, though the methodology used in some of the research outside of food

deserts is highly appropriate for this study. Again, very few studies included interviews or observation of participants; the detailed aspects of the day-to-day lives and experiences of people in accessing food. These studies highlight what I consider the missing link in food research: the importance of including the experiences of people living in food deserts.

As research on food deserts tends to concentrate on gaps in food availability and provisioning and neglects the lived experiences, this should call into question the comprehensiveness of food desert and food access research. By leaving out lived experiences of the people who would actually be acquiring the food, the full picture of the problems of food access may not come to light. If simply examining where there are pockets of stores missing and not examining how and where people actually access their foods, perhaps the remedy of just adding more stores would seem logical, however misguided. By trying to obtain all possible factors in food access, this study will hopefully fill in those missing gaps. Previous research seems to instead stop at the point of identifying some of the problems of food access, but does not take that extra step forward in trying to remedy the situation--which is where this research is positioned. By identifying the more nuanced details of food access in different communities, from and in collaboration with the actual people obtaining the food, the initial steps in effecting change at the community level will take place.

Depending on a person's social situation, accessing food can vary greatly. It is important that these experiences are captured and there is a great need to examine these experiences in a different context. If we are to better understand the inequities that are prevalent across society, it is most appropriate to examine the experiences of the people living in these areas. Generalizations cannot be made about shopping behaviors and perceptions of people living in food deserts because there has not been adequate research in this area. The

research questions that will guide this research project as well as the data and methodology are outlined in the next chapter.

4 METHODOLOGY

4.1 Research Questions

The overarching question this research aimed to address was: What are residents' experiences living in a food desert? Accordingly, I hoped to also gain much more detailed information for where and how residents shop for food and how residents conceptualize living in a food desert. In doing the research, I also investigated the following, which are discussed in more detail in the coming chapters:

- A) the geographical space of residents' actual food-purchasing activities or regimen (in relation to home or work)
- B) residents' perceptions and conceptualizations of the availability of the food and food resources in their neighborhood
- C) reasons for food shopping routine and practices of residents (why they shop where they do)
- D) what do residents feel is the biggest obstacle or most impactful factor in obtaining their food?
- E) what do residents feel is the best path forward in alleviating the food access issues

4.2 Research Design

For this research, I employed a mixed-methods approach, with a theme of scholar- and community activism. Mixed-methods research combines quantitative and qualitative forms, but involves more philosophical assumptions (such as, in this case, that there is more to food desert research than just the location of food stores and how close people live to them) and the mixing of both quantitative and qualitative research forms (Creswell and Plano Clark, 2007). Using this approach allows for a stronger study than just performing either research method on its own (Creswell, 2009).

In this chapter, I discuss in more detail the various methods employed in the study. The main components of this study included the use of geographic information systems (GIS) and interviewing; a qualitative aspect of capturing residents' experiences as well as their routine in accessing foods. In order to do this, a questionnaire (see Appendix D) was distributed and in-depth interviews (see Appendix E) were conducted to supplement the questionnaire. The interviews helped to build upon the questionnaire and the GIS; the idea was to delve further into some of the items on the questionnaire, getting more detail from the residents and thereby embed the qualitative data in with the quantitative data. I performed a type of geo-ethnography, which was essentially combining the use of GIS with ethnographic data and performing analysis of those resulting data (Matthews, Detwiler and Burton 2005). Through the geo-ethnography, I was able to capture different aspects of this and provide some understanding to the everyday lives of people that are experiencing inequality in food access.

Upon completion of the interviews and mapping, I employed the grounded theory methodology in order to analyze the qualitative data content from the interviews. Using a mixed methods approach for this food desert and food access research in general sets it apart and hopefully fills in some of the missing pieces of previous research. Participant experiences that were analyzed after the interviewing process included the factors relevant to their accessing foods: their activity space (for this study, this was limited to where they live, work, and shop), their mode of transportation, the thoughts or perceptions on what is available and where, and suggestions on how to move forward.

The data collection efforts for this project included recruiting participants from specified target areas, asking them to complete the questionnaire, enlisting them in a participatory mapping outing (explained below) and then followed-up with the interview questions to

supplement the quantitative data collection by capturing some of the more detailed aspects. The mixed methods approach for this study are discussed in more detail below, first with the quantitative methodologies and closing with the qualitative procedures. In Chapter six, I detail even further those experiences of participants, examining each variable that resulted from the grounded theory methods in more detail.

4.3 Data Collection

4.3.1 Spatial Analysis with GIS: Study Area Qualification

A tool as well as a method of spatial analysis known as geographic information systems (GIS) was a major component of this research. As I am concerned with spatial information of the participants and the location of food stores, the use of GIS is ideal. GIS is a computer-based technology and methodology for collecting, managing, analyzing, modeling, and presenting geographic data for a wide range of applications. The software used in this research is produced by ESRI (Environmental Systems Research Institute or also known as Esri)—ArcMap, version 10.4.1. GIS allows for the representation of tabular data in graphic form, such as maps. This is done with the use of tables, i.e., databases, and those tabular data are then converted into spatial data in the form of digital maps produced by the software system.

For this research, the initial step of locating the food deserts needed to be completed. I obtained a list of grocery stores and Census block data that were then transferred into the GIS software (Figure 4.1). Atlanta actually has multiple areas that qualify as food deserts, based on the USDA's qualifying criteria of a one mile distance to a food store, (Figure 4.2). Figure 4.2 shows the Atlanta Journal Constitution's map (AJC 2015) production from a mapping tool provided by the USDA. The USDA mapping program allows the layperson to perform mapping of food deserts across the country. The data are based on the spatial distribution and density of

the food stores overlaid with residents' demographic data--race and ethnicity and average household income. In order to perform additional analysis myself, I obtained and mapped Census data and food store locations in order to find those food deserts within the Atlanta study area. These data were then analyzed together to also determine where future recruitment of participants would be (Figure 4.3).

The use of the Census data was to allow for a more comprehensive analysis of the demographic information alongside the store data. With these data, I chose among the most prominent looking food deserts, i.e. areas that looked to have the sparsest distribution of food stores within the one-mile radius, no major supermarket grocery store, and that also qualified as having a high concentration of fast food establishments. One-mile buffer rings were added as layers on top of available food stores, and spatial analysis was performed in the GIS software to determine those areas in which there was a gap in food store locations, especially major grocery stores (Figure 4.4). Data that were mapped included 1) store locations, available from the North American Classification (NAICS) database of business listings (NAICS code 445110: commissaries, primarily groceries; delicatessens primarily retailing a range of grocery items and meats; food (i.e., groceries) stores; grocery stores; supermarkets), 2) code 722513: limited service restaurants (i.e. fast food and quick service restaurants), and 3) Census block data showing income levels. One can merely "eyeball" the map to determine the clustering of food stores within the particular area, however, to be more certain, hot spot analysis was also performed as a test to more accurately define those residential areas that qualified based on the income levels (Figure 4.5). This analysis was only performed on the fast food establishments as there were just a handful of major grocery stores in the area.

To add an extra layer of validity, I performed a hot spot analysis in the GIS software. The hot spot analysis tool within GIS helps to determine if there are any statistically significant clustering patterns within the data. The hot spot analysis tool calculates the Getis-Ord G_i^* statistic for each feature and dataset and provides p-values and z-scores to indicate which features with high or low values cluster spatially (Esri 2015). Though the analysis is to highlight hot spots (high values), it could also highlight the “cold spots”—showing areas of low values, making it useful for either purpose. The z-score represents the statistical significance of clustering for a specified distance, in this case, one mile. Figure 4.6 shows these results.

After the hot spot analysis and in analyzing where these stores were located in relation to the population, I was then able to find particular areas within the city that would classify as food deserts. By identifying the food store locations, I was able to measure outward to determine the travel distance away from these locations. Figure 4.5 indicates the proximity measurements (using a one-mile radius) from major supermarkets and analyses already performed. I chose two areas in Atlanta that consisted of lower income and predominantly non- white racial/ethnic makeup. The reasoning behind the particular neighborhood choice is that there are a few major grocery stores and a high concentration of fast food establishments within the area and they also consisted of the qualifying socio-demographic criteria. Also, as one of main themes of this research is to examine residents’ experiences through a critical race perspective, my target group had to consist of those demographics.

For each of the food studies discussed above, it should be noted that there has not been one set parameter in the measurement of the food environment and food access, and this is discussed in more depth in chapter five. Again, food environment is defined as an environment in which people access their food, to include food stores, restaurants, schools, and work sites,

and there may not be a lot of variety within this environment (McKinnon et al. 2009). By its nature, measurements of the food environment take on a geographical element and because there is no systematic compilation of measures of the food environment, these measures can vary depending on the study being performed.

Many researchers have defined those geographic areas that lack access to healthy foods (McKinnon et al. 2009, Wrigley et al., 2002, Cannuscio et al. 2013, Glanz et al. 2005) and have identified food deserts based on their measurement criteria. For this research, the USDA's (2009) measurement criteria of food desert and access have been utilized: the reasonable distance allowing for access to supermarkets is roughly one mile. Figure 4 indicates the buffer zones of one mile. As this criterion is still subjective, my hope in this research was to also find out if this distance is in fact *reasonable* to participants. The idea was that the reasonable distance could very well be a greater or lesser distance, depending on particular variables that would arise in the research, specifically, what the participants identified as a reasonable distance in their accessing food.

4.3.2 *Sampling Procedures & Recruitment*

After the first stage of GIS was completed—identifying the areas where recruitment would take place—I used the target research areas specified in Figure 4.4, as the areas in which to recruit participants. This was done by going to the particular target areas and canvassing the neighborhoods for willing participants. The number of participants included in the study was contingent upon how soon theoretical saturation was reached; that is, the point at which no new information may be revealed by different participants in the interviewing process. I estimated 30 participants to be sufficient. Anticipating that I would not obtain the target number of participants from the initial round, I planned for multiple rounds of recruiting. The first round of

recruiting took place from February 2017 to March 2017 and lasted 5 weeks. During this time, I was able to obtain 23 participants. The second round, lasting 6 weeks, from late March 2017 to the end of April 2017, allowed me to gain 13 more participants. Seven of the participants did not complete the full study but only the questionnaire, leaving the final sample size for the study at 29 participants (N=29).

Initial recruitment was also done by distributing flyers that contained brief information regarding the study as well as my contact information; e-mail address and phone number (see Appendix B). Handing out flyers while I greeted the potential participant, I then recited a recruitment script. A portion of this script is included below:

Hello, my name is Lakeisha Tate—graduate student in the Sociology department at Georgia State University. I would like to invite you to participate in a research study I am doing for my dissertation. You may participate if you live within this neighborhood (which is classified as a food desert). As a participant, you will be asked for 3 to 5 hours of your time over the course of 1 to 2 days...

The flyers were also posted in the target neighborhoods and in various businesses and organizations in these particular neighborhoods. Food stores and convenient stores were of course ideal as the study is focused on food, however when recruiting in these locations, verification of the neighborhood in which the participants live had to be done in order to ensure the sample was taken from the specified target area. The idea was to recruit from people doing their everyday shopping in these particular businesses.

Flyers were also posted in various areas around the city, particularly in transportation hubs, such as train stations, and also bus stops. As the neighborhoods I was targeting likely have a larger percentage of people using public transportation, MARTA (Metropolitan Atlanta

Rapid Transit Authority) train stations and bus stops were included in the recruitment process—stations that are located nearby or are routed to the particular target neighborhoods. Bus stop shelters located within the target areas were also used to house flyers.

Flyers were also placed in neighborhood churches, community centers, and schools. Organizations providing food to the underserved, such as the Atlanta Community Food Bank and the Union Mission, were also ideal places for recruitment. Communication with the leaders of these organizations was necessary to properly perform my research. I made sure to obtain permission to post flyers and speak to passersby, if needed. As churches, community centers, and schools tend to have strong networks of people, the hope was that the word would at least spread to an ideal number of people.

Another method of recruitment consisted of social media such as Facebook, Instagram, and Twitter. Social media has become increasingly popular to spread word for so many topics and events. I hoped to leverage the power of social networking to find my recruits; people that were willing to participate in the study or people who may know others who fit the criteria. I made an initial post on my personal site in order for word of the study to disseminate, while also asking those in my own network to help spread the word on their own pages. I also asked different organizations, especially non-profits and those same churches, community centers and schools, to also post information on their own sites.

4.3.3 Initial Communication with Participants

When potential participants contacted me, I greeted them with a script (see Appendix C) and proceeded to ask them a series of questions to determine if they qualified for the study. These questions included items such as: whether they live in the particular study area, if they own an automobile, and how and where they access their main food items. If they qualified for

the study, I gave further directions on how and when the study will take place and also encouraged the potential participant to spread the word about the research to others they know. This snowball sampling assisted me in expanding my study's sample size (Weiss 1994). The participants who were interviewed were asked to share the information about the study to those friends, family members, neighbors, and others that might be interested in the study. I also provided the qualified participants with additional flyers to hand to those potential participants they knew.

4.3.4 Sample Demographics

The 29 participants (who used false names in this study) were residents of the specified food deserts, of varying ages, ranging from 27 to 54 years old. Recruiting people of different age groups allowed for the gathering of very different data, which may better contribute to the growing body of research aimed at eliminating food deserts by enacting a more accurate solution. People of different age groups may require, want, and value different items and focusing on one particular group may overshadow another. For instance, younger participants may not take issue with the abundance of fast food restaurants in their neighborhood; they may want it. Younger participants also may not be as concerned with their overall health as older participants and could also have very different habits in accessing food. Older participants, particularly those with families, may value a particular type of food store and want certain items to be more readily available. Also, the age of participants may indicate some difference in the use of public transportation as well as how money is spent. These experiences of the different groups are essential to gaining a better understanding of the issue and how it affects different people. Also, in an effort to ensure diversity, in addition to the varying ages of

participants, males and females were recruited. A total of 22 women and 7 men participated in this study. Table 4.1 lists the participants' demographic information.

4.3.4.1 Compensation

To incentivize participation in this research, I compensated participants at different participation levels. If the participant was available for the complete study—questionnaire, interview, and observation—they received the full \$25. If they were only available for the questionnaire and interview, they received \$15, and just the questionnaire \$5. As most of the participants were exceptionally excited about the study, full participation happened with all but 3 participants, who were only able to complete two parts. Compensation consisted of a choice of a store gift card (drug store or grocery store) or a MARTA cash card, or an American Express gift card--either valued at \$25.00. It would have been ideal to compensate all participants with a grocery store gift card as it is fitting in a food study, though if there is limited access to the grocery store (hence this research) I thought this would likely not be appealing as compensation.

The budget for this project was estimated to be \$1250; \$750 for an estimated 30 participants' compensation and another \$500 for additional help if needed, such as what might have been required from two graduate students when doing another stage of recruitment. As I was fortunate in the recruitment stage of being able to obtain an acceptable number of participants on my own, the help of graduate students was not needed for additional recruitment purposes. The money for the study came from my own personal fund as I did not apply for any other source, such as a grant, mainly in the interest of time to complete the research.

4.3.4.2 Questionnaire

As I was interested in obtaining information from residents regarding their experiences with food in their residential area, as well as later determining if the use of GIS could aid them in accessing food, I began with a questionnaire. Most of the respondents (N=21) completed the printed questionnaire upon my first contact with them, after also signing a consent form (see Appendix A). The remaining agreed to participate in the study and I later contacted them by phone to continue, and I asked the questions over the phone. The questionnaire helped capture core aspects of food access in the neighborhood for the specific participant. I used a questionnaire with my sample in order to get a measure of what factors are most important to participants in getting their food. Of interest were the types of food stores people are looking for or wishing they had in their neighborhood.

I was also interested to know how the people feel about the available food sources they currently have and if they know of what is available to them. If the previous research has indicated a proclivity to compromised health typically caused by fast foods, what are some underlying reasons for Atlanta residents' purchases of these foods, if they actually do purchase them? The hope of the use of the questionnaire was to also address why people shop where they do; is it because the stores simply are not available to them or is it preference? A number of elements made a questionnaire suitable for this research.

In order to achieve this type of data collection successfully, I developed a proper scale for measurement to include multiple dimensions as well as following the procedures as presented by previous researchers (DeVellis 2003, Converse and Presser 1986, Czaja, and Blair 1996, Weisberg et al. 1996, Dillman et al. 2009) on how to develop a proper scale. Each of these variables can have different meanings for individuals. I generated specific scale items

that I wanted to measure and provided the respondents with statements that they were able to answer according to how much they agreed or disagreed with each statement. For instance, items were “I have a variety of food stores in my neighborhoods” or “When shopping for food, I tend to buy whatever is priced lowest.” The responses were measured using Likert scale with 5 being “strongly agree” and 1 being “strongly disagree.” The neutral point was set at 3, “agree or disagree equally.”

In measuring either of these variables regarding food, the higher the responses to the statements indicated the higher the level of the agreement to the statements. The Likert scaling was the most fitting for both the attitudinal measure than for the preference measure. Administering a scaled questionnaire allowed me to capture attitudinal and behavioral data; items that most studies on food access seem to not include. The questionnaire is included in Appendix D and a summary of the results in Table 4.2.

4.3.4.3 Data Analysis with GIS: Analyzing Participants’ Data

To address the question of what the participants’ geographical route of purchasing food is, I employed an additional GIS method. GIS was also used to map the participant data, such as home and work addresses to be associated with the nearest grocery store and/or the store which they shop (if different than nearest). I performed a rudimentary form of primary GIS data collection in which I collected and inputted the various store locations from the receipts of participants. This method allowed for the creation of my own dataset with each attribute being obtained from each singular receipt.

To create the GIS dataset, I used self-reported data from participants. This was also a variant of activity journaling. I asked the participants to “journal” only the stores they visited over a span of four weeks. To easily document this, I asked that they keep their receipts from

the stores, as most of the store receipts contain date, time, and store location information. This allowed for the journaling portion to be easily completed, as well as my data entry into the GIS dataset. This was a much more workable solution for journaling compared to having the participants keep a diary or use a device, such as a tablet that I would have provided containing GIS software for them to access. The training and learning curve as well as time constraints were greatly reduced by asking them to maintain an envelope to house their receipts. This was opposed to having the participants enter information into a tablet which thereby stored the GIS data they would be inputting. Upon completion of the four-week time span for each participant, I collected the receipts and inputted the information by hand myself in the GIS database. For the purposes of this research, I focused mainly on location of the store(s) and analyzed those in relation to their home locations. These results are discussed in more detail in Chapter 7.

4.3.4.4 Mental Sketch Mapping

Another purpose for participatory mapping was to better capture the perception of the residents, in terms of what they think is available to them in a given area. Perception mapping coincides with mental or sketch mapping, which is a technique used in order to map out people's perceptions of their surroundings (Boschmann and Cubbon 2012, Giesecking 2013, Downs and Stea, 1974, 1977). Mental sketch mapping is the representation of an individual or group's cognitive map of a particular space and is an effective method in informing qualitative studies of people and space (Giesecking 2013, Ingold 2000). Perception mapping is often used in qualitative GIS, to assist in identifying human behavior as it relates to individual spatial narratives; i.e. collecting spatial data of individual experiences (Boschmann and Cubbon 2012, Gould and White 1974). These are often created in association with verbal methods, such as interviews, focus groups, and/or ethnography (Giesecking 2000:712).

It was ideal to collect the mental or sketch map first. I wanted to perform a comparison on the actual shopping location information collected from the participant. The purpose was to have participants pinpoint certain locations on a map; where they live, work, and shop. By indicating where they shop, this allowed for more understanding of what the participant thinks or knows is around them. This was also done to determine if the participant was aware of the particular stores that are in their surroundings or on their routes. If the participant chose a store that was farther away than what seemed convenient (to me as an outsider), I was curious to find out if they knew about the store and chose not to go for particular reasons, or if in fact they just were not aware a store was closer. Again, as people often misperceive distance and availability of resources, the mental sketch mapping was useful to help to highlight some of these situations.

The sketch map exercise was completed by having the participants point out their locations on printed paper maps. The paper maps were large format, zoomed to their particular home and work environments, and participants drew (circled or placed marks) on the map indicating their home, work, and shopping locations. Upon completion of this initial locating activity, I later input these data into the GIS system, to allow for ease of use and analysis when overlapping the other data. The details of these mental sketch maps are discussed in chapter seven, when the participants' routes are highlighted. The resulting maps are also included in that discussion.

4.4 Analysis of Interviews Using Grounded Theory Methods (GTM):

For all participants who were interviewed (N=29) my set of pre-determined questions (see Appendix E) was used. The questions centered on how participants obtain their food, what their perceptions of what is in their surroundings, and how that affects their decision-making

when getting food. These factors were also related to money, the use of public transportation, and especially convenience. On three separate occasions (June 8th, June 17th, and July 12th 2017) I conducted focus group interviews. In the first session, 6 recruits participated; in the second, 4 recruits participated; in the third, 8 recruits participated. All other recruits (N=11) were interviewed individually either over the phone or in person on Georgia State University campus. These interviews took place on various days over a six-week time span from June 8th, 2017 to July 20th, 2017.

Though each participant was asked the same series of core questions, each individual of course does not have the same exact experience. Therefore, the interviews may have taken on a different direction at times, but only to investigate a particular statement further or in more detail. The interview guide was still used as the main structure in order to maintain consistency with each participant. I used a digital voice recorder to record the interviews and performed the transcription myself. I transcribed each interview in a separate WORD document and saved the files according to the name of the participant.

During and after transcription of the interviews, I employed simplified version of grounded theory methods to analyze the content from the interviews. GTM was used to obtain those common variables that emerged from the interviews. As I was conducting a type of ethnography, the main purpose of this research was to gain an understanding of residents' experiences living in a food desert. The analysis was concentrated on how residents conceptualize living in an area classified as a food desert as well as what their perceptions are in living in a food desert. One of the sole purposes for performing this research was to gain insight into those experiences, as previous research lacks this component, grounded theory methods allowed for a more thorough and better interpretation of the data that were collected.

Grounded theory methods (GTM) is a qualitative, or multivariate non-statistical set of procedures used to generate or build theory from collected data, but also used as a way to analyze and interpret qualitative data (the use for this study). It is often described as the processes involved in deriving theory from empirical data (Strauss and Corbin 1998, Draucker, et al. 2007, Charmaz, 2000, 2006). The method was made popular by Glaser and Strauss (1967) and has continued to be beneficial in qualitative studies. I used the data collected from the interviews and followed with the simplified methodological procedures outlined by LaRossa (2005), which includes the different stages of coding and analysis.

Grounded theory method employs the constant comparative method, which is designed to help generate hypotheses. This technique might sacrifice breadth for depth, making it especially applicable and useful when working with a small sample size, which is the case for this research. The detail of GTM used in this research is outlined below, to include discussions of all stages of data collection, data analysis and coding, constant comparative method, and variable identification. Mainly, GTM was used in this research to help analyze and code the data obtained, and to identify common themes that emerged from the data, not necessarily to generate new theory, which would be a final stage of GTM. GTM was a better way to organize the interview data, especially as similar themes began to emerge from responses.

4.4.1 Open Coding

Following the coding methods outlined by LaRossa (2005), three stages of coding took place. The initial stage, that of open coding, involved a close analysis of all the transcribed interviews as well as the open comments section on the survey questionnaire; word by word, line by line, phrase by phrase. Every aspect of the transcribed text is examined during the open coding stage. During the transcription stage, I also created coding notes and memos; any

thoughts and ideas I may have had while coding that would help in analysis of the variables later. This was done to assist in the creation and organization of the variables to be used in the continuing stages of coding.

Though I categorized concepts into separate variables, during the open coding process, multiple variables emerged from the same statements or pieces of text. As I continued with the coding process, new variables began to emerge and eventually the process helped narrow the variables down to just a few major themes. This was done after finding those words or phrases that appeared most frequently as well as those that seemed to be most prominent or significant when a participant was trying to relay their thoughts during the interview. Each of these phrases and key words were compared to others, repeatedly during the coding process.

While reading through the transcripts, I tried to determine what the interview responses connoted, while also keeping in mind that the interviews and experiences would be examined through a critical race perspective. There were many connotations of having difficulty getting food, issues regarding transportation, money, and convenience. Table 4.3 shows a simplified variable-concept-indicator model used in this analysis and the resulting variables. Examples of some responses are also presented in interview excerpts below:

Excerpt 1: I have always lived here and I know nothing else but that store up the street from me. I just do what I have to go get my food. I don't really have a set time or day I shop, I just go when I can. Like my mom, she always goes on Sunday...I don't do that but mainly because I can't.

Excerpt 2: I have lived here all my life. There hasn't been a new grocery store open up in years, and the ones that do are too far away. I'm just used to it. And I don't really think about it much. I have always had to buy my food on the way home from work, because I don't want to hop back on the train later on. I buy it on the way home.

Excerpt 3: My cousin lives up the street from me and she has a car. When we go grocery shopping we use her car because it's too far to walk and it's a pain to carry everything you need on MARTA, especially on the bus.

Excerpt 4: I know a lot of people out there have hard times, it's just different for different people. My hard time... making enough money to even buy enough food to support my family. And when I do have money to get food, I have to go out of my way to get it. It gets old sometimes but you do what you have to do.

Excerpt 5: I have lived in my neighborhood over 5 years. I have shopped at that Publix on Ponce for that time because it's the closest one to me. I never really thought about the distance because I just had to get food and that's where I got it. I don't expect they will put a grocery store in my neighborhood any time soon.

I quickly reached theoretical saturation for my concepts in all variables. As LaRossa (2005) states, "the addition of another indicator to those already grouped under a concept did not appear to generate significantly new insights about that concept" (p. 841), this was the point of theoretical saturation. Again, as there were many indicators for the concepts, saturation happened early on in the open coding process, after nearly reaching the midpoint of all the text transcribed from the interviews.

These indicators led to various concepts such as difficulty, inconvenience, compliance, necessity and/or requisite. All indicators were then narrowed down to produce a total of six variables. During the whole coding process, I maintained the central focus of my research question regarding what participants experience in accessing food. With this in mind, I coded based on likely variables that would answer that question. Those final six variables are discussed in more detail in chapter six; these are the variables I used to answer the questions regarding people's experiences. They are as follows:

1. Finances
2. Transportation Issues/Limitations
3. Neighborhood Factors
4. Preference/Choice of food stores
5. Availability of food stores
6. Convenience

4.4.2 Axial Coding

After I established a flow with coding and began to see dimensionality some of the variables and as I began to see just how the different variables related to each other, I was able to connect more variables together—such as issues participants have regarding money to issues of transportation or neighborhood factors related to availability of stores. After the initial stages of coding, the analysis became more detailed and connections started to emerge. This led me into the next step in grounded theory methods, axial coding.

As stated above, I began to notice connections in my variables. In this step of coding, I was specifically looking at the relationship between variables and how they correlated. This was done by using the constant comparative method as developed by Glaser and Strauss (1967). During this process, new indicators were continually being compared to already coded variables to see what new codes may have emerged. In working with a small sample size (N=29), the constant comparative method is ideal. This process was key in helping me develop hypotheses (though not necessarily the goal of using grounded theory methods for this study) about the participants' experiences. This process helped me to gain insight as to how one variable influenced another. For instance, it was common to find variables of transportation related to issues of finance: e.g. "I can't afford to buy a car right now." Other variables continued to relate to each other as well, especially those regarding neighborhood and availability of food stores: e.g. "We don't have those stores in my neighborhood." These are simplified examples of some of the statements from the interviews, though the coding process

need not be overly complex. I was able to pick out indicators relating to transportation, finance, neighborhood, availability, etc. from shorter statements as well as more in-depth conversations with the participants.

During this stage of coding, multiple variables at times would appear to be those focal variables that would later possibly become the principal story. Multiple variables seemed to change in their importance while coding; some seemed to be emerging as the core variable, then others would. In the end, after comparing the themes and indicators that emerged, I was able to progress into the final stage of coding to then determine the principal story.

4.4.3 Selective Coding: “Convenience” as Core Variable and Principal Story

The process of selective coding is done in order to determine the principal, underlying story but also to establish the core variable. As LaRossa (2005) states, “the core variable is the one variable among all the variables generated during coding that, in addition to other qualities, is theoretically saturated and centrally relevant” (p. 852). The core variable in this case became “convenience” as it was the most theoretically saturated and also appeared to be the most prominent theme that resulted from the interviews. The core variable is essentially the main focus of research; what the research questions can be framed around. After examining all the variables, concepts, indicators, linkages and relationships in experiencing food, “convenience” appeared to be the most prominent and explanatory. Though the indicators that appeared most were also related to *inconvenience*, I still decided to code this as *convenience* due to the framing of my questions. By asking the participants “why do you shop where you do?” and “what are significant factors affecting your food purchasing activities?”—the phrasing of “convenience” made more sense.

Initially, while coding, I thought the core variable would be “finances.” This was due to the fact that the majority of the interviews discussed how the participants felt either the food they wanted might be too expensive for them to purchase or that they just did not have enough money to obtain food, therefore this influenced where they shopped. Also, it was common to hear that the participants felt that what they could spend on particular items was probably not the best use of their money. Other variables such as transportation also seemed to link well with “finances,” so again, it seemed fitting. However, with the help of diagramming and memo-taking, “convenience” appeared to take on a most important role in the analysis. Although all variables were related in some degree, more variables linked back to convenience than any other variable and thus became the core of the story.

4.4.4 Conclusion

It seemed more evident in reading through the transcripts again, that participants have difficulty accessing their food more so because of the inconveniences of multiple factors in their daily experiences: their neighborhood, the reliance on public transportation, money matters, and store availability. This became the principal story of the analysis: efforts to access food in a food desert are most affected by the lack of convenience of how or when; either getting to the stores or how those stores would be accessed by the individual. This principal story is apparent in the examples discussed in more detail in chapter six. The use of grounded theory methods allowed me to examine the varying issues involved in food access and to connect the latest literature on food deserts that note that there is more to researching the problem of food deserts and access to foods than just the examination of store locations. Before detailing how those variables emerged, in the next chapter I first look at how participants conceptualize food deserts.

Table 4.1 Participant Information

Participant	Gender	Race/ Ethnicity	Marital Status	Age	Household Income	# of People in household	Children in home	Own Vehicle?	Public Transit Primary?	Food Assistance Program?	Employed	Shops Closer To
M. Clark	M	African American	S	35	<\$25,000	1	0	N	Y	N	U	Home
G. Johnson	F	African American	S	27	<\$25,000	1	0	N	Y	N	PT	Home
W. Gardener	F	African American	S	31	<\$25,000	3	1	N	Y	Y	FT	Home
L. Jackson	M	African American	S	41	\$25,000-\$49,999	1	0	N	Y	N	FT	Home
J. Johnson	M	African American	S	32	\$25,000-\$49,999	3	1	N	Y	Y	FT	Home
W. Brown	F	African American	S	48	\$25,000-\$49,999	1	0	N	Y	N	FT	Home
B. Owens	M	African American	S	43	\$25,000-\$49,999	1	0	N	Y	N	FT*	Home
D. Perry	M	African American	S	33	\$25,000-\$49,999	1	0	Y	Y	N	FT*	Other
S. Williams	F	African American	S	31	\$25,000-\$49,999	2	1	N	Y	Y	PT	Other
M. Reyes	F	Hispanic	S	37	\$25,000-\$49,999	1	0	Y	Y	N	FT	Other
F. Martinez	F	Other/Multi-racial	M	32	\$25,000-\$49,999	2	0	N	Y	N	FT	Other
C. Carter	F	African American	S	38	\$25,000-\$49,999	1	0	N	Y	N	FT	Work
K. Rodriguez	F	African American	M	41	\$25,000-\$49,999	2	0	N	Y	N	FT	Work
R. Jenkins	M	African American	M	45	\$25,000-\$49,999	4	2	Y	N	Y	FT	Work
A. Watson	F	African American	S	54	\$25,000-\$49,999	1	0	N	Y	N	FT	Work
M. Turner	F	African American	S	47	\$75,000-\$99,000	2	1	Y	N	N	FT	Work
T. Hill	F	African American	S	37	\$50,000-\$74,999	1	0	N	Y	N	FT*	Work
B. Murphy	F	African American	S	51	<\$25,000	1	0	N	Y	N	FT	Work
N. Sloan	F	African American	S	50	\$25,000-\$49,999	2	1	Y	N	N	FT	Work
F. Lopez	F	Other/Multi-racial	P	43	\$25,000-\$49,999	2	1	Y	Y	N	PT	Work
E. Byrom	F	African American	S	43	\$25,000-\$49,999	1	0	Y	N	N	FT	Work
B. Garner	F	African American	S	33	\$25,000-\$49,999	2	1	Y	N	N	FT	Work
K. Smith	F	African American	S	45	\$25,000-\$49,999	1	0	N	Y	N	FT	Work
L. Thomas	F	African American	S	41	\$25,000-\$49,999	1	0	N	Y	N	FT	Work
N. Butler	M	African American	M	34	\$25,000-\$49,999	2	0	N	Y	N	FT	Work
L. Butler	F	African American	M	49	\$25,000-\$49,999	2	0	Y	Y	N	FT	Work
M. Freeman	F	African American	S	28	\$25,000-\$49,999	2	1	Y	Y	Y	FT	Work
M. Kirksey	F	African American	S	35	\$25,000-\$49,999	2	1	N	Y	Y	FT	Work
M. Jones	F	African American	S	29	\$25,000-\$49,999	1	0	Y	Y	N	FT	Work

Marital Status: M=married, S=Single, P=partnered

Employment: FT=full time, PT=part time, U=unemployed, FT*=full time second or third shift

Table 4.2 Food Access Questionnaire Responses (N=35)

Questionnaire	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
In my neighborhood, I have plenty of food options.	6%	6%	29%	46%	14%
I prefer to shop for food at the grocery store.	34%	40%	23%	0%	3%
I feel that grocery stores are accessible in my neighborhood.	3%	6%	20%	51%	20%
In my neighborhood, it is easy to buy healthy foods.	3%	6%	9%	46%	37%
The stores where I shop have a wide selection of fruits and vegetables.	6%	37%	37%	11%	9%
Whether or not I go grocery shopping depends on my mode of transportation.	40%	20%	26%	3%	11%
I feel I always have enough food in my home.	11%	20%	51%	14%	3%
Fast food is easily accessible in my neighborhood.	66%	11%	11%	11%	0%
I worry about how I will pay for my next meal.	6%	0%	46%	29%	20%

Table 4.3 Variable-Concept-Indicator Model (subset of concepts and indicators)

Variable 1: Finances	
Concepts	Indicators
Best use of money on food	I can't afford that. That's an expensive store. I can get more food for my money elsewhere. I spend money getting there and when I get there, I can't get as much food.
Not enough money	I only have about \$30 to spend each week on food for 3 people. Most of my paycheck goes to rent. I get child support but that and my check barely covers what I need every month. I work on commission and sometimes I don't know how much my check will be. I might have to hold off on shopping until the next check. I really wait to see how much money I have left after my bills are paid. Then I eat.
Budget	I budget \$50 per week on food My WIC vouchers cover so much, and I don't have much for food
Price is too high/cheaper elsewhere	It doesn't cost as much at the store by my mom's I know the stuff I want is cheaper at that store That store is more expensive It costs too much there Their stuff costs too much I can't afford that
Variable 2: Transportation Issues/Limitations	
Concepts	Indicators
Reliance on public transportation	I can only go wherever my ride goes. It depends on the bus. If there was a bus stop there, maybe, but then I'd still probably have to wait another hour before the bus came back around to get me. I have to catch that train and it doesn't go near a store
Don't own personal vehicle	Me and my cousin share a car. I get it the couple of days I go to work and going grocery shopping may or may not happen. I don't have a car and it's real hard to get anywhere, let alone the grocery store
Variable 3: Neighborhood Factors	
Concepts	Indicators
Not in my neighborhood	I've just never gone there, even though it's close. It's not my neighborhood. I just don't go there because it's not what I'm used to—the people and the places Since it's not my hood, I don't go
My neighborhood doesn't have that	We only have that little shop near me We don't have stuff like that in my neighborhood
Bad neighborhood	It's worse than where I live

	I don't feel safe in that neighborhood That neighborhood is bad and scary sometimes
Variable 4: Preference/Choice of Food	
Concepts	Indicators
Personal choice of foods	What I want isn't available What's in the stores is crap I don't want to eat that stuff everyday I'm picky about what I eat so if they don't have it I don't get anything
Selection	There's not a lot to choose from in the convenient store They have fruits and vegetables, but they are usually spoiled. They usually just have bananas and apples
Store preference	I don't like going to that store; their employees are weird My sister and I refuse to shop there because we don't like the company
Quality	The bananas are always brown They only sell junk food Their stuff is expired a lot
Variable 5: Availability of food stores	
Concepts	Indicators
No/few grocery stores	When I first moved here, I noticed there were no grocery stores nearby What grocery store? There's no store near me...but plenty where I work
Many fast food places	I have no problem getting a hamburger and fries anywhere There are a lot of places like McDonald's, Wendy's, Popeye's... I can grab fast food anywhere around me
*Variable 6: Convenience	
Concepts	Indicators
It's inconvenient	That's way too far for me The traffic in that parking lot is ridiculous and it takes too much time to get in and out
It takes too much time	It would take me hours to get there and back home It takes too long for me to get there, so I just go to the shop up the street
Too far	That's too far for me to walk with all those groceries It's too far, especially if I have to go with my son
Very close	I can go there after work It's close to school, so I go there

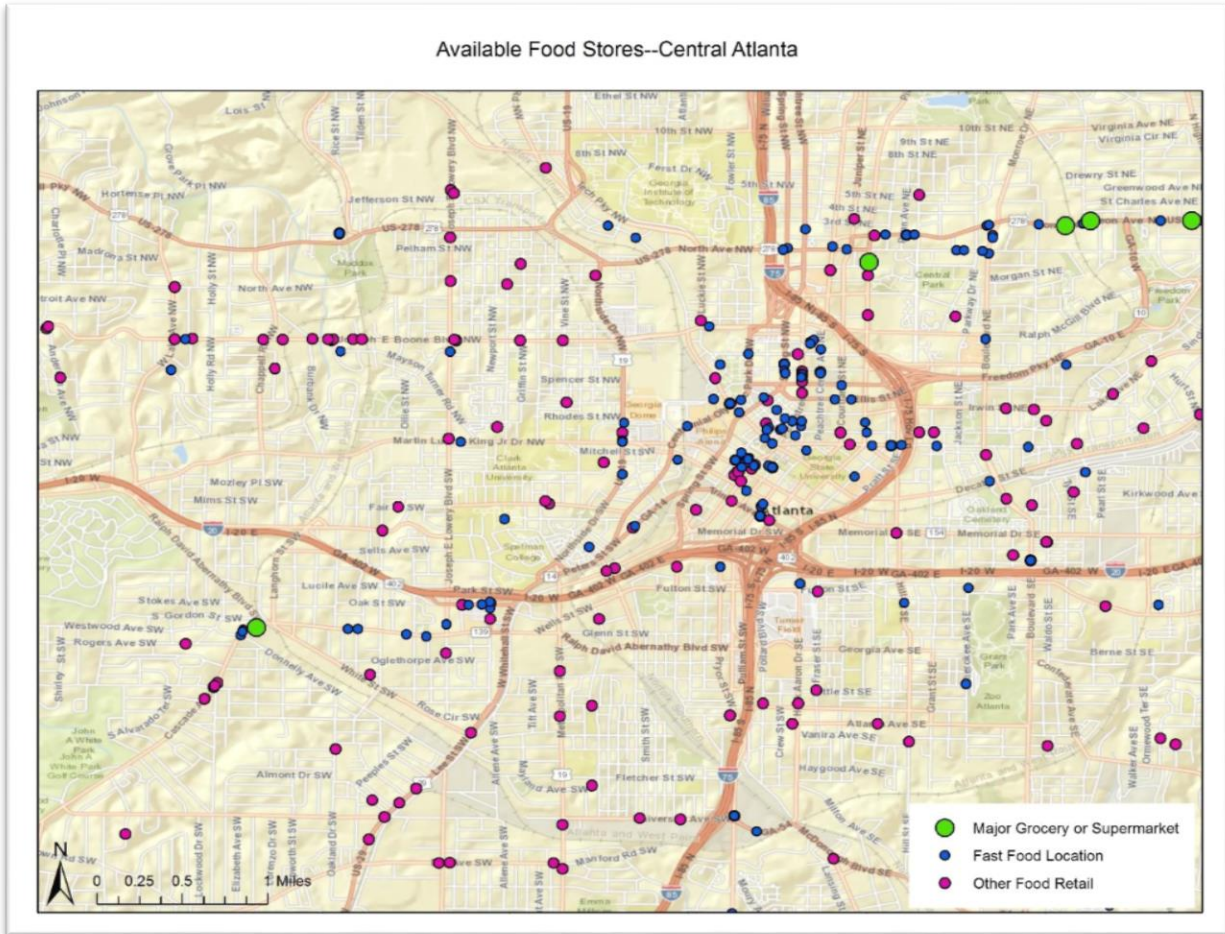


Figure 4.1 central Atlanta (downtown) food store locations

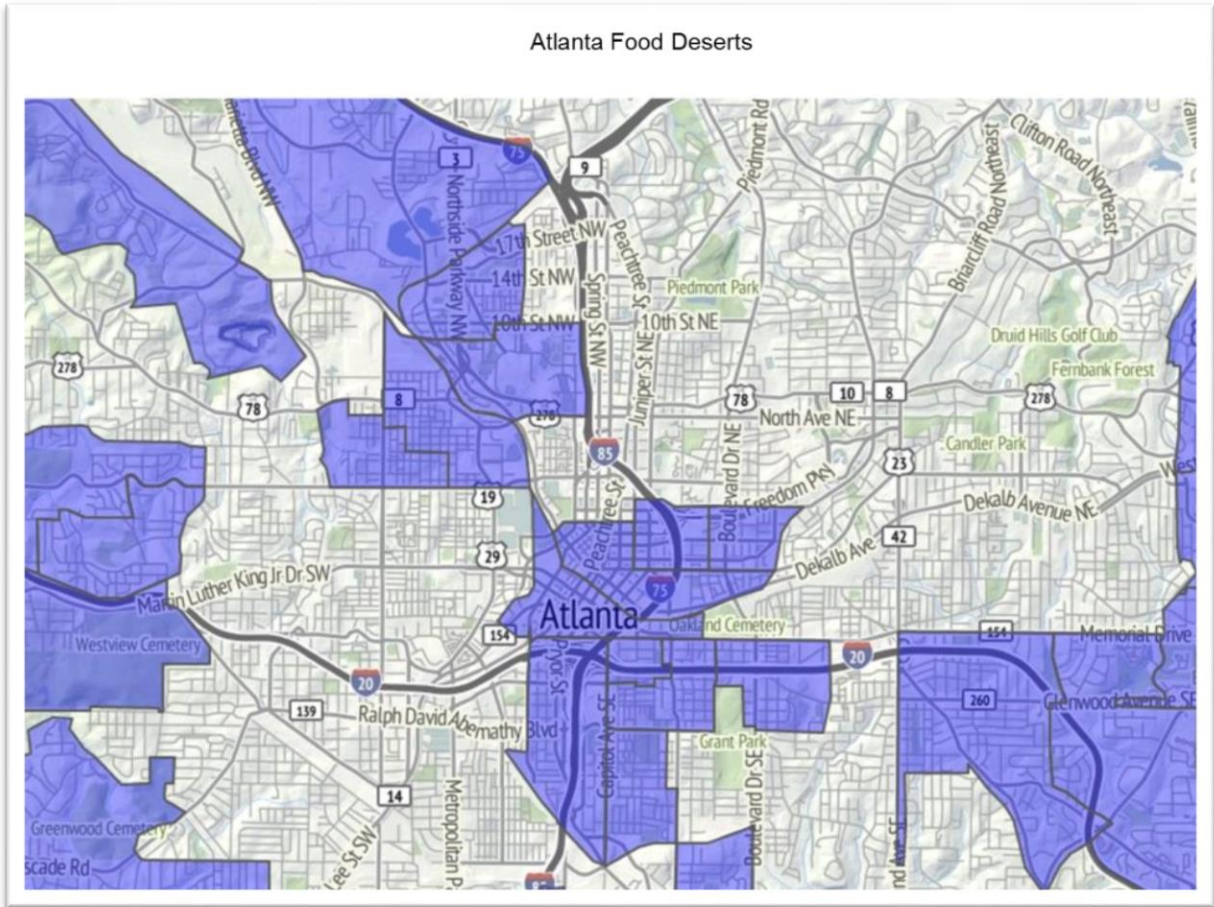


Figure 4.2 Atlanta area food deserts in low income communities

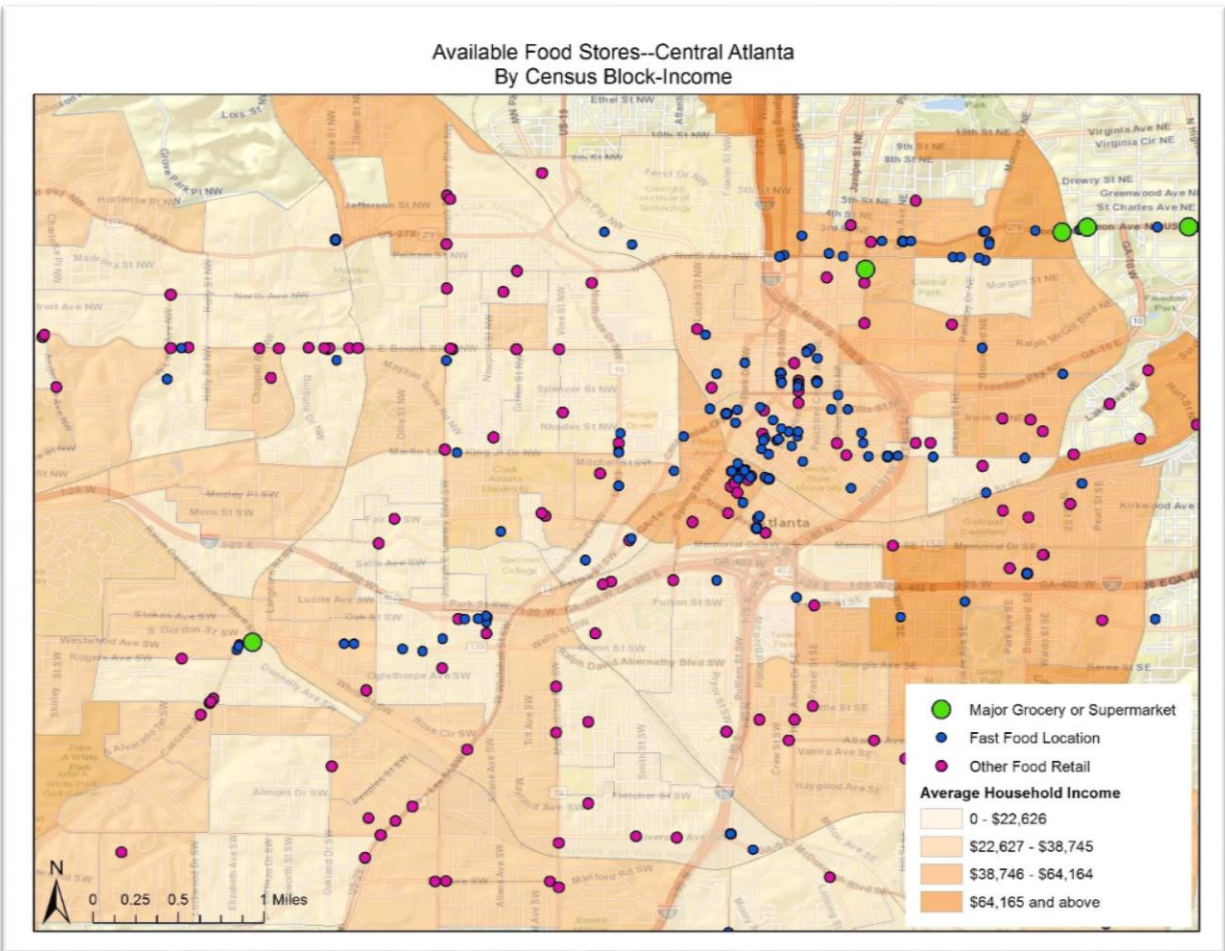


Figure 4.3 Overlay of food stores with average household income by Census block group

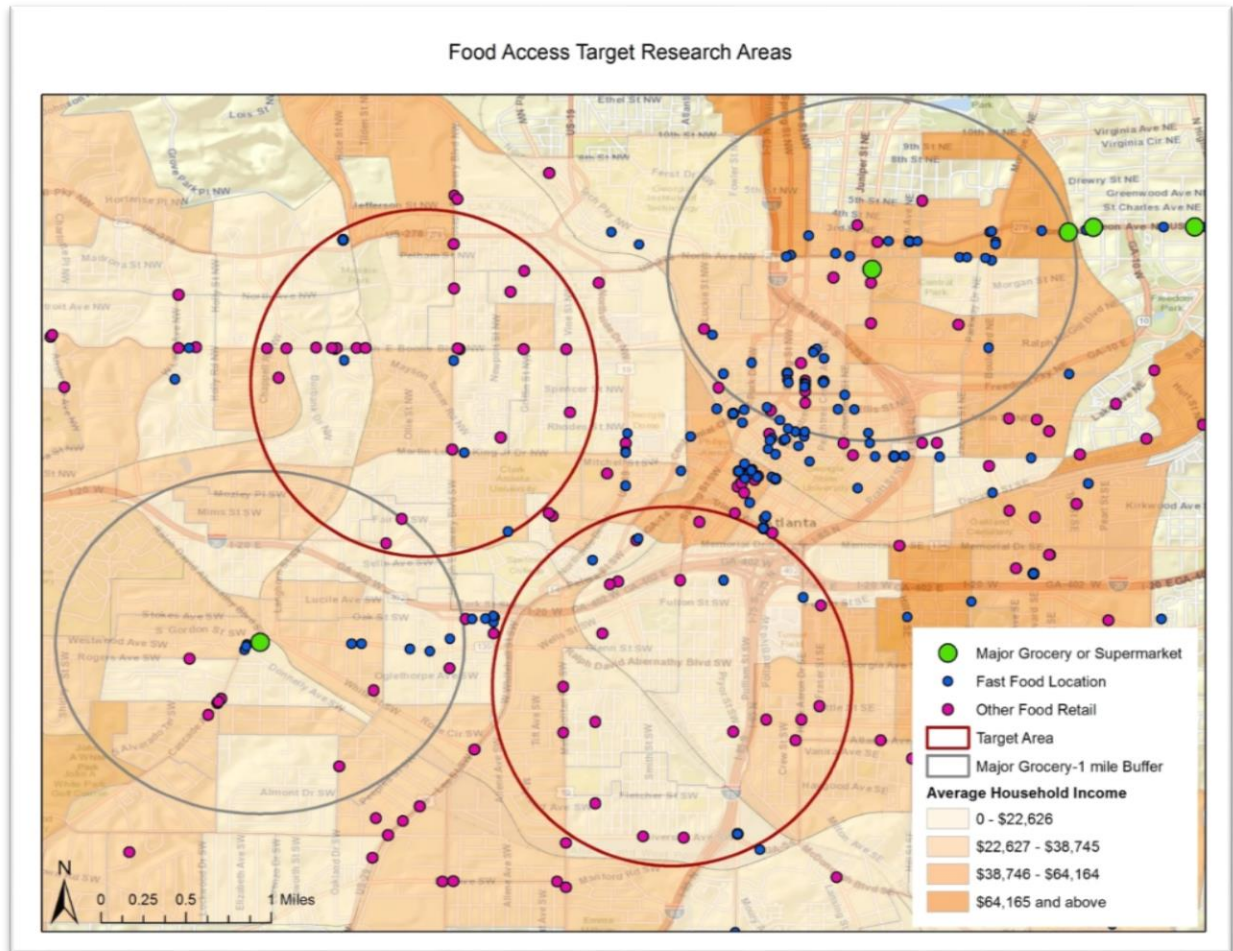


Figure 4.4 Targeted research areas for participant recruitment

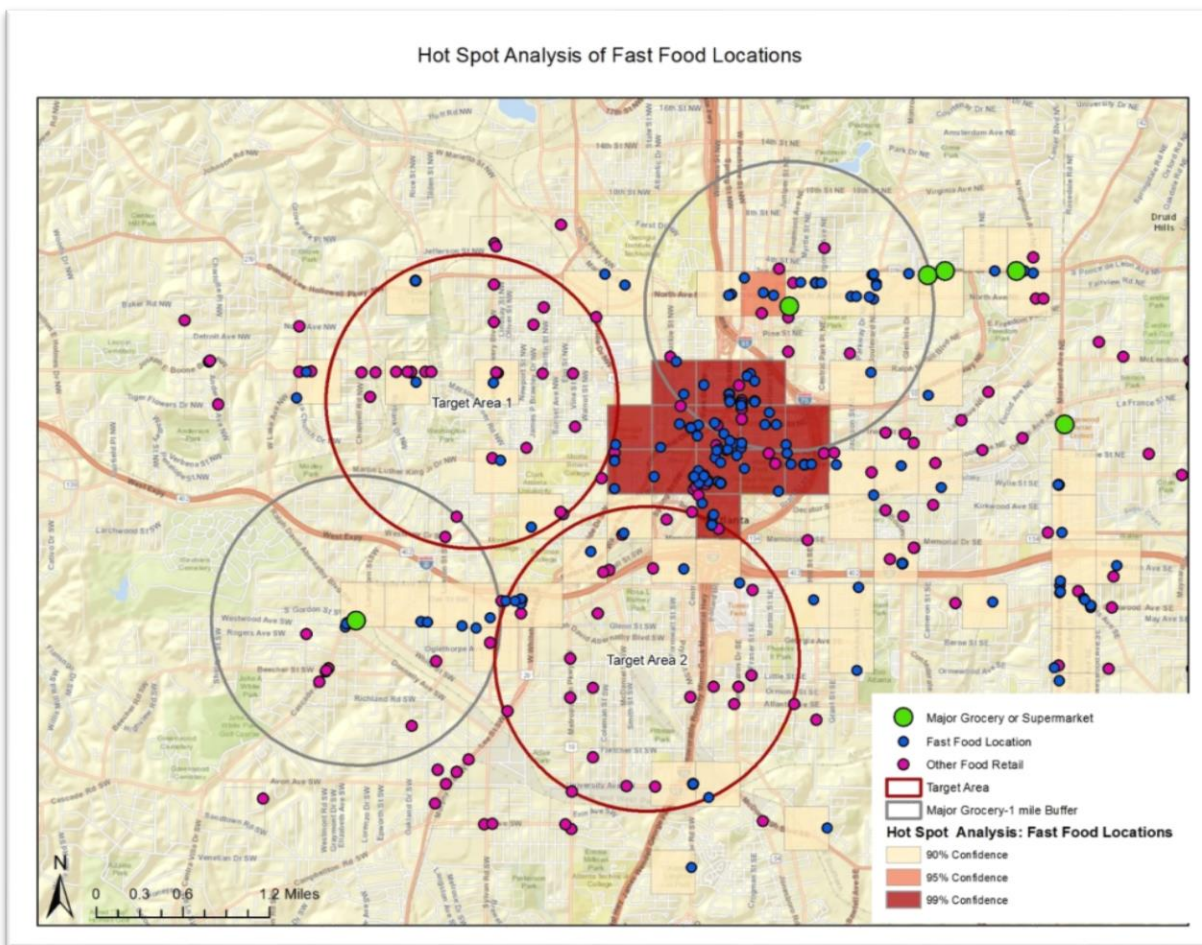


Figure 4.5 Hot spot analysis of fast food locations

5 CONCEPTUALIZING THE FOOD DESERT

Viewing the perceptions and experiences of people living in food deserts through a critical race perspective is an effective viewpoint for addressing major sociological and geographical problems. Applying a critical race perspective to the issue of food deserts allows for these individuals living within them—those who have been socially, structurally, and intellectually marginalized—to have their voices heard. As critical race theory aims to inflict some type of social change, to examine these experiences through a critical race lens means to also try to hopefully alleviate the issue of food deserts by addressing the issue in a different way. Though

this specific study is focused on marginalized individuals in an urban setting in Atlanta, Georgia, the approach can also be beneficial for those in rural and suburban settings as well.

This chapter focuses on those conceptualizations of food deserts through the perceptions of the residents. Throughout this chapter, examples of how residents define food deserts are highlighted, as this is significant when discussing their lived experiences, which will also be discussed in more detail in the following chapter. Before beginning that discussion of people's perceptions and experiences of living in a food desert, I felt it was important to first discuss the definition and conceptualizations of the term and what some residents perceive it to be.

Understanding how residents living in a food desert define and conceptualize the situation and circumstances in which they live sets the foundation for the coming discussion on residents' experiences. These conceptualizations are also framed around critical race theory because it is important to apply an understanding of a person's background when discussing an issue that seems to persist or perpetuate in society.

5.1 Defining Food Desert

Among many food desert studies, there is the issue of the varying definitions of the term *food deserts*—as there is not one completely agreed upon definition of the term. This also leads to other debates about whether food deserts even exist (Wright et al 2016). This becomes increasingly more difficult to argue in favor of when there is not a common definition. Questions then emerge as to how to solve the problem of food deserts. But if the problem is not adequately and properly identified and/or defined, this can seem like an impossible feat. This being the case, for the purpose of this study, the residents' definitions can be noteworthy to especially understand how food deserts can be thought about going forward, perhaps for future

research, and for also understanding and supporting the idea that food deserts are not the same for everyone. How one defines something can also shape how they experience it.

What is a food desert? Again, by the USDA's definition, a food desert is an area characterized by low-income and low access to food; low-income communities, typically occupied by racial and ethnic minorities, that are located more than one mile from a reliable source of healthy foods, especially fresh fruits and vegetables. It is important to keep in mind that this is a definition maintained by researchers and other professionals in the food and agriculture business; an administrative definition. The original term was coined by a particular resident living in a characteristic food desert space in Scotland, United Kingdom (Cummins and Macintyre, 2002). The conceptualizations and experiences of the one individual have continued to be used and applied as defining attributes of a food desert.

The USDA also defines and tends to limit a food desert with the use of the spatial constraints of Census tracts. This can be problematic when examining food deserts by neighborhood, as people may not always associate by Census tract but more so by neighborhood affiliation. Even so, with neighborhood affiliation, boundaries may be different person to person. Another issue to consider is that people do not always shop at the store closest to their place of residence, which can be situated in a food desert. These points will be discussed in a later chapter, but will also be highlighted here as they inform the conceptualizations people have regarding what a food desert is.

A major question to be asked is would not different people conceptualize these spaces and circumstances differently, and thereby experience them differently? How do residents, who live in these areas, define a food desert? Are the definitions different for someone living in the food desert versus someone (i.e. those researchers or others living outside of that

environment) from the outside looking in and providing a definition? Most participants (N=21) had actually heard the term before, but they were unsure of exactly how it was defined. Some of the participants also had never thought about what a food desert was, let alone what it was like to live in one.

5.1.1 How Participants Define Food Desert

In communicating the standard USDA definition of a food desert (the one-mile qualifier) to the participants, it was interesting to note the overwhelming response from participants: that they had essentially lived in a food desert all their life. The difference now is, to them, there is another name for the area or type of area in which they live, which contributes to how they define food deserts. Participants were no strangers to hearing “low-income neighborhood,” “the hood,” “inner-city,” “the ghetto,” etc. regarding their neighborhood; terms commonly associated with food desert neighborhood characteristics. Participants also offered their own descriptions of food deserts using these same terms. Their responses to hearing “food desert” and the standard definition of it deserves attention, as some participants felt that it was just another fancy name for their experiences within their disadvantaged social setting or neighborhood.

Participants were asked to describe, in their own words, the meaning of food desert and also whether they felt the term applied to anything they experienced themselves. Many of the participants (N=17) described a food desert simply as an area that lacks foods or grocery stores. Some participants (N=6) made common statements regarding their neighborhood’s lack of grocery stores, especially in comparison to other parts of the city or the suburbs:

F. Martinez: I’d say it’s like our neighborhood—we don’t have grocery stores...not like they do everywhere else. Even when I go see my boyfriend, I can see all these stores I’m passing and I really do wonder why we can’t get

them in our neighborhood. Everyone needs groceries right? I think I'll end up moving in with him in a few months and I'm actually happy about all the stores around.

N. Butler: I guess it's like our neighborhood—a place that doesn't have grocery stores. We have lots of places to buy stuff, especially fast food. And there are a lot of little shops, but they aren't just for selling food. Whatever a food desert is, I know my mother in-law doesn't live in one because she's got groceries all around her—Publix, Kroger, Walmart, Aldi... but she doesn't live up here, she's down in Riverdale.

Riverdale is a suburb just south of Atlanta. The stark difference N. Butler noticed between what is available in the suburbs versus the city in which he and his wife live, help him conceptualize what a food desert is and what it looks like.

Some participants replied with an explanation of an area without food; an area “dried out of food” as some participants explained:

C. Carter: I think a food desert is a place where you can't get food. I guess it's just like if you're looking for water in a desert, right?—it's dried out. You can't really find it. I have heard people talking about it but never really thought about where they might be.

L. Butler: I guess it's just a place that doesn't have food. There might be places to get food here and there, but for the most part, it just doesn't have any or enough to go around. Can it also be stores that don't have enough food? A lot of times I go to the store and they don't have what I need.

M. Kirksey: Well, it would be like a desert right? No water in a desert, so now there's no food in a food desert?—or something like that. I think it means that it's like a desert but instead of water, you're talking about food.

For most of the participants, the food desert was defined in such a way—areas lacking food—but there was not a distance qualifier, such as one mile. When discussing what they thought about the one-mile qualifier, some were unsure it mattered. When asked if the one mile was

significant to them, there was a mix of responses to include shrugging of shoulders, looks of intrigue, or just simple statements of “No, that doesn’t matter.” Specific reasons for why the one-mile qualifier did not matter varied among participants, but each had a common theme regarding the method in which they obtained their food: many times they were not buying their food from locations closest to their home anyway.

5.1.2 Applying the Institutional/Administrative Definition of Food Deserts

Participants were also asked their thoughts on the institutional or administrative definition of food deserts, specifically their thoughts on the one mile qualifiers and how that relates to them. Is the one mile qualifier significant or meaningful? In much of the latest food desert research, it is clear that the distance may be arbitrary or meaningless if the customer is not actually shopping for food in their neighborhood or within a distance of one mile from their home. If a person obtains their groceries from trips during their workday—on the way home from work, for instance—it would not matter as much how far away the grocery store is and one mile could be as significant or insignificant as being five or ten miles away. Later in Chapter seven, I examine individual activity spaces that better illustrate these points regarding distance from home or work and where participants shop.

When asked to discuss their thoughts on the administrative definition of food deserts, participants yielded varying responses:

D. Perry: It doesn’t really make a difference how far it is to me. I have a car so I can go wherever I need to go to get my food. I’m not going to go 20 miles to go grocery shopping, but I can get to wherever I need to now.

B. Murphy: One mile...I guess if I have to walk it matters, which is what I usually do when I go. If it’s bad weather, I don’t go. I’m not going to go shopping if it’s pouring. I think a mile is kind of tough sometimes, so I can see why they would use that distance. It’s tough for me, but probably not someone who has a car.

L. Thomas: Is that what it is? One mile? Really it doesn't matter because I don't shop by my house. I get my stuff after I get off work and go pick up my kid. There's a store near my work.

Many of the participants were not necessarily surprised to hear that food deserts are defined using a distance of one mile for the nearest grocery store. Only three of the participants used any distance measurement in their definition of food desert and these statements were as such: "far away," "not close to me," and "maybe too far to get to." The remaining participants described a general area in their surroundings that did not have grocery stores.

5.1.3 Just Part of the Neighborhood

Others described food deserts in relation to food options such as stores and restaurants, while also linking them to poorer areas, in general. These were described as not just poor in food, but poor in other resources they felt should be available in their given neighborhood. These ideas were based on their comparisons to other neighborhoods they may have come across or even frequented and noted as having a sufficient amount of resources, such as stores, schools, healthcare, etc. These are common factors, when they are lacking, associated with neighborhood decline. The participants recognized that their neighborhood was lacking certain resources, yet it seemed to be what was expected for the location in which they lived. This was a common theme with participants who associated food deserts with "the hood." For example, M. Turner's thoughts on what a food desert is:

M. Turner: I have lived in this run-down neighborhood all my life. I'm in "the hood." We've never had anything. I can't expect to have a nice grocery store when nothing else in my neighborhood is nice. So I guess I'd say that a food desert has to be the same as the hood. Companies don't want to open a store here. Why would you want to open a store that's just going to get robbed every day?

Or as A. Watson explained,

A. Watson: I have lived here all my life. I took over my mom's house and this is the same house I grew up in. We always called it the hood. And since I was younger, I don't remember seeing a major grocery store near me. I work on the north side and they have grocery stores everywhere. Not us.

The north side in which A. Watson worked is in the Dunwoody suburb of Atlanta. One can argue that one difference here is that Dunwoody is in fact a suburb and suburbs can be significantly different than urban areas. Although after further discussion on A. Watson's comment, she found this to be one of the determining factors as to why "they" had grocery stores and her neighborhood did not—it was not "the hood." Especially upon closer examination of the Dunwoody demographics, one would note that the average household income is substantially higher (approximately \$78,000 versus \$23,800) (Dunwoody Perimeter Chamber 2017; U.S. Census 2015) than that of the neighborhoods in which the participants in this study live.

Something the participants noticed as not lacking were the fast food restaurants in the neighborhoods. Some participants tended to associate the abundance of fast food restaurants with food deserts. Participants noted that there are many of fast food establishments in their neighborhood, and how they were also aware of the types of foods at fast food restaurants not being the healthiest options. This translated into their definition of a food desert—areas that lack healthy food options, but have an abundance of fast food choices. These are, of course, conceptions and ideas from people not heavily versed in food desert research, illustrating just how obvious these patterns may be to everyday residents.

However, this can also just illustrate the awareness of fast food options being in the surrounding neighborhoods, but not the association to food deserts specifically. Some residents

felt that if there were choices for food, then that could not mean there was a lack of food, hence not necessarily a food desert. The healthy vs. unhealthy aspect seemed unimportant, as noted by some below.

M. Clark: I don't think my neighborhood doesn't have food. We have plenty of places we can get stuff. The restaurants are there for a reason, food is food. I get that there are better things to eat but you can't always get the stuff you *should* have. I buy food to eat so I'm not hungry anymore. Plain and simple.

B. Murphy: I understand what food deserts are but I don't think that's what this is. I have food around me—Wendy's, Popeye's, McDonald's...those are still places to get food. I think a food desert is a place that has nothing available. My cousin, for example, who lives in South Georgia—in the sticks...they got nothing around them.

While the approach to gaining participants' conceptualizations of food deserts was not centered on distinguishing between healthy versus unhealthy food (i.e. fast foods) availability, it was interesting to note those who considered having fast food locations around to be sufficient enough to not qualify the areas as a food desert.

5.1.4 Just Another Fancy Name

Among some participants, there seemed to be an overwhelming feeling of indifference and lacking enthusiasm on the topic of food deserts—at least in the sense of having anything remedied. Participants were excited about the study, but not as hopeful for any change. My observations of participants' indifference came about from the ways they defined food deserts.

For instance, M. Jones' thoughts:

M. Jones: I don't understand why it's now being talked about as if it's something new. I have seen the same stuff all my life. I can't get to a grocery store. It seems like people are only concerned about something once it makes it big on TV or someone famous talks about it. Michelle Obama was on a big food and health kick, but that still doesn't change anything for my neighborhood. If they really cared, they would do something. They don't care

about us. I think it's great that you are working on this but what do you think will come from it?

Others felt that the term “food desert” was something new associated with what they called hype over all the food issues these days; i.e. non-genetically modified, organic, locally sourced, etc. Some participants (N=7) brought up interesting points in that only until celebrities started talking about the topic of food did anything appear to be done about it; similar to the statement about Michelle Obama noted above. The common theme here was that the issue of food only became noticed when people with money, power, and celebrity said anything about it. I relate this definition of food deserts to a feeling of indifference and another fancy name to illustrate the idea that the residents who live within a food desert do not seem to feel there is anything to define; there is no phenomenon that is going on that calls for attention. Food deserts have long been a part of their lives and they seem to not define it separately than any other everyday factor or experience. Also understood by participants is that the name “food desert” has gained recognition in recent years, but again, it is nothing of consequence to them.

N. Butler: I can see why it is an issue, but we have other issues going on in our neighborhood anyway. I've been here for a long time and nothing is new, nothing is different. So why are they talking about it now? Nothing is going to change. I don't mean to sound negative, but really, do you think anything will change?

5.2 Conclusion

Participants unknowingly tended to reveal some of the ideas in the latest food desert research—that what could possibly be more effective in examining access is to look at all aspects of people's daily routines. If shopping closer to work, no matter how many stores are

available, it might be that the definition of food deserts needs to be reexamined to include additional elements related to the food environment and a person's geography as it relates to their work, home, and shopping locations.

Many of the responses in which participants defined food deserts were filled with other thoughts regarding overall feelings regarding more than just food deserts. Those comments related to neighborhood and environment more so than food and health. Responses with negative tones, mainly from those who felt nothing new was going on, led me to wonder and question why they would participate in the study if there is no interest in what happens or if there was no hope that anything would come of the study, as expressed by some. The participants recruited for the study were not interested in participating for the compensation involved, as this was still relatively minimal. Four of the participants mentioned that though they were not expecting much of anything in terms of positive results or changes regarding food deserts, they wanted to participate in order to at least have their voices heard.

6 EXPERIENCING FOOD DESERTS

In the previous chapter, I discussed how residents defined and conceptualized food deserts. The goal of this chapter is to detail the lived experiences of the participants and to discuss in more detail the variables that came about from the coding and analysis processes of grounded theory methods. In order to answer the question of what the participants felt was the biggest obstacle or most impactful factor in accessing their food, I framed my coding process around this and developed the variables accordingly. Interview transcripts were prepared and analyzed using a simplified version of the coding stages of grounded theory methods (GTM) as put forth by LaRossa (2005). The open coding and axial coding processes led to the development of concepts and six main variables. During this process I related that core variable of “convenience” to the participants’ experiences. I address each of the six variables that emerged from coding while also including excerpts from participant interviews. These findings from stages of coding, are discussed in more detail in the subsequent sections.

6.1 Finances

The issue of money or finances was common among all participants in the study. Though money was an issue, the reasons why varied. Initially, it seemed that the most common issue to come out of the participants’ responses was that there was not enough money to purchase food, but this was not always the case. While there were some financial insecurities such as having to live “paycheck to paycheck,” as some participants noted, others also mentioned the value for their money spent. Participants felt that some food stores that were easily accessible just did not satisfy them in terms of the amount of food they could purchase for a specified amount. As T. Hill, who considers herself relatively financially secure, notes:

T. Hill: I usually budget \$50 a week for food but I can't really get much with that amount if I go to that Whole Foods. I understand their food is supposed to be better and healthier, but I can't afford that. I will either go to Kroger or Publix just up the street from that Whole Foods...well, that Kroger is closed now. And since it's just me, I can get a good amount of stuff for \$50. I'm just feeding one person. Some weeks I don't even spend all of my budgeted grocery money, so that helps overall. I don't necessarily live paycheck to paycheck and I think I'm actually okay with money. But it never hurts to have more, right?

T. Hill's concerns were influenced more by the amount of food she could get for the dollar spent. While she does not consider herself to be struggling financially, money is always in the forefront of her mind and always something to be considered before any decision is made. T. Hill's situation is very different than many other participants in the study; others do struggle more with their finances and the situation plays a bigger role in food purchasing.

W. Gardener makes less than \$25,000 a year, works full-time, has a child, receives assistance for food, and helps pay bills for her mother, who also lives with her. W. Gardener indeed lives paycheck to paycheck and usually keeps a strict shopping list, as she does not usually have money to spend on junk food.

W. Gardener: I actually prefer not to take my daughter with me sometimes because she asks for things that I can't always get. She's a good kid and I don't think she's spoiled or anything, but I still like to get her things. It's just easier for her not to be with me so I don't have to say no all the time. My mom will usually keep an eye on her when I go shopping. I get WIC and that helps a lot but I know I won't have that forever. I wouldn't be able to afford all that stuff on my income.

The federal program of WIC (Women, Infants, and Children) has an age restriction that will cut benefits off by the time her child reaches their fifth birthday. W. Gardener stresses thinking about what she will do when the benefits end, because she doesn't see herself getting a higher paying job. She is essentially on a fixed income and it will become even more difficult in less than 2 years.

J. Johnson lives with his girlfriend and their child and they also rely on WIC to assist with their food purchases. Shopping usually occurs monthly when the vouchers are available and there is a somewhat strict budget regarding the other items that are not covered by WIC:

J. Johnson: We don't really share our money but we each pay half of everything, or just pay for our own. She pays half the rent and utilities, and we might go grocery shopping together or she gets stuff when she gets her WIC. I sometimes just pick up whatever I know I might want to eat or need that night. Either way, we don't usually spend that much on food because we really don't have that much leftover to spend. We actually didn't even move into this place together...she was having a hard time and I told her she could stay with me. She actually helps me get food now.

J. Johnson saw the need to mention that his girlfriend helps him get food because he sometimes did not think to go grocery shopping before living with her. Living by himself, he could frequently get by on eating something quick and cheap, such as fast food. As he expressed later in the interview, having a loved one in the house with their child makes him think more about what types of food are made available. "It's okay if I eat fast food all the time, but the kid doesn't need to be eating that every day," he expresses. J. Johnson also knows that these types of foods that he feels a child should be nourished from are more expensive than value meals he can get for himself. He has made the changes to his own finances in order to ensure his girlfriend and her child get the foods they need, as much as he is able to, but it still does not leave much money.

6.2 Transportation Issues/Limitations

A number of indicators were present regarding access, and mostly access related to transportation needed to get to a store to obtain food. While financial issues did also come up, those concepts were used to create the "finances" variable, though of course, highly related to transportation issues. If the finances were not available, people were unable to own their own

vehicle. The variable of “transportation issues/limitations” came about from the concepts of either having a vehicle, having to rely on public transportation, and/or having to rely on other means, such as a social or familial network. Eleven of the participants own a vehicle and four of those still utilize public transportation as their primary mode. Transportation appeared to affect the participants in different ways; most utilized public transit, some shared vehicles, some formerly owned vehicles, and some recently purchased their own.

J. Johnson: I don't have a car so it gets tricky sometimes. I have to take MARTA to get anywhere, to a store or even to my mom's. I have thought about trying to save up to buy a car, but I know it's still going to be expensive. I have to pay for gas an insurance and I'm not ready for that. So I just take MARTA. It might not go everywhere I want to go, but it works for now. So since I can't make it to Ponce to get to Publix, I just have to go wherever MARTA takes me.

M. Clark: Well, I really have to use the bus because I just got laid off a couple of months ago, and I already couldn't afford a car. It's hard to find a job and keep a job without a car, let alone get food. I don't even think about groceries if I don't have a job to get money to buy the food. When I had a car a couple of years ago, I know I was able to go wherever I wanted. Now I'm really stuck.

J. Johnson relies on the public transportation routes and schedules, understanding that there are limitations. M. Clark also knows that the bus cannot operate at whatever hours he needs them to. Remembering back to when he did have a vehicle, M. Clark stressed the benefits of a more flexible schedule and more flexibility in deciding where he could go shopping. He does not have that choice now, especially as he is currently unemployed. But he also felt that having a vehicle afforded him more freedoms, not just in buying food. “Even when I need to go to the doctor, I have to go catch the bus. I already don't feel good and now I have to stand outside in the cold and wait on a bus to go somewhere”—M. Clark explaining his last trip to a doctor's office the previous winter.

Others expressed the freedoms of having their own vehicles for their daily transportation needs. Whether it was sharing a vehicle with a family member or being able to go places and not feel restricted, having their own car would be a huge benefit:

F. Lopez: My sister and I share a beat up car. It usually works out because she needs it the first half of the week and I need it the second half—because of our work schedules. So I make sure I shop when I have the car. But it doesn't always work out that way because her schedule might change. Mine doesn't. So if she says she needs the car all week, I'm out of luck.

M. Jones: Before I got my truck, I used to walk up to that little shop up the street. That's not really the kind of food to buy to help you through the week, but whatever. Now I have my truck and I feel like I'm more free to do things. I have only had it like four months now, but I love it.

K. Smith: I can really only go where my bus goes. Sometimes I barely catch my bus when I get off work, and there might not be another after that because of the time I get off. So I really can't go too many more places because either the bus doesn't go or I just don't have time. I can't wait until I can get a car. I won't have to be watching my back as much either.

The idea of “watching her back” highlighted another issue some participants mentioned, especially female participants: the idea of safety. Asking to elaborate further yielded responses related to work schedules and the concerns with walking home from either the bus stop or the train station. These concerns pervaded into the task of grocery shopping as well, as participants having to walk with groceries in hand feel even more vulnerable if having to do so at night and by themselves. As K. Smith and T. Hill note:

K. Smith: Yeah, I think about that all the time. If I'm by myself, it's even harder. If I had a car, I know I'd still have to think about that, but not as much. I have to go shopping when I get off work, so my bus won't put me back down here until it's dark a lot of times. So sometimes I don't even shop. I might just get something quick to eat if I don't have groceries in the house. If I had a car, I could go to the store whenever and only worry about the crazy people in the parking lot. I don't live in the best of places.

T. Hill: I feel safer up where I work than I do in my neighborhood. I catch the train at Lenox and when I get to my home station, I still have to walk a little

before I get to my place. I don't like walking by myself, especially at night, but you do what you have to do. I would feel a lot better if I had a car, but oh well.

While the detailed issues of safety are beyond the scope of this study, it deserves some attention in the discussion of the obstacles in obtaining food. Participants who expressed this concern related the fears of safety to their lack of personal transportation, sharing public spaces (trains and buses) with strangers, and walking in their neighborhoods at various hours of the day. Participants did not feel these issues directly impacted their ability to purchase foods, but their food shopping routines are affected in terms of when and where they do their shopping. Overall, if participants, especially females, had their own personal vehicle, their concerns about safety and shopping would be lessened. Male participants' concerns regarding having their own vehicles were mostly related to convenience—being able to shop when and where they wanted without relying on public transportation.

6.3 Neighborhood Factors

Comments regarding neighborhood make-up or neighborhood condition were also common throughout the interviews. Participants discussed characteristics of their neighborhoods to include dissatisfaction regarding the overall condition: “my poor neighborhood doesn't have anything...no good schools, no stores, no doctors...” and phrases like “but that's what they all are like right?—living in the ghetto?” What became noticeable after just a few interviews was participants' awareness of many of the neighborhood decline and disadvantage characteristics. These characteristics were associated with the existences and persistence of food deserts in their community as participants tended to relate those characteristics to reasons why they did not have nicer stores, such as grocery stores, in their neighborhood.

M. Turner: Even though I know we don't have much here, I stay. I can afford to live somewhere else—some place nicer, but I don't. My family has been here forever; I have two cousins up the street. And my grandmother left me this house. I don't need to go pay for some other place to live when I have a good enough place here. I'm not planning on leaving. I can get food, but I just have to shop in a different neighborhood, but that's okay.

M. Turner's responses highlighted the idea of neighborhood attachment or affiliation. Though she does make a decent wage (as a nurse, and the highest paid participant in this study) she is attached to the neighborhood for various reasons. Though she shopped in a different neighborhood all together, out of necessity, she is still bound to the neighborhood in which she lives, by choice, knowing there are little to no food options for her.

6.3.1 “That's not my neighborhood”

Again, another factor that was interesting to note with participants and their shopping patterns was their affiliation to their neighborhood. Many participants did not go to certain areas, let alone shop for groceries, if they felt they did not belong in the neighborhood. The sense of identification and attachment to one's neighborhood played a more unexpected and major role in where and why people shopped where they did.

B. Murphy: I shop by my job and by my house. I feel better shopping near my house because I feel like it's more my style...if that makes sense. I'm just used to it and I like to go there.

W. Gardener: I don't usually go there because I don't know it. I just stick to what I know. That's not my neighborhood so I don't usually think to go there. It's not that there's anything wrong with it, hell, it might be nicer than my own. But I just pass it on the way home and do whatever I need to do in my own hood. If I need to go get groceries, I'll just go to the Kroger up the street.

Comments like these were also highly associated with next variable of preference or choice of food. While some participants actually have no choice in where they shop, due to the overall constraint of working with what they have and lack of availability, preference also plays a major role in accessing food. When asked about whether they would shop there if it was the only store around, even though it was not in their neighborhood, W. Gardener replied: “I think it would really have to be the only option for me in that case. I don’t like to go to places I’m not used to.” There was a comfort level that many of the participants felt was not present if shopping in areas they were unfamiliar with.

6.4 Preference/Choice of Food Store

Many food studies have ignored the importance and impact of agency and individual choice when it comes to accessing food (Sadler et al. 2016). This variable was initially surprising to have develop, considering it seemed there was a very limited selection to allow for preference. But, as evidenced by participants in this study, agency plays a major role in access to food, especially as there are two store locations that are within the target area from which I recruited participants. While these two stores are located within the areas targeted as food deserts (there still is not an abundance of food stores around), the overwhelming majority of participants in this study (N=25) preferred not to shop at these two store locations. I separated the preference variable from the availability variable. Though some of the explanations were similar regarding this, within this sample of participants, preference had more to do with two particular stores in the neighborhood that seemed to be passed frequently.

One of the stores is a Walmart and the other is a Save-A-Lot. The participants had similar views of the stores, and generally speaking, they did not shop there because they were either dirty, crowded, cramped, lacking in items they wanted or needed, and had awful

customer service. The participants preferred to shop elsewhere—regardless of the fact that these two stores might be closer to their home.

N. Sloan: The first time I went there (Walmart), I felt like it was a little pop-up shop. Stuff was everywhere and they didn't really have a lot of what I needed—because they sold out. It was also so crowded and the lines were so long. They had 2 cashiers working with a bunch of customers in line. I would rather go a little farther to Kroger than to sit and waste my time in that store. I'd probably get home around the same time.

M. Reyes: I'll go there every once in a while, if I need to get something quick. But the store is weird. They don't really have a lot of the stuff I want and I really don't like where it is. If I'm going by myself, I feel uncomfortable and I'd rather just wait until I can make it to store up the street from school, even though it's farther away—but I'd be in the area anyway.

The Walmart Supercenter location, on Martin Luther King Jr. Drive, opened in 2013 and occupied the space of a former Publix grocery store. That Publix closed down in 2009 and the neighborhood had nothing there since. This Walmart location also has a big social media following, as it tends to promote store events and specials—almost as a way to keep a positive image about it, while also promoting neighborhood involvement.

Asking the participants how they felt about the Walmart location yielded similar responses regarding the downturn of the store. When the store first opened it was nice and convenient to the residents. Participants were excited to see the store and some even felt their neighborhood might have been experiencing a bit of a positive change. Now, some feel it has gone downhill and no one seems to be doing much to revive it. Others however do still see the potential of the store, yet they do not tend to shop there just because of the hours the store is open. This factor is discussed more below regarding inconvenience/convenience.

The Save-A-Lot store, located near the Mall West End, was also a store many of the participants did not prefer to shop at. Like the feelings regarding the Walmart location, many felt that this store did not carry the items they wanted to buy. Asking about their preference and why they did not want to shop at Save-A-Lot also yielded similar responses regarding quality of food and store layout/feel. Save A Lot brands itself as a “discount” grocery store and some of the participants expressed their opinions on their observations of this.

A. Watson: Uh...well...it's a weird store. First it definitely is a discount store because some of the stuff in there I've never even heard of—like their brands. I guess it's their own brand? And I'm used to bigger groceries stores, like back where I used to live in Cincinnati. I'm used to shopping at Kroger and I wish I could get to it more often.

The point about the brands that Save A Lot carried was one that led to a conversation about brand preference. The participants that mentioned the weird brands the store carried were ones who preferred the national brands, even if these items were more expensive. There was the equation of quality to price. Some felt that if they paid more for certain foods, they would be getting the better product.

B. Garner: I might not be able to afford the big name brands all the time, but I'd rather buy them if I can. Save A Lot had some weird stuff in there. I've learned there's a reason things are priced certain ways. I don't want to buy crap foods for myself or my kids. So I'll wait until I can get to the store on the southside when I go to work.

While A. Watson and B. Garner both live close to the Save A Lot store, they still choose to shop elsewhere; both shopping closer to their work locations. A. Watson prefers a bigger supermarket with national brands she can choose from, and B. Garner also has brand preference. B. Garner's brand preference has more to do with her perception of national brands being better than store brands or discount chain store brands, and mainly for the welfare of her

child. Overall, participants had varying reasons for their preference of stores and none was concerned about the location of their preferred store being slightly out of the way.

6.5 Availability of Food Stores

The overall availability of food stores was discussed among all of the participants in the study. Availability was closely linked to the preference variable as well, as noted earlier by the participants' preference to bypass a store that might be closest to them. Many of the stores participants knew of that were available to them in their surroundings consisted of convenience stores or smaller, locally and privately-owned markets. The main issue with shopping at these stores was the selection; there were not many groceries in the stores. Participants noted there were many places to buy snacks, alcohol, and smaller everyday items, such as paper goods, but not food. Therefore, they considered there to be low availability of grocery stores and supermarkets, or no stores available at all. Regarding the question "do you feel you have available food stores to choose from in your neighborhood?"—the overwhelming response was "no." A common sentiment among participants was expressed in L. Thomas's thoughts:

L. Thomas: We have a lot of little, cheap places to get food, but not the food you want to feed your family with. I'm talking about stores with all the snacks and stuff; like gas stations. And we can get liquor anywhere. We can get fast food anywhere. But if I want to go grocery shopping, I shouldn't have to go 20 miles to get to a store. It's ridiculous.

Another issue to consider regarding availability of food stores is the availability of qualifying food stores, such as those that would accept food assistance program vouchers or credit. Like W. Gardener mentioned earlier, M. Kirksey receives WIC vouchers every month but has had difficulty in being able to redeem them as the stores she needs to shop at are far away. Each month she feels she has to scramble to find a way to use the vouchers before they

expire. This requires her finding sufficient transportation to the store, which is usually done by asking a close friend of hers. She also splits some of the items with this friend, as compensation for her friend's time.

M. Kirksey: I get WIC, but there have been times that I couldn't use them because I couldn't get to the store. That kills me to have them go to waste. There aren't stores around me that are within walking distance. If I try to take the bus with all those cans and milk, I would be in pain trying to carry it all. Stuff from WIC is heavy!

M. Kirksey's example of not being able to get to a store highlights a concern I had not originally thought of; there is a tangle in methods of assistance. While some may have food assistance programs helping, if they cannot get to the store to use the program benefits, they are not in a better situation. M. Kirskey, among others in this study receive support from food assistance programs. But if they are restricted by certain items, such as the case with WIC, they would also be restricted to certain stores. Not having those stores available presents the additional challenge that many in the situation cannot do anything about. As M. Kirskey also mentioned, some of her vouchers have gone to waste.

6.6 Convenience

A number of different factors made "convenience" stand out the most as the core variable and principal story. Not only did convenience connect the most with other variables and become the prominent story told, it also became the most significant obstacle or issue in the process and activity of obtaining food. When performing the selective coding process, I was constantly thinking about what obstacles people may face in accessing their food. Again, as convenience seemed to be the most connected to other variables and the story that was told most often among participants, it was clearly the prominent variable affecting food purchase.

Convenience also seemed to encompass the other variables as well and these stories were prevalent throughout the interviews. For instance, other variables such as availability, finances, and transportation played a significant part in the participants' overall ability to obtain food in their neighborhoods. It is inconvenient to not have enough money, a vehicle, and a nearby store at which to shop for foods, thereby it was clear that convenience was the principal story with the participants in the study. As noted by a few below, many adjust their personal schedule, routines, and budgets in order to purchase their foods.

M. Freeman: There just never seems to be enough time for me to go shopping. I get off work and have to pick up my son. Sometimes we go together, but sometimes he's too much to handle. And if I don't drive and have to take the train, I have to go to the store with him. And then takin' all those groceries on the train...it's just too much. I have to go when he's not with me...and when is that? I can't go when I'm working because...well, I'm working. I can't go when he's sleep...and I'm definitely not going to hire a babysitter just so I can go grocery shopping. I just have to suck it up and take him with me sometimes. I mean, we have to eat, right?

B. Owens: If I'm trying to get to the grocery store, I have to figure out when I can go while also working out my train schedule. I work second shift so it's hard to get to work around the train and my job. I usually just end up at that Kroger on Cascade because it's close. So even if I just need to get a couple of things, sometimes I can just walk. Walmart closes at 10:00pm and I am rushing to get there sometimes. I have tried to make it a couple of times but just can't seem to do it, so I just stopped.

E. Byrom: Until I got my truck, it was hard. I had to wait for the buses and sometimes they would be late. Then the times when I knew I still had to get food, it was just hard. I couldn't always go when I needed to go, mainly because it wasn't really up to me. Now that I have my truck, it's a lot more convenient. I can go whenever. I was only able to get my truck after I got a promotion at work. So even though I started making more money, that money goes to my truck payment.

E. Byrom continues to tell the story of now being able to drive to a store in a different part of the city in order to get his food, but he essentially still runs a bit short on the money to

purchase his groceries. Any extra money he obtained from his promotion and raise is now going to a more reliable form of transportation, which is needed to maintain his position. While his financial situation was helped in one way, it has not been eased enough for him to say he is comfortable in his socioeconomic status.

Others, such as D. Perry, still find it difficult to get to a store “in time.” Working various time does not afford him the freedom to go grocery shopping whenever he wants. He has to work around his own job schedule even more because of his shift-work.

D. Perry: I didn't really pay attention to what was around me when I moved years ago. There really aren't any grocery stores by me. If I want to get a lot of stuff, I have to go to Kroger over there on Moreland. There's an Aldi there too. But I can't always to that area or get there when the store is open. I work the third shift and sometimes I get overtime. I have no problem working overtime because I always need the money. So, if I can't get to a grocery store because of my hours, oh well, I just grab a hamburger from some place.

These participants highlighted the varying ways a person can be inconvenienced when trying to obtain food: inconvenienced by time, transportation, location, and preference in how or with whom to shop. Participants have been quite resilient in their ability to access the necessary foods, not being as hindered by lack of major grocery stores and I initially thought they would be. As discussed in the next chapter, the fact that many participants do not access their foods closer to their home is helpful in overcoming the issues of living in a food desert; there are viable alternatives in place. The participants in this study were quite accustomed to having to navigate in a more creative way in order to get to the goods and services they needed, therefore the negative aspects of food deserts do not seem to affect them as one might think, especially when viewing the situation from the outside.

6.7 Conclusion

As this chapter demonstrated, participants experience food deserts in different ways. Some had different views of foods and nourishment when a child is present versus not; people changed their shopping behavior according to who was in their household. Participants who had multiple people living in the household tended to have differing shopping habits than those who were single. This was either due to needing to provide or help provide for someone else, issues with finances, and also convenience overall. Some participants expressed the ease of living on their own and not having to worry about taking care of others, especially if they felt they could barely provide for themselves (whether in regard to finances or just overall lifestyle). Participants who lived by themselves had more lax shopping and eating habits and were less concerned with having substantial amounts of food or being able to get to a grocery store compared to those having to feed a family or dependents.

While the variable of convenience became the principal story in what participants experience living in a food desert, this does not discount the other variables in the study being just as important. One has to take into account the individual and circumstance. I coded convenience as the core variable to make sense of the various factors that came about from my qualitative analysis of interviews. Another group of 29 people studied by another researcher could produce stories with very different results. However, examining these experiences through a critical race perspective illustrates how influential a person's social status and race contributes to their experiences, such as living in a food desert.

7 NAVIGATING FOOD DESERTS: ACTIVITY SPACES

The goal of this chapter is to address the question of what the geographical space of resident's actual food-purchasing activities are. In this chapter I explain the ways the residents accessed their food. The common elements to be discussed are themes that came about through the analysis of the interview data from participants—mainly whether they shopped closer to home or work. This was achieved by additional interviewing after examinations of the GIS data and maps and in this chapter, I combine both. The maps included in this chapter are of individual-level data; showing participants' home, work, and shopping locations, also known as their activity space. Activity space is defined as an environment in which a person performs their daily activities, to include activities such as work and shopping (Schönfelder and Axhausen 2003, Golledge and Stimson 1997, Christian 2012, Horner and Wood 2014). This chapter highlights those routines and paths of participants and also answers the question of why they shop where they do.

Seeing these spatial patterns on a map help to better illustrate the wider range of food access and how people go about their daily routines. While chapter six detailed the different experiences of the participants in obtaining their food, this chapter continues the discussion of the experiences, but especially in the sense of how the participants continue to navigate food deserts with the limited resources and choices, and why they do it the way they do. The chapter will highlight what participants are doing in order to, essentially, survive living on, in, and around limited resources.

7.1 Mental Maps, Geographic Awareness, and Activity Space

Activity spaces are also related to cognitive or mental maps as these stress the spatial knowledge about activity opportunities and their relative positions and connections

(Schönfelder and Axhausen 2003). I relate mental maps to the activity space in the instances with participants because I was interested to see if people actually knew what was available around them in terms of food resources. A method similar to Kestens et al (2010) is used in this study, in which a record of participants' travel and activity throughout any given day was measured in order to capture their food access routine. The majority of the participants in this study (N=21) accessed their food in very similar activity spaces or pathways. While the geography of the activity spaces differ, the method by which they access their food is similar in that it is usually closer to their work location, not their home/place of residence and the participants tend to overlap their shopping trips with their workday.

For the purposes of this study, I was strictly interested in where participants live in relation to where they work and shop. The findings from this, after plotting all locations on the map, indicated a wider range of activity than I anticipated. Figure 7.1 shows all participants' home, work, and shopping locations. All but two of the participants live in the study recruitment area, but still in neighborhoods that classify as a food desert. The work locations ranged from the in-town Atlanta area, to the northern, eastern, and southern suburbs of Atlanta.

Participant Home, Work, and Shopping Locations

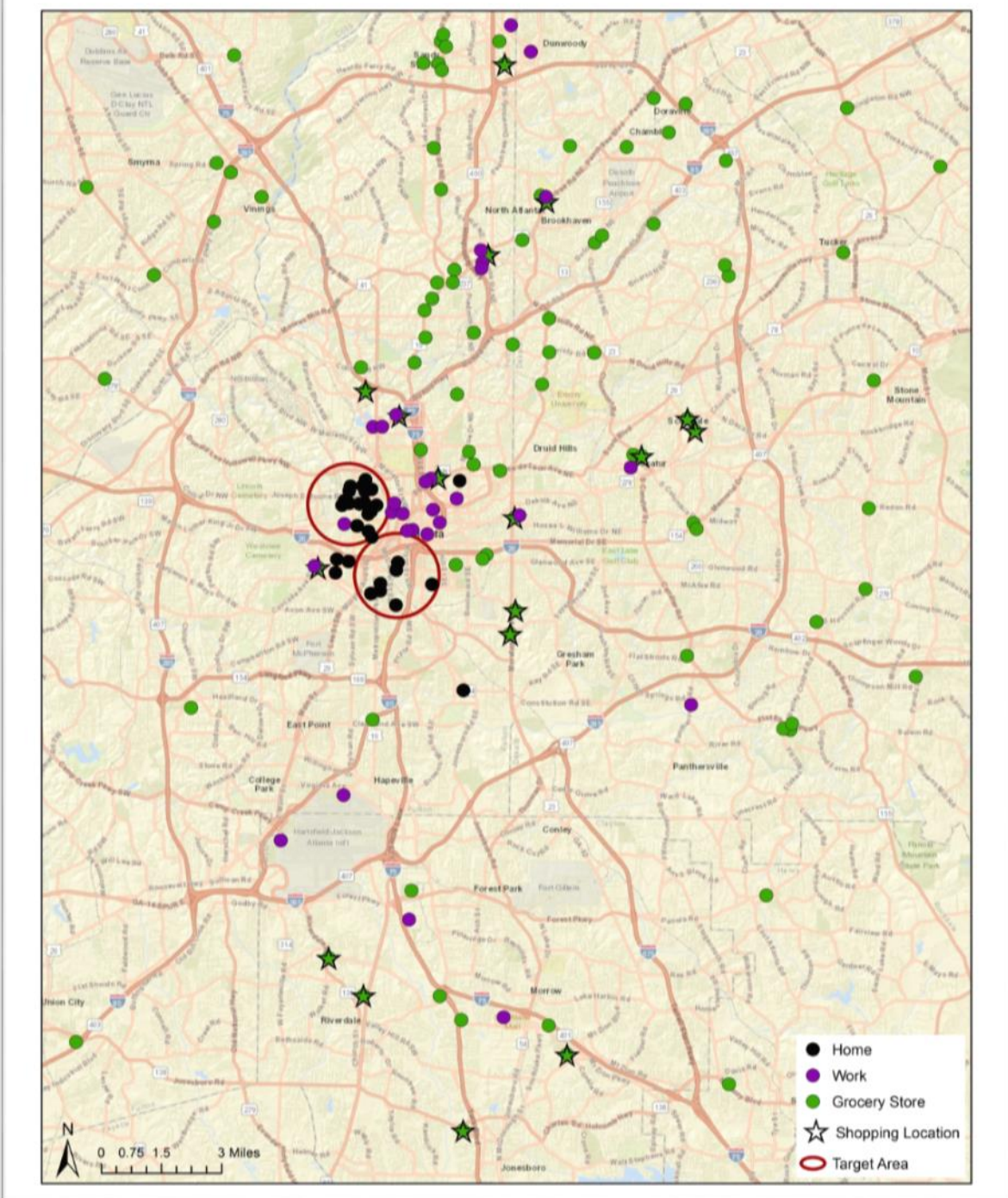


Figure 7.1 Locations of all study participants' home, work, and shopping locations

The mental maps exercise produced an unexpected yet interesting finding in that some of the participants did not know where their neighborhood was on the map, let alone their specific street. This has further research implications, especially in the field of geography, but beyond the scope of this project. It is especially relevant regarding where the participants would perceive their nearest food stores to be. Mental maps are beneficial for stressing the spatial awareness and knowledge of activity opportunities and their relative positions and connections (Schönfelder and Axhausen 2003). If participants do not know the location of their place of residence, can it be expected that they would be aware of the grocery stores around them—or lack of, for that matter?

All of the participants performed the mental maps exercise and most were relatively accurate in their elicitations. However, four of the participants stated that they have never really needed to know (especially by having to pinpoint their location on a map) because everything they needed to access was in their immediate surroundings. These same four participants also expressed similar sentiments—that they had lived in their area all their life and it just became a matter of following along to get to the places they needed to go. Some followed other family members throughout the years, others followed friends. This is also known as the knowledge space (Horton and Reynolds 1971, Goldenberg et al. 2001); second hand experiences through family, friends, and other sources which help compose the space in their mental map. The three most important places these participants needed to know were: 1) where the bus stop or train station location was in relation to 2) where they lived and 3) where they worked.

The maps of these four participants' activity spaces as well as what came about from the mental maps exercise are shown below. This was a somewhat rudimentary exercise of just

having participants point out where they lived and where they thought the nearest grocery store to them was. This could be a grocery store they shop at already, or just the perceived nearest one in general. The maps provided to the participants were at the same zoom level as what is shown in Figures 7.2-7.5. Two participants, K. Rodriguez and G. Johnson, were relatively accurate with pinpointing their home location on the map. Two participants, B. Owens and L. Thomas, essentially shrugged their shoulders and guessed their location.

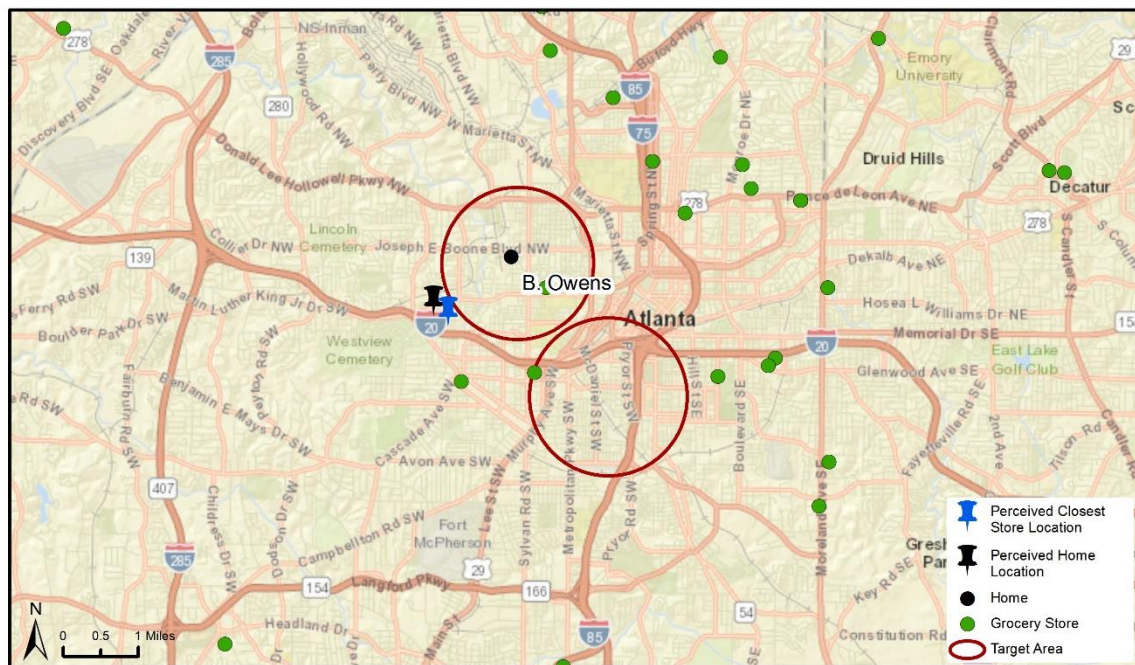


Figure 7.2 B. Owens' mental map representation

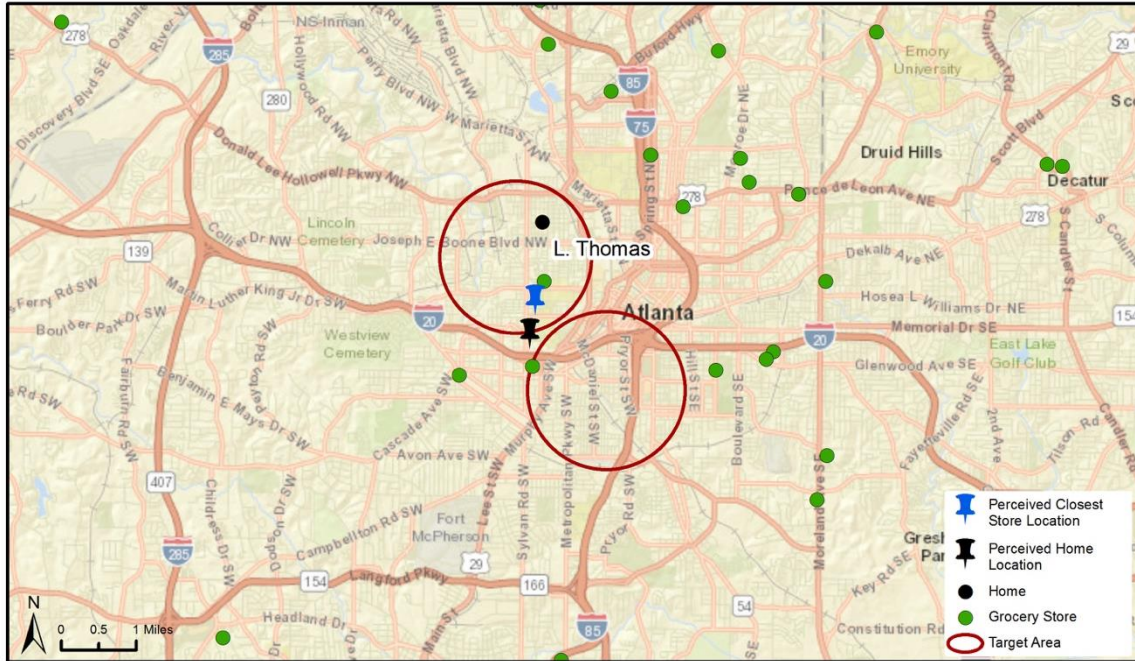


Figure 7.3 L. Thomas's mental map representation

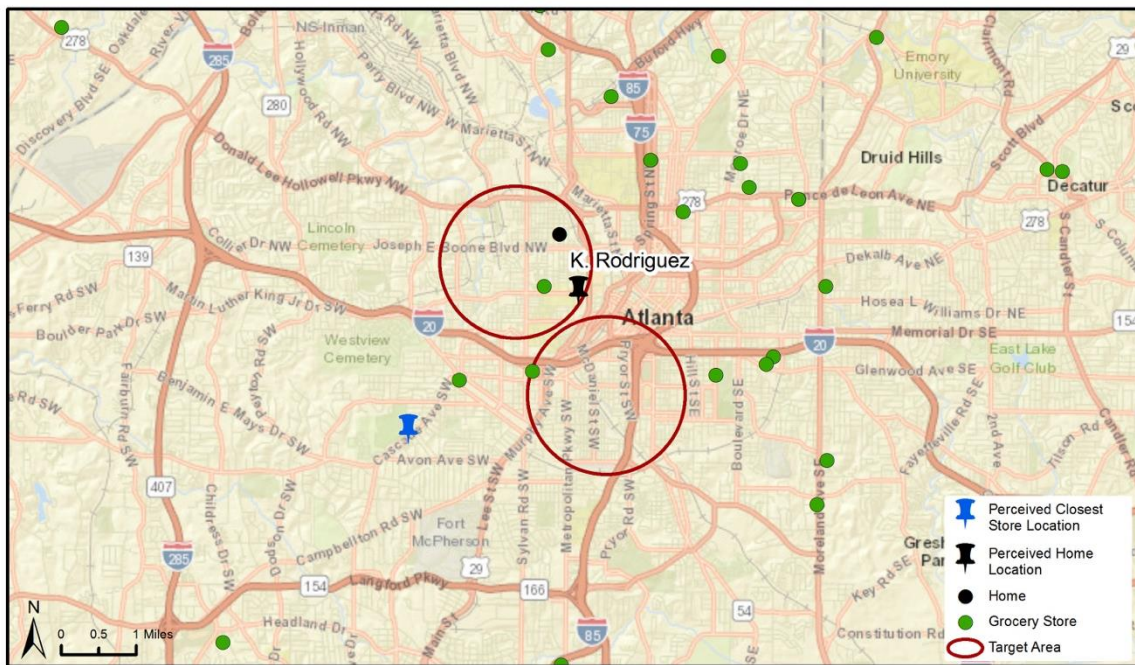


Figure 7.4 K. Rodriguez's mental map representation

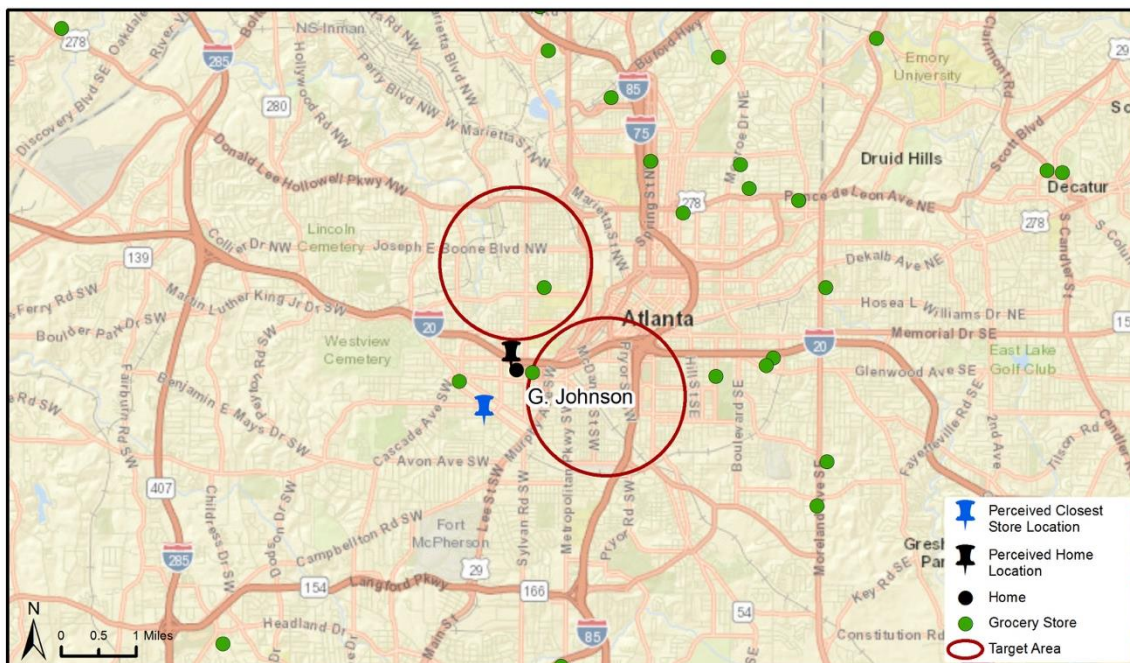


Figure 7.5 G. Johnson's mental map representation

The mental maps exercise also helped to provide some insight into other factors that can affect people's access to food—just their overall knowledge and perception of what is available around them, but it also allowed for further inquiry as to why they choose to shop at a location that is not the closest to them. When asked to explain their lack of preference for a store closest to her home, G. Johnson mentioned factors such as cleanliness, safety, size and feel of store, and most importantly for her, advocacy for her sister.

G. Johnson: I really just don't like that store, but especially after my sister told me how awful it was to work for them, I don't support them. She didn't work at that location, but still the same company. We try to have nothing to do with them. I don't care if it's silly and if it might mean I can't get some of my food when I want to. It's the principle.

This point is exemplary of reasons that have nothing to do with location or availability in influencing people's shopping behavior or preference. If anything, the location of the store G. Johnson refuses to shop at should be the main reason to shop there—because it is so close. But due to poor treatment of her sister as a former employee at the store, in solidarity, she does not

support the store. Still, while G. Johnson was well aware of the nearest store to her, she was still unaware of just how much her neighborhood lacked grocery stores, in comparison to other parts of Atlanta, until looking at the map.

As Edward Tufte (1990, 1997) and Kwan (2000b) have noted, people are better able to reason and learn effectively in a visual setting than from just numerical and/or textual data. In showing the participants the routes they were taking, on a map, they were better able to visualize the bigger picture of their neighborhood and the food resources around them. Again, there were some interesting findings with some of the participants in terms of their knowledge or awareness of their food store options. For instance, L. Jackson stated that only until they closed down the Kroger he frequented did he really have to become aware of what else was around. L. Jackson, being such a creature of habit, only shopped at Kroger and is now somewhat forced to shop at the Publix on Piedmont Avenue, a little further west (see Figure 7.6).

L. Jackson: I used to go to “Murder Kroger” until they closed it. I guess they are working on putting something else there. I knew there was a Publix over on Piedmont because I pass it a lot. But I still don’t know where else I could go. I have lived in Atlanta all my life but I really only know certain areas. I don’t really move around a lot. I go where I know.

When asked if he shopped at the stores closer to his work location, at Georgia Perimeter College in Clarkston, L. Jackson explained that he would like to, only he cannot usually get to them because he relies on MARTA. As the buses and trains do not put him near enough to the stores, he just waits until he is back at home. “I guess I could try to do it but it just seems like more trouble than it’s worth,”—L. Jackson explaining the trip times that would result from shopping near work. While he knows there are stores available in his somewhat near surroundings, he still prefers his neighborhood store. Many of the participants had various reasons for their shopping locations, as highlighted in the next section.

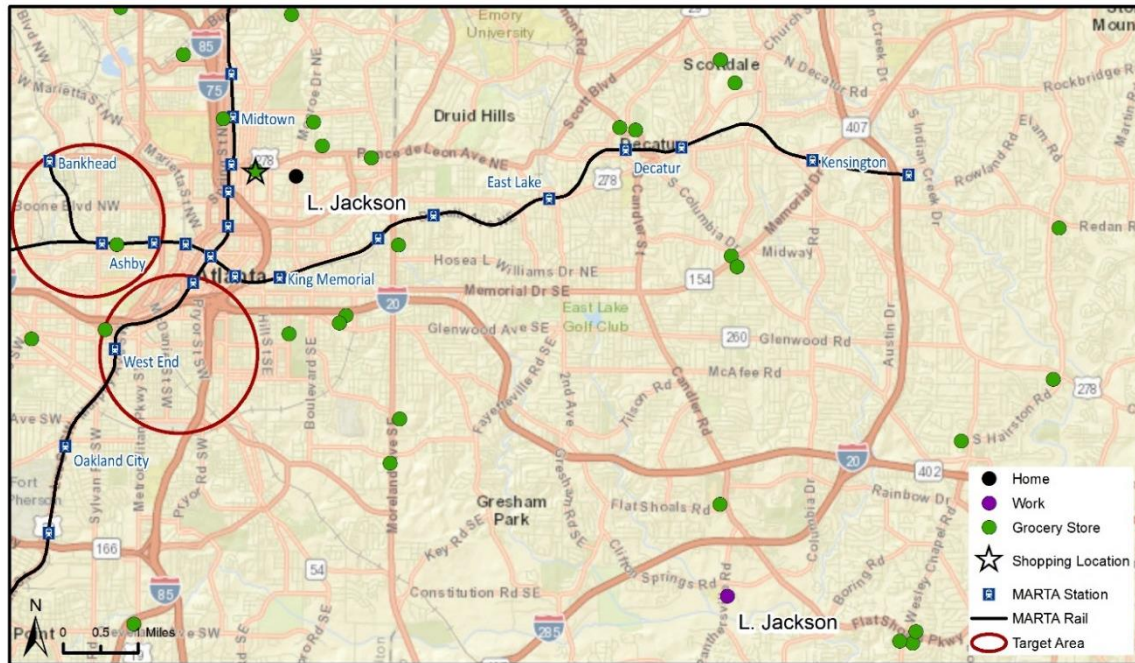


Figure 7.6 L. Jackson's activity space

7.2 Where Shopping Happens and Why: Home-Work-Grocery Store Routine

In order to better visualize participants' responses to the question of where they access their food, I utilized the GIS software again. Initially, I wanted to examine all participants' routes to and from the grocery store, but this became a difficult task as the majority of participants did not actually have a fixed, habitual routine. Many of the participants went to a grocery store whenever they seemed to have the availability to do so—mostly when they did not have to work. Many have inconsistent work schedules as well, adding to the difficulty in establishing a routine. Others did not have a strict shopping schedule or times—either by day of the week or time of day, and their routines were therefore unpredictable. Shopping frequency ranged from seven times per month to once a month among all participants.

Participants did however have a routine in the location at which they shopped for their food, and for many, it was not closer to home. As evidenced by this study, and observing the

patterns seen on the maps, "...food desert research, with a focus on the spatial fix of home as the site of food consumption fails to account for a much wider set of mobilities across urban and rural space" (Del Casino, Jr. 2015). The majority of the participants accessed their food closer to work. For the purposes of this research and the data that resulted, I decided it best to categorize the differing ways in which people accessed their food. The three categories of shoppers that resulted are 1) closer to home, 2) closer to work, or 3) other/in between (work or home). Table 7.1 also shows which participants were categorized in each. I highlight some of the participants' activity spaces throughout the next sections, with the remaining maps for each group to be found at the ends of the appropriate sections.

7.2.1 "Closer-to-Home" Shoppers

Seven of the participants in this study performed their shopping at locations closer to their home. The reasons were similar for each—strictly because of proximity. None of the seven own a personal vehicle, so the proximity is also of importance as they would either walk to the store or take their usual bus or train. Even if taking a MARTA bus or train, there is still a good portion of the trip that needs to be walked, for everyone. For instance, B. Owens takes the MARTA train and usually alights at the West Lake Transit Station, just over a mile from the Kroger at which he shops, and a mile from his home. Though the Kroger is in the opposite direction from his home, he still chooses to go there to shop, as opposed to a store that might be on the train's route. Either way, B. Owens feels he would be going out of his way a little, no matter what.

B. Owens: If I stop on the MARTA line, I still have to walk to get to whatever store there is. I have a friend who lives in Decatur and I know there are grocery stores around there. Even if I took the train, it's not like the store is right there when I get out. I still have to walk a little. But I don't expect there to be a store *right there*, you know? That would be nice though.

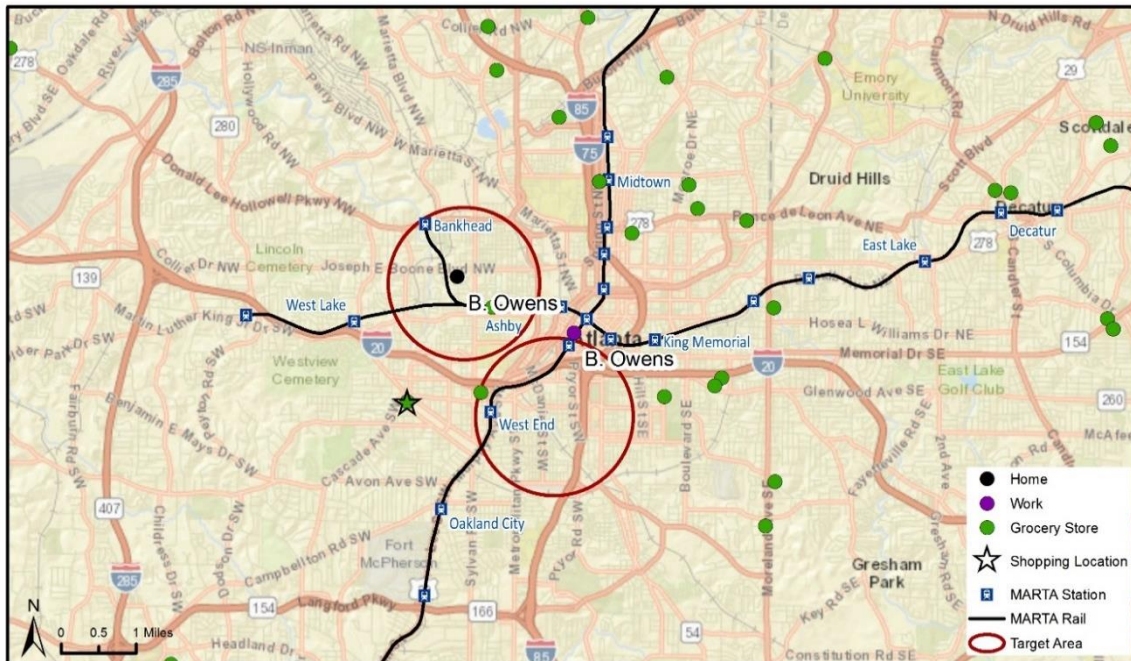


Figure 7.6 B. Owens' activity space

B. Owens understands his task of grocery shopping will always come with some inconvenience, and that it is to be expected with most things he tends to do, because he does not expect everything to be catered to him. While he does most of his shopping closer to his home, he will sometimes stop in the other two stores closest to his house for a quick trip.

M. Clark has been unemployed for a few months and has had to change her routine. While she typically prefers to shop at the stores near her former place of employment (work location still indicated on the map in Figure 7.8, but should be noted as her last place of employment), she has been limited to shopping closer to home due to her limited finances and transportation issues.

M. Clark: I try to limit my trips now because it's not like I have a lot of money to be spending on silly things. If I'm going out anywhere, it's usually to try to find myself another job or to get my groceries. Since I lost my job I only go every other week at the most. If I don't find something soon, I think I might have to apply for assistance. Luckily my rent isn't that much, but I still need a job.

When asked why she preferred to shop near her (former) job, M. Clark indicated reasons such as selection, availability, and convenience: “I could pick up stuff before I got on the train to head home. And since stores were close, I could make multiple trips during the week and not have to worry about carrying too much stuff home.”

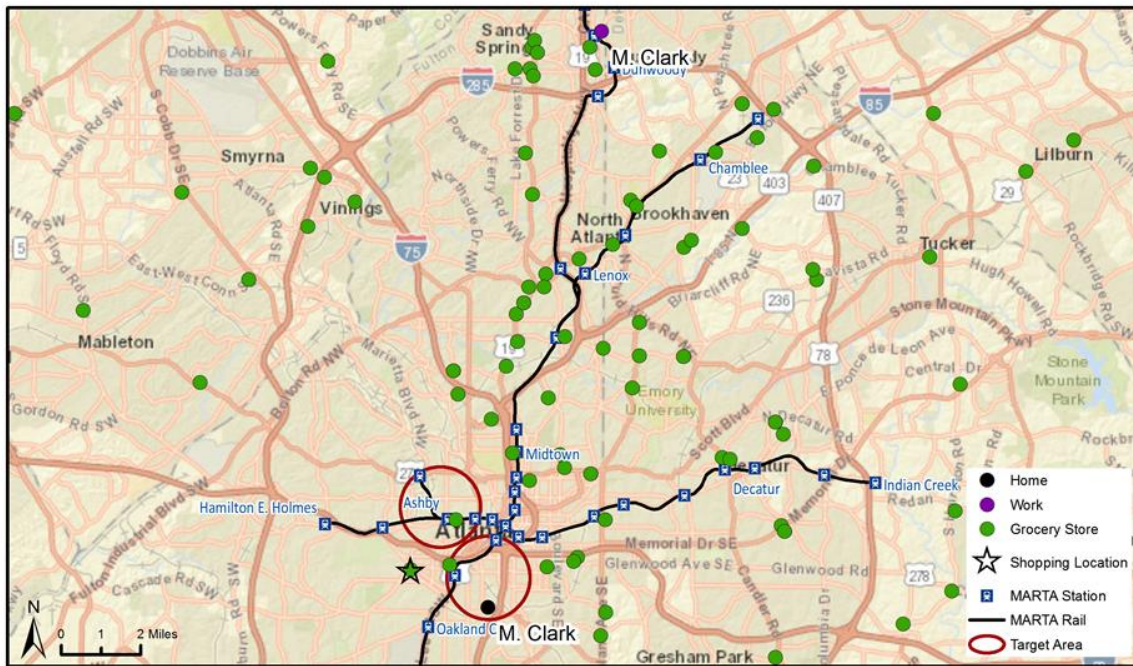


Figure 7.7 M. Clark's activity space

M. Clark is somewhat of an exception to the closer-to-home shoppers, considering her situation, but her reasons for shopping at home are still valid to include in this group. People have varying factors contributing to the locations in which they shop. The remaining participants in this group of closer-to-home shoppers all had similar reasons for why they shop where they do: convenience. The stores they shop at are close to their home and they do not feel they need to travel far out of their way to obtain their groceries. Figures 7.9-7.13 are maps of those participants' activity spaces.

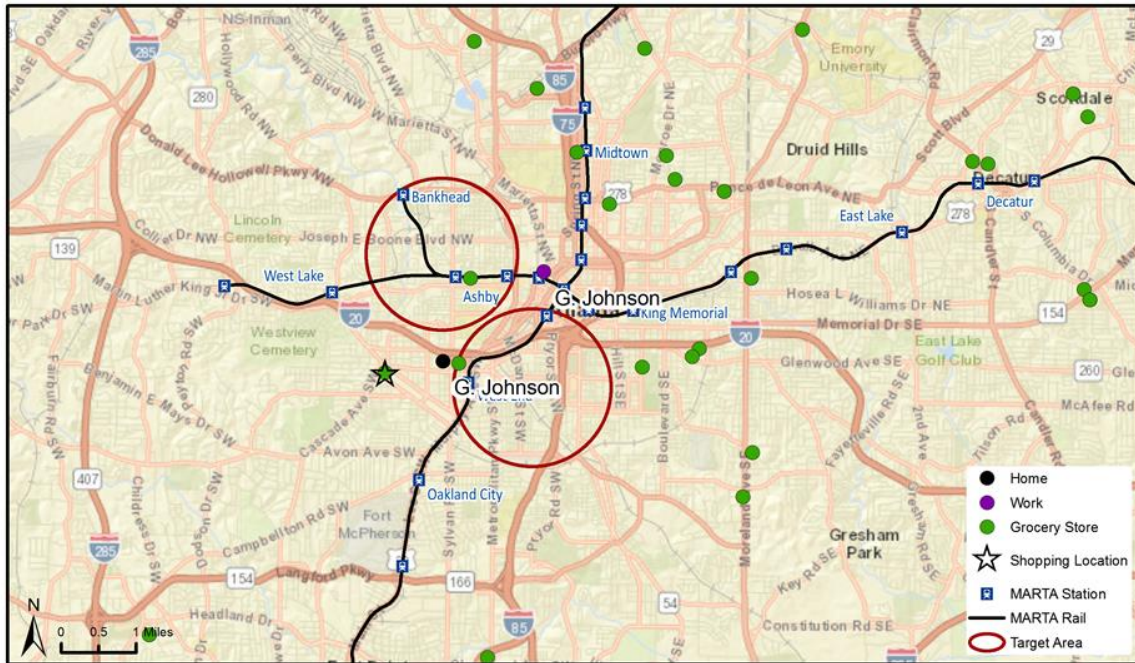


Figure 7.8 G. Johnson's activity space

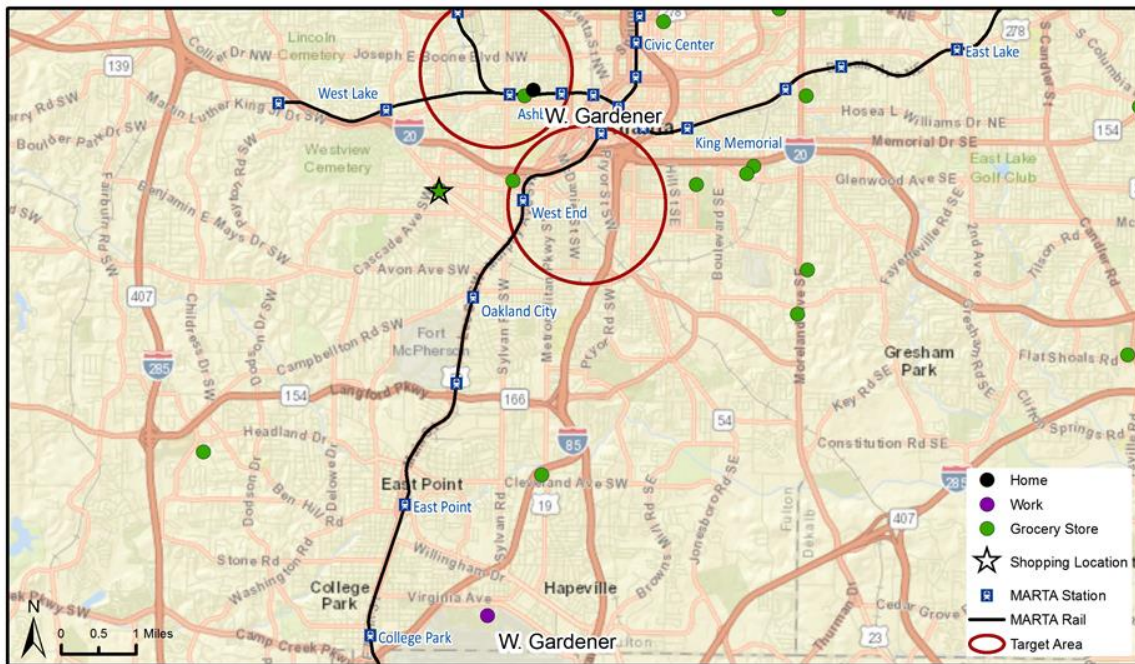


Figure 7.9 W. Gardener's activity space

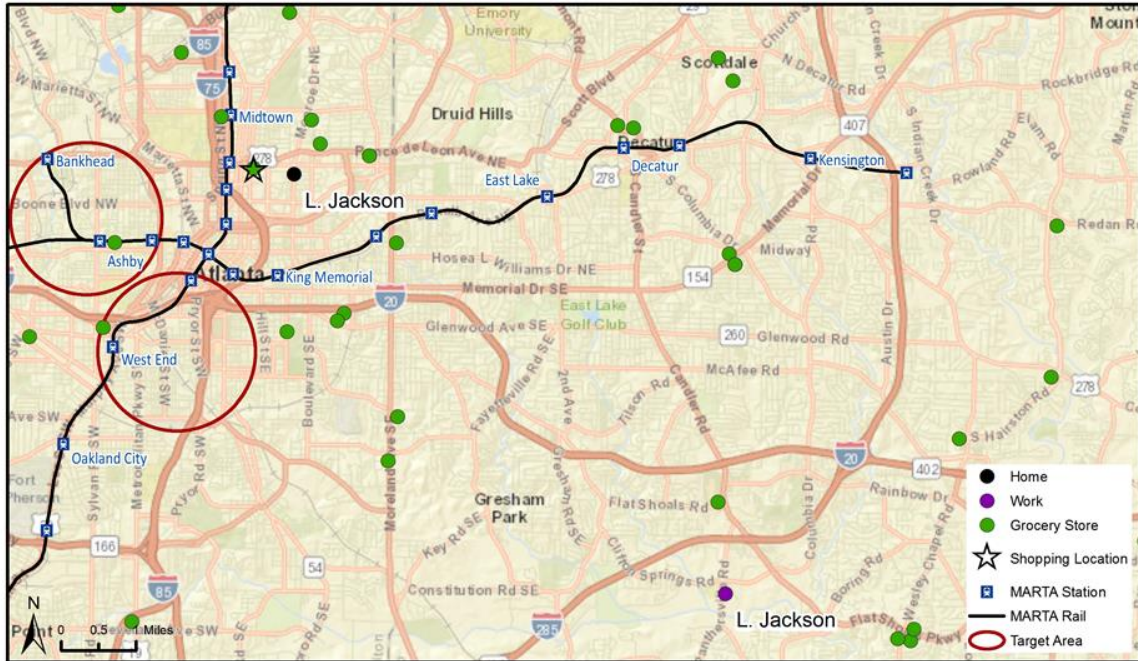


Figure 7.10 L. Jackson's activity space

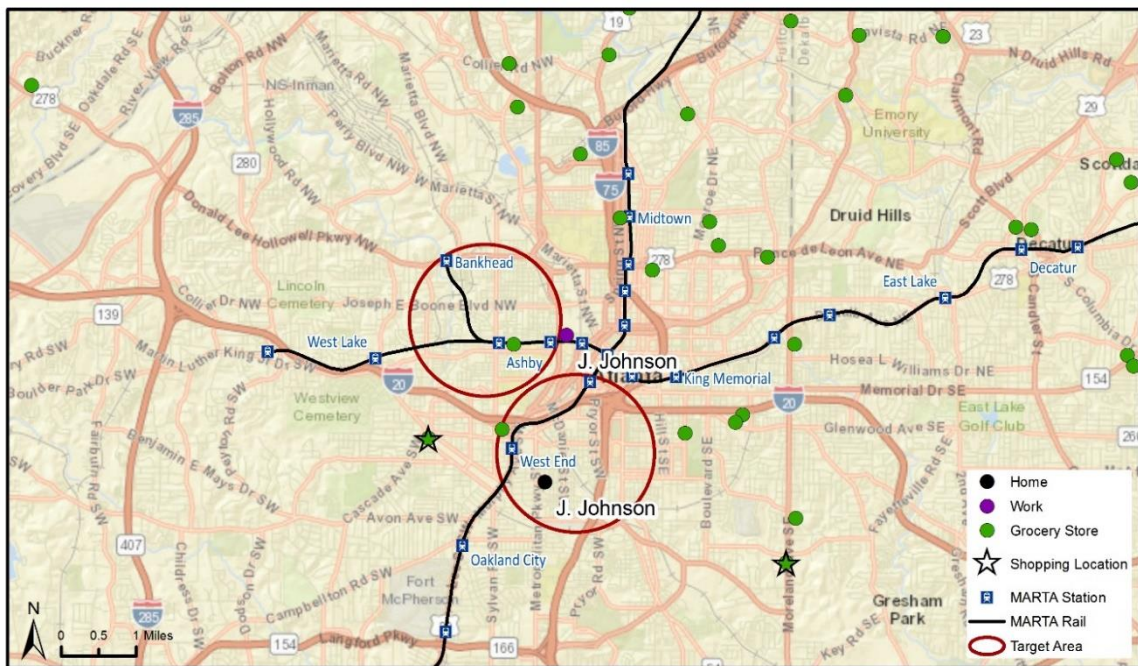


Figure 7.11 J. Johnson's activity space

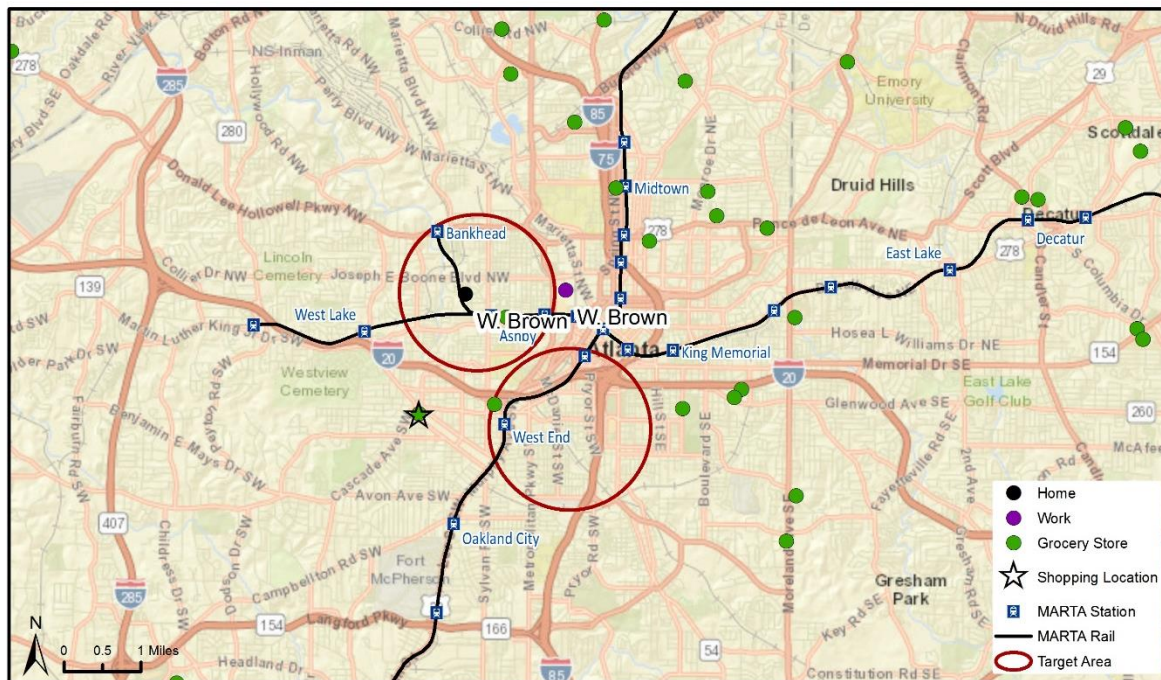


Figure 7.12 *W. Brown's activity space*

7.2.2 "Closer-to-Work" Shoppers

The majority of the participants (N=16) in this study shopped for their groceries closer to their work location and the reasons for this were similar among all of them, as well as among the closer-to-home shoppers: convenience. Participants found it easier to obtain their groceries if they shopped at locations closer to work strictly because of their availability and the conveniences associated with timing and scheduling. Knowing that there are not stores near enough to their home, or stores at which they prefer to shop, participants make it a point to schedule shopping around their work schedules.

E. Byrom and F. Lopez (see Figures 7.14 and 7.15 respectively) have the advantage of choosing between a couple of different stores around their work location because they each own a vehicle. F. Lopez also understands the advantage of this, compared to some of her neighbors. She speaks of her next-door neighbor and her own shopping routine:

F. Lopez: I don't know how my neighbor does it, she doesn't even have a car. She works all different hours and I never really know when she's home—not that I need to know. That's none of my business (she laughs). But I wonder how she gets around sometimes. I have my car and I know when I have time to go shopping. I like to go when I get off work at the end of the week, that way I don't have to get back out there on the weekend if I don't want to. You know Atlanta, the traffic is bad and I just can't stand lots of people around. Especially if there's something going on downtown, I won't get back out there if I don't need to.

F. Lopez is also describing a couple of different convenience factors—those of time and location—while also bringing up the importance of transportation. Not only does F. Lopez like to combine her trips of home, work, and shopping because of location of the stores, it is also due to the hassle she does not want to experience if needing to go back out into the city on a weekend day or any day off. F. Lopez realizes that she would not have the options she has in obtaining her food if she did not have her own vehicle. “I wouldn't be able to get as much stuff each time either...I would hate to be walking with all those groceries,” she explains.

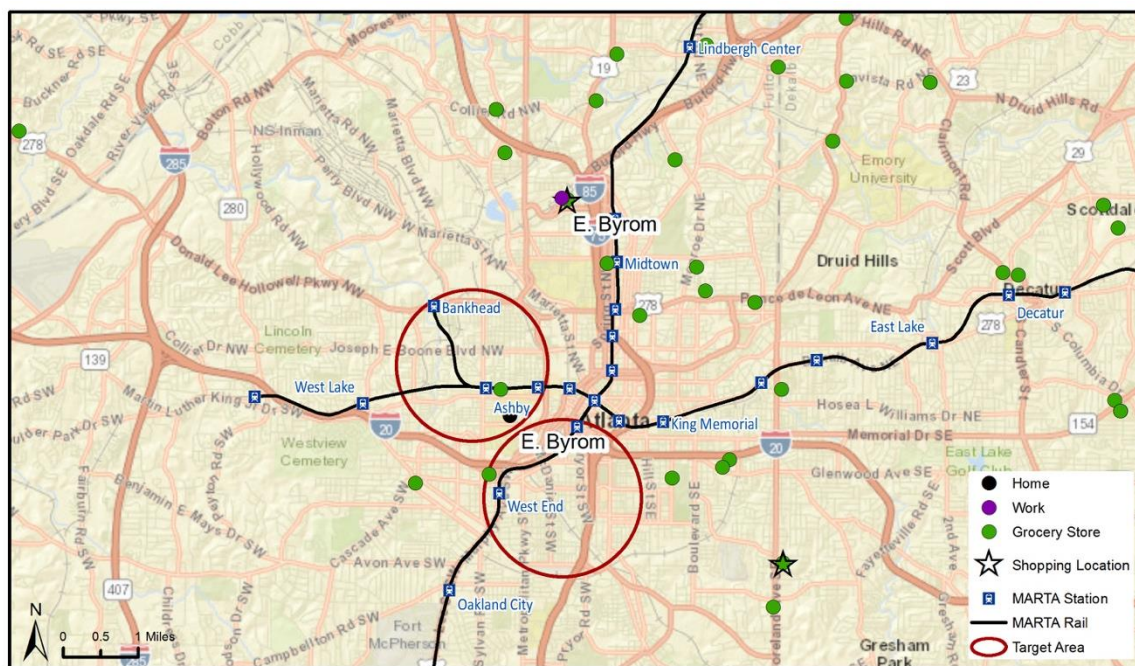


Figure 7.13 E. Byrom's activity space

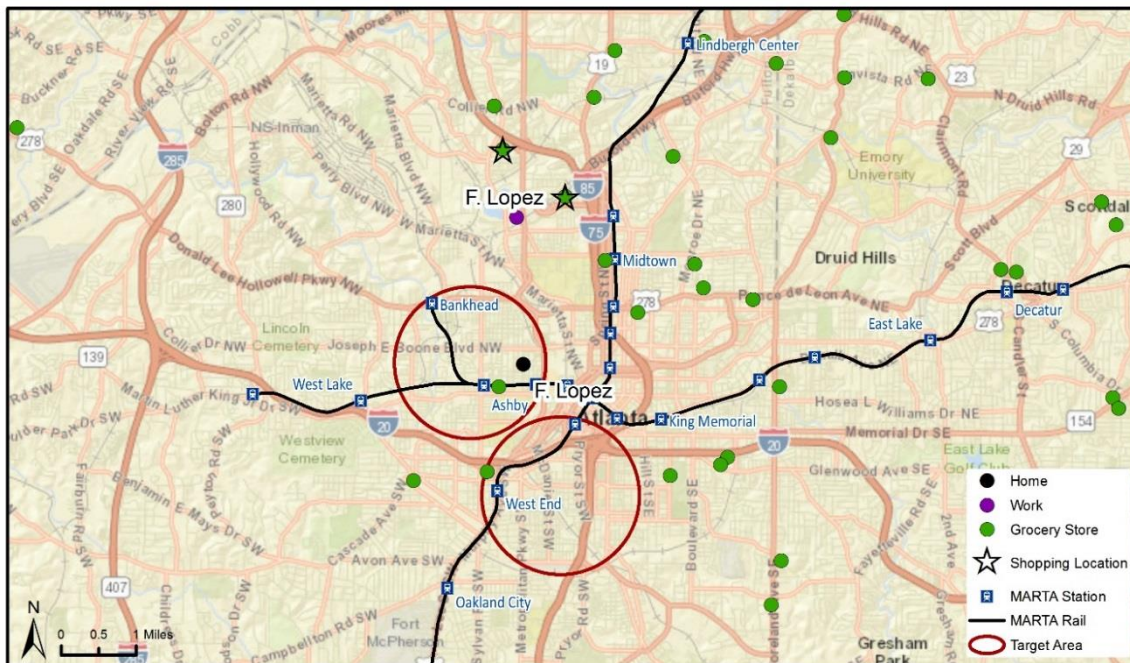


Figure 7.14 F. Lopez's activity space

F. Lopez brought up a common issue many of the other participants consider when shopping for their food. Being able to shop for all that is needed or wanted, and then having to carry all those groceries home plays an important role in these participants' shopping experiences. This is a factor that also plays a role in where they purchase their food. For some participants, the distance needed to travel with grocery bags in hand is shorter if they combine their shopping trip with work. E. Byrom was able to speak of how things used to be before he bought his truck:

E. Byrom: I don't know how I did it so long without my truck...but I guess you get used to stuff and you do what you have to do. It is so nice to be able to go to whatever store I want to and get as many groceries as I can because I don't have to think about carrying all that stuff while walking home. I didn't used to shop by my job, but since I got the truck and I know there is a store there and not close to my house, I shop when I get off work. But I also don't have to go as often anymore because I can get more stuff in one trip. Before, I could only get whatever I could hold.

Having personal transportation eases the burden of living in a food desert in a couple of ways, as evidenced by F. Lopez, E. Byrom, and the few others who own a vehicle or who do not always rely on public transportation: there is more flexibility with their time regarding when they go shopping, where they go shopping, and how many groceries they can get in one single trip. One factor continues to influence another. The factor of time or convenience is eased by not having to make multiple trips, because more could be bought in one single trip. The factor of store availability or location is less burdensome because they have a vehicle and greater mobility and have more options when it comes to where and when they shop.

B. Garner's case is also one to highlight (see Figure 7.16). B. Garner lives in town, also owns a vehicle, but works south of Atlanta, in Morrow, at Southlake Mall. She takes advantage of being near grocery stores and other resources while she is in the suburbs because she recognizes these are not available where she lives. B. Garner's typical shopping experience consists of shopping on the days she gets off work early enough to make it to the store. Working retail means she sometimes has to close, which could require her staying as late as 10:30pm sometimes. If she gets off work early enough, maybe around her typical 6:00 pm time, she has time to go grocery shopping. Publix is nearby and she prefers that to either Walmart or Kroger, which are also in the area.

B. Garner: I work at the mall and if I don't get my groceries by work, then I might make a trip to Walmart near me, but I hate that store. I like Publix down on Mt. Zion because they have a lot of good stuff to choose from. I also like their buy-on-get-one free sales. Sometimes I just buy what I need based on the sale, even if I don't usually get the brand. Anyway, the Publix is close enough to work that I can stop there before I go home. I usually go when I'm about to be off for a couple of days.

To clarify the point B. Garner made regarding her “hate” for “that store,” I asked if these feelings were for Walmart in general, or just the one near her home. It was explained that it was specifically the one near her home due to the fact that it was always busy and the management did not seem to keep up the store (i.e. cleanliness). B. Garner would rather shop somewhat out of her way, travelling even a little further south away from her job and her home, in order to shop at a store she likes and feels comfortable at.

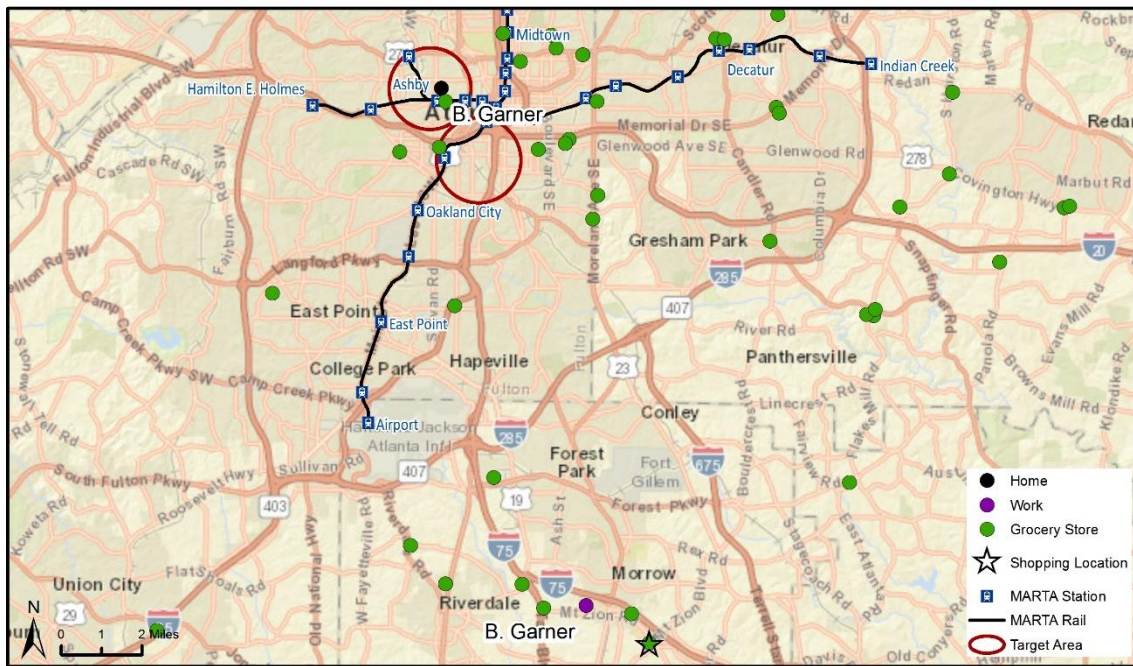


Figure 7.15 B. Garner's activity space

The remaining closer-to-work shoppers' activity spaces can be seen in Figures 7.16-7.31. While each participant had their own specific reasons for shopping where they do, in short, all participants navigate living in a food desert with the awareness and understanding that they are being resourceful and efficient in their methods of doing so. Combining a

shopping trip with their work trip is the most common routine among the participants. This is due to transportation issues, store availability, preference, and convenience.

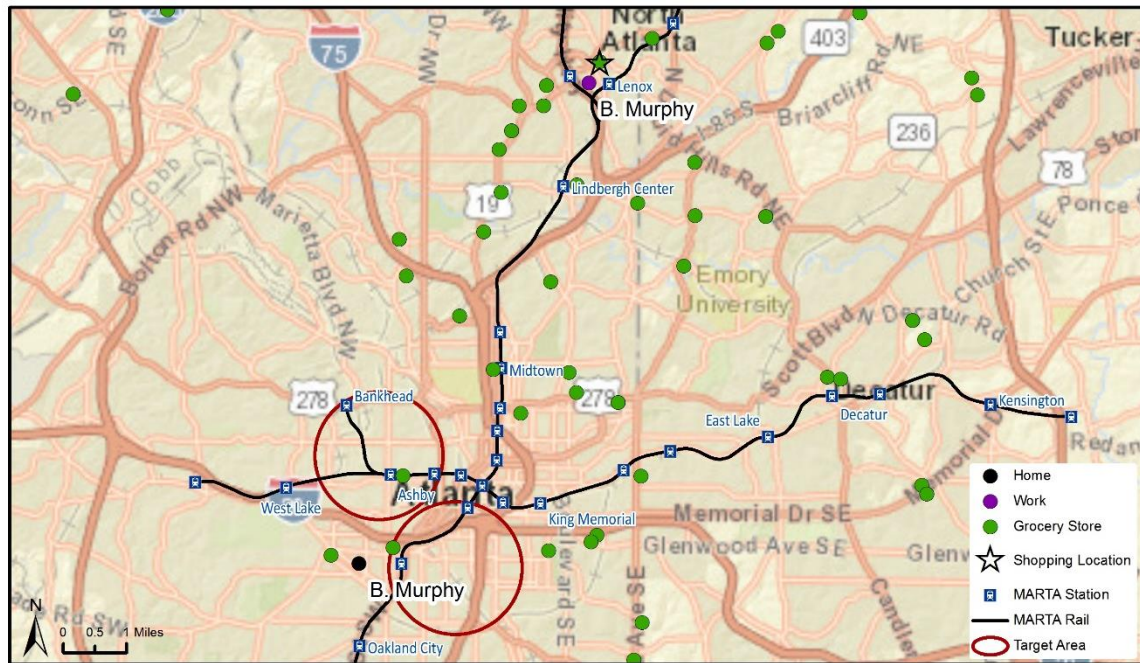


Figure 7.16 B. Murphy's activity space

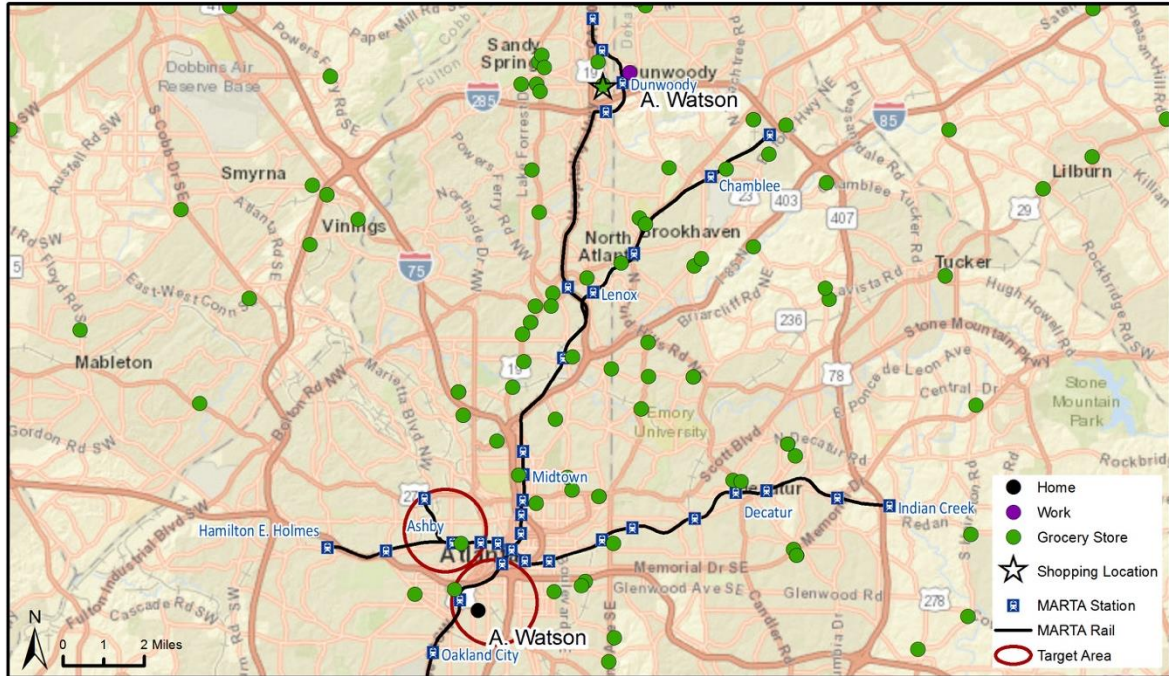


Figure 7.17 A. Watson's activity space

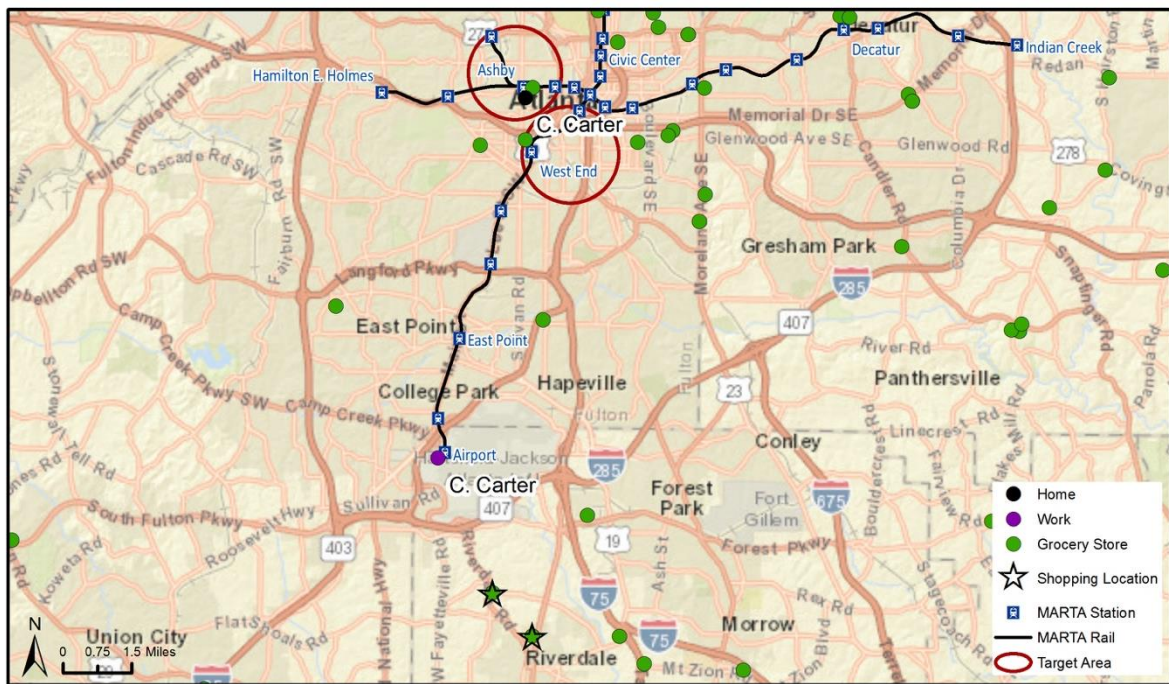


Figure 7.18 C. Carter's activity space

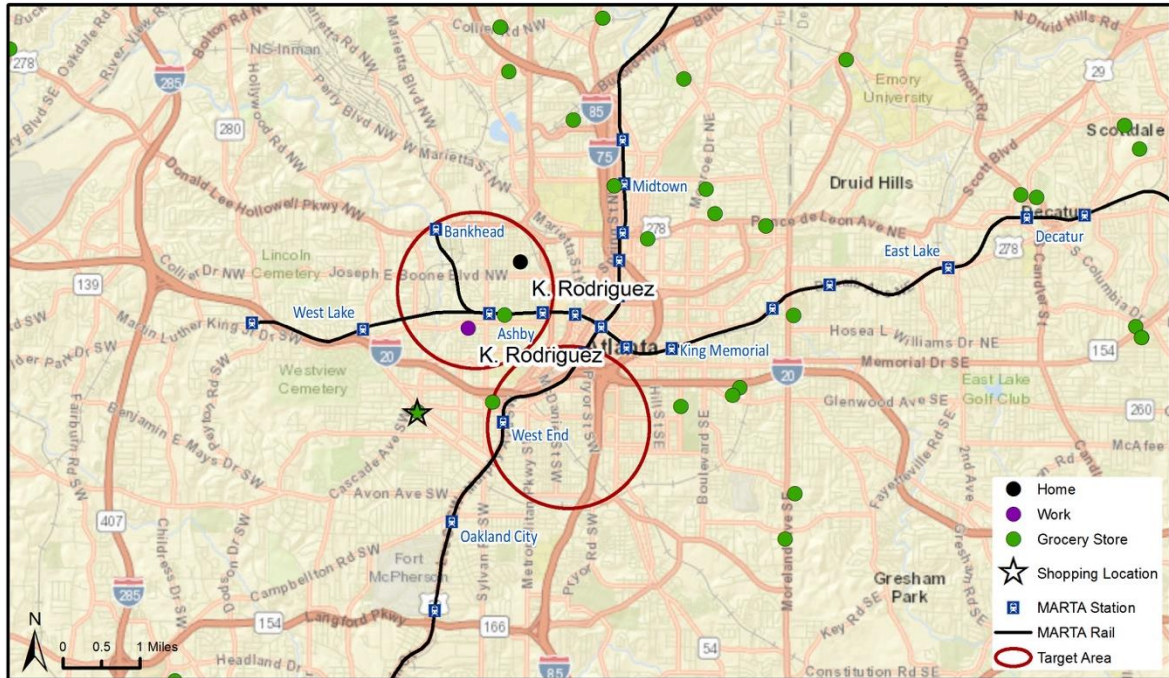


Figure 7.19 K. Rodriguez's activity space

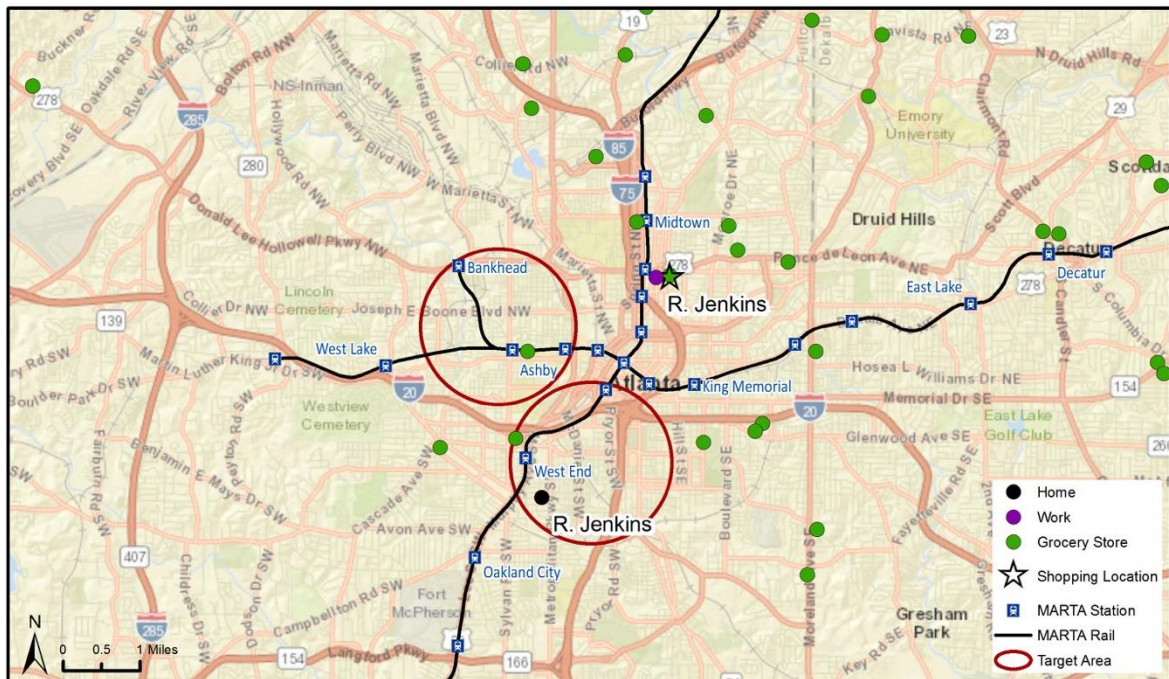


Figure 7.20 R. Jenkin's activity space

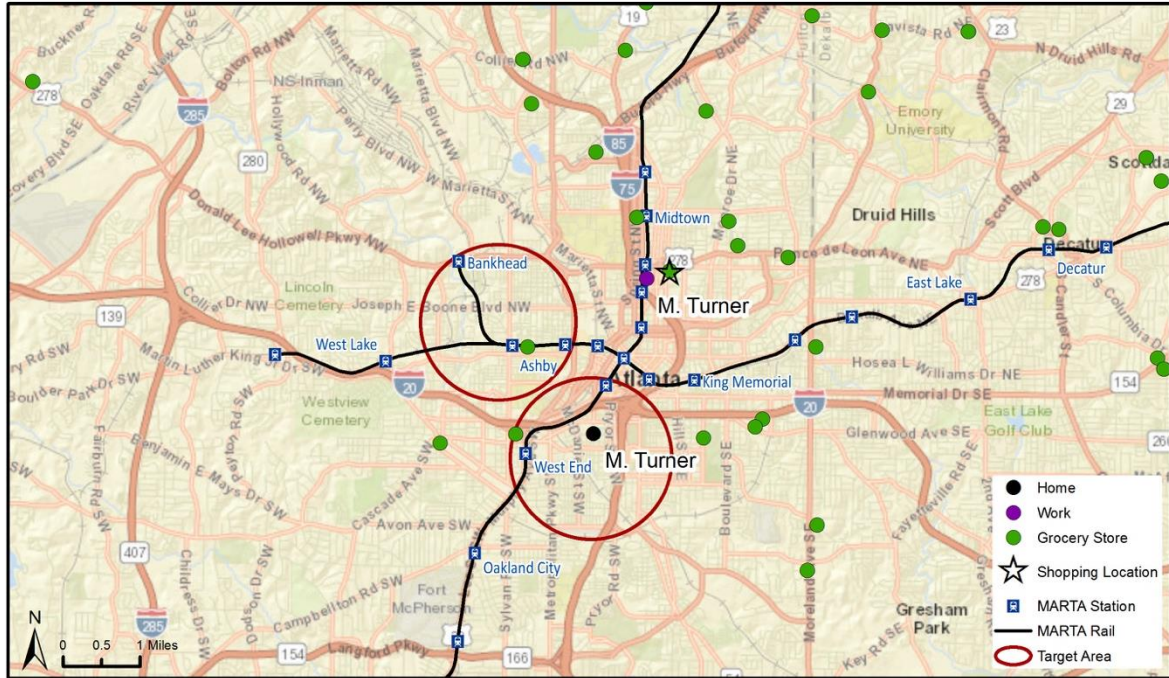


Figure 7.21 M. Turner's activity space

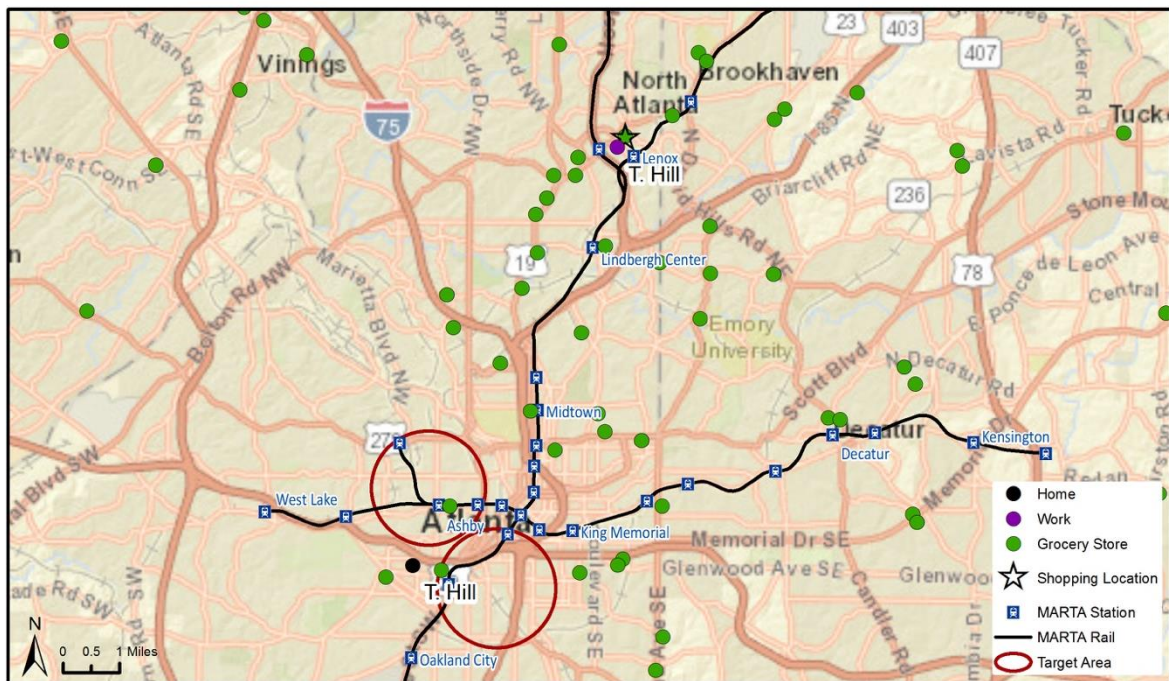


Figure 7.22 T. Hill's activity space

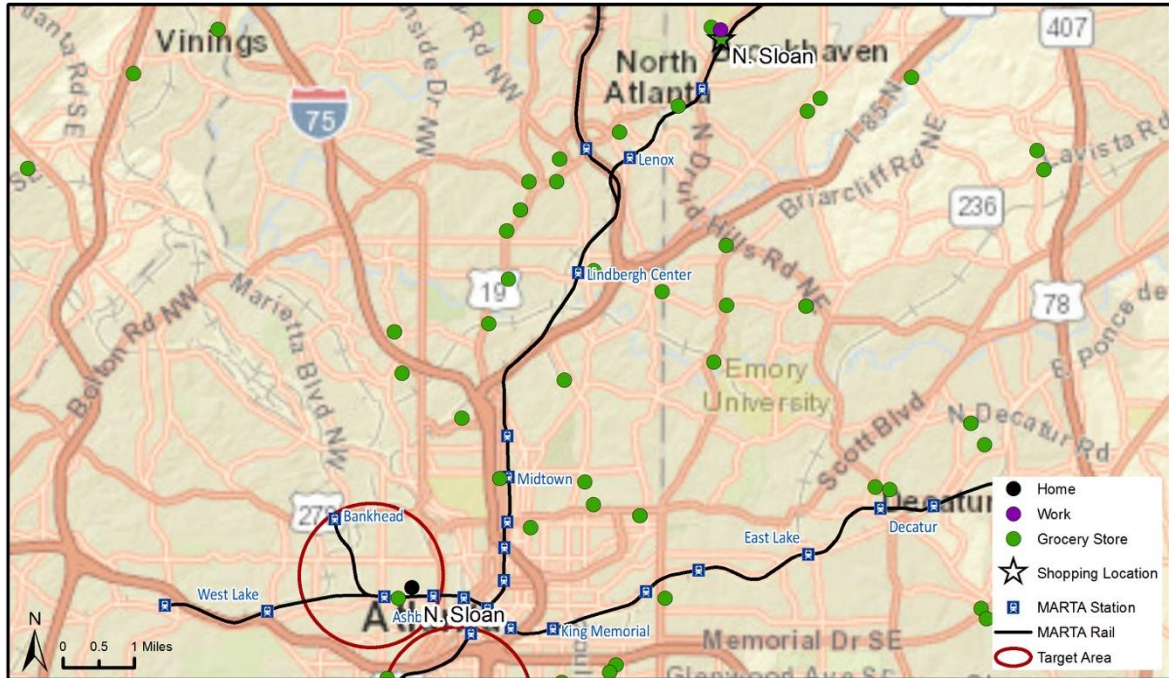


Figure 7.23 N. Sloan's activity space

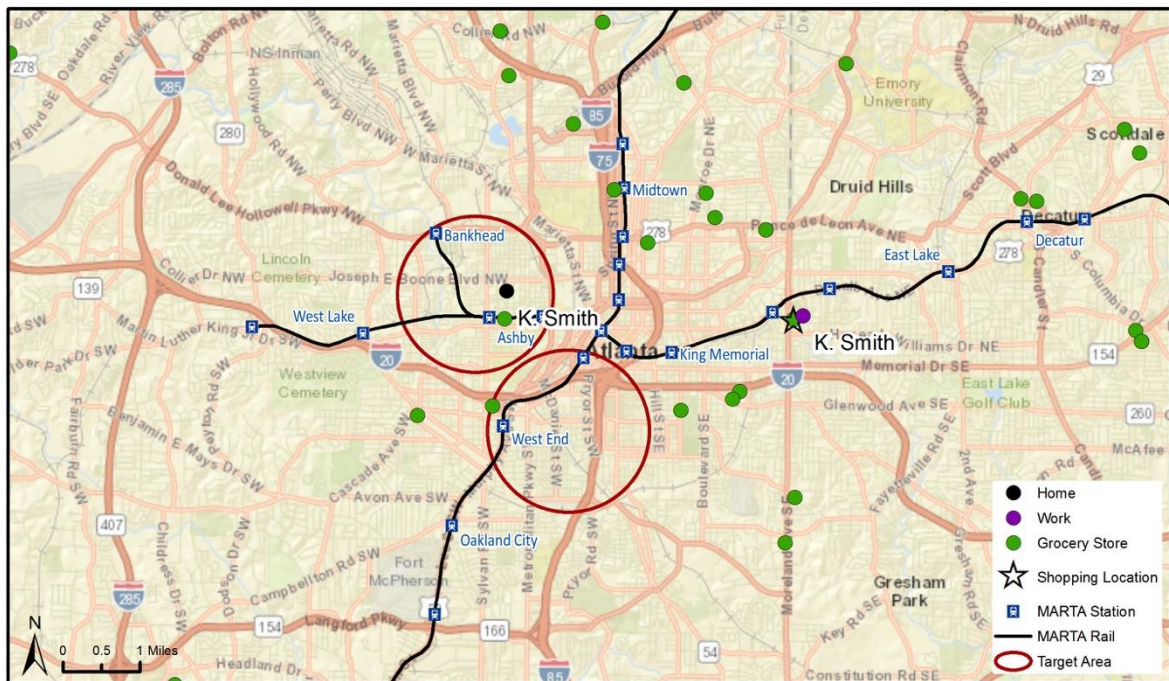


Figure 7.24 K. Smith's activity space

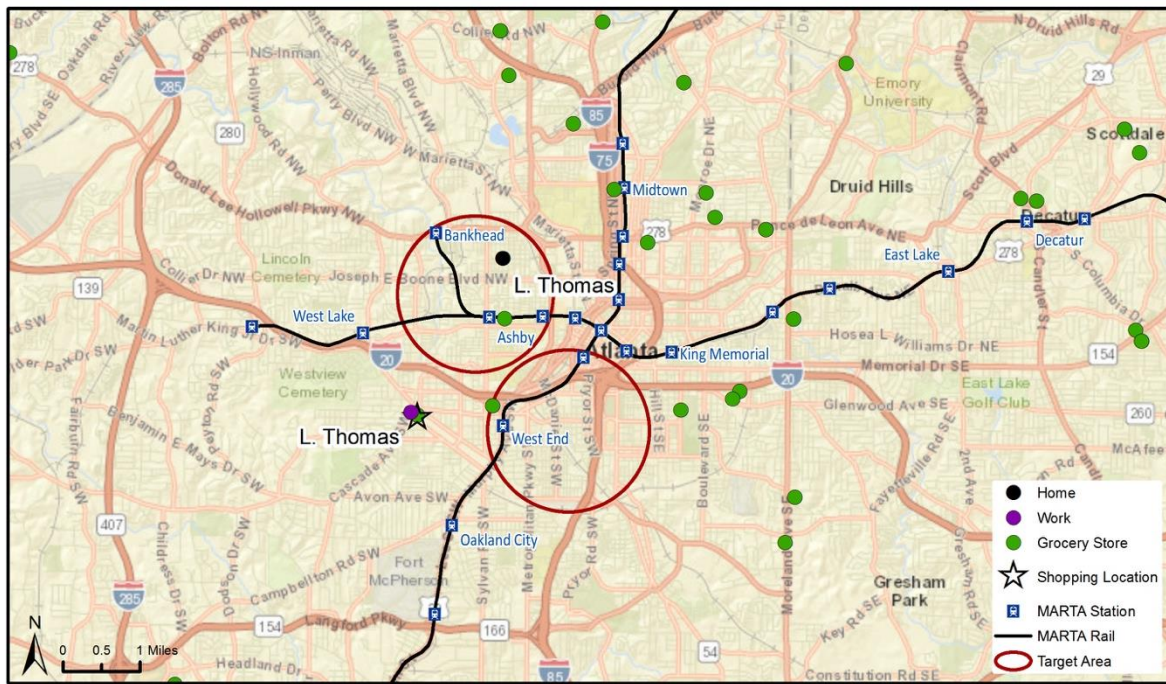


Figure 7.25 L. Thomas's activity space

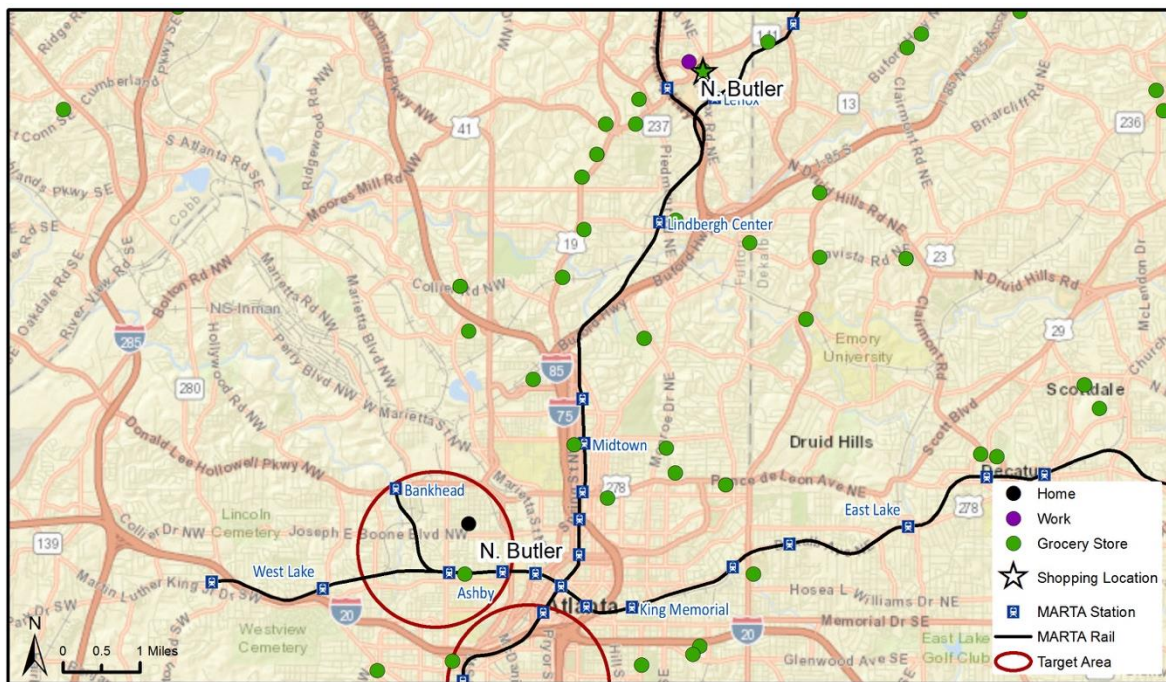


Figure 7.26 N. Butler's activity space

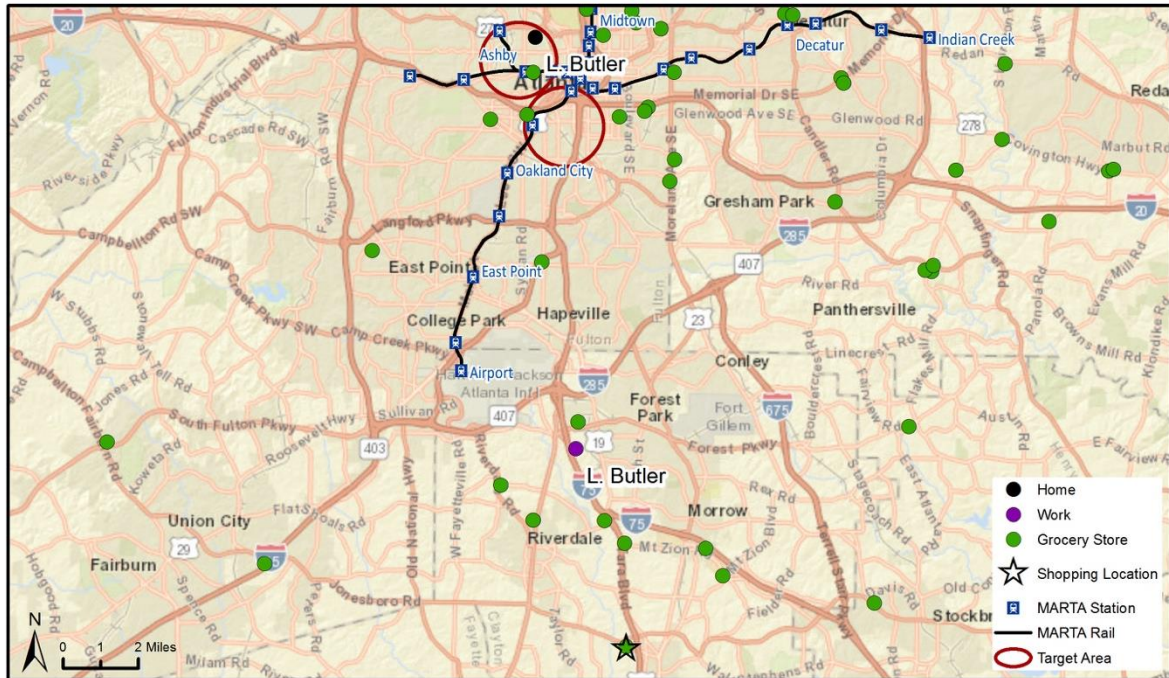


Figure 7.27 L. Butler's activity space

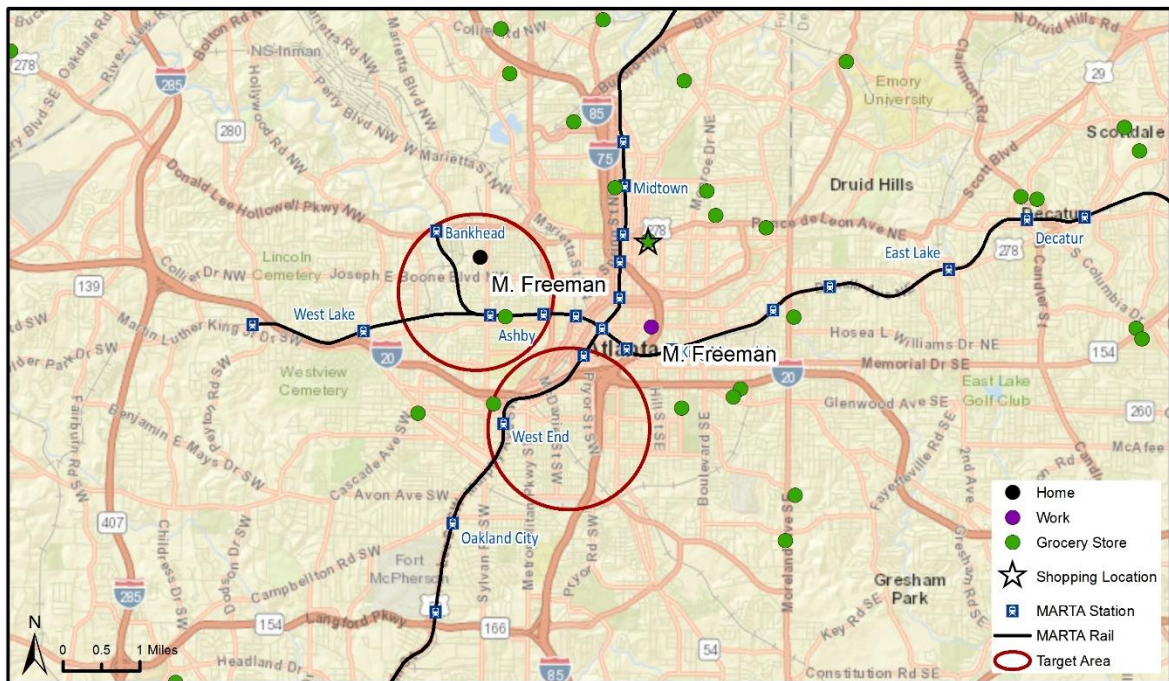


Figure 7.28 M. Freeman's activity space

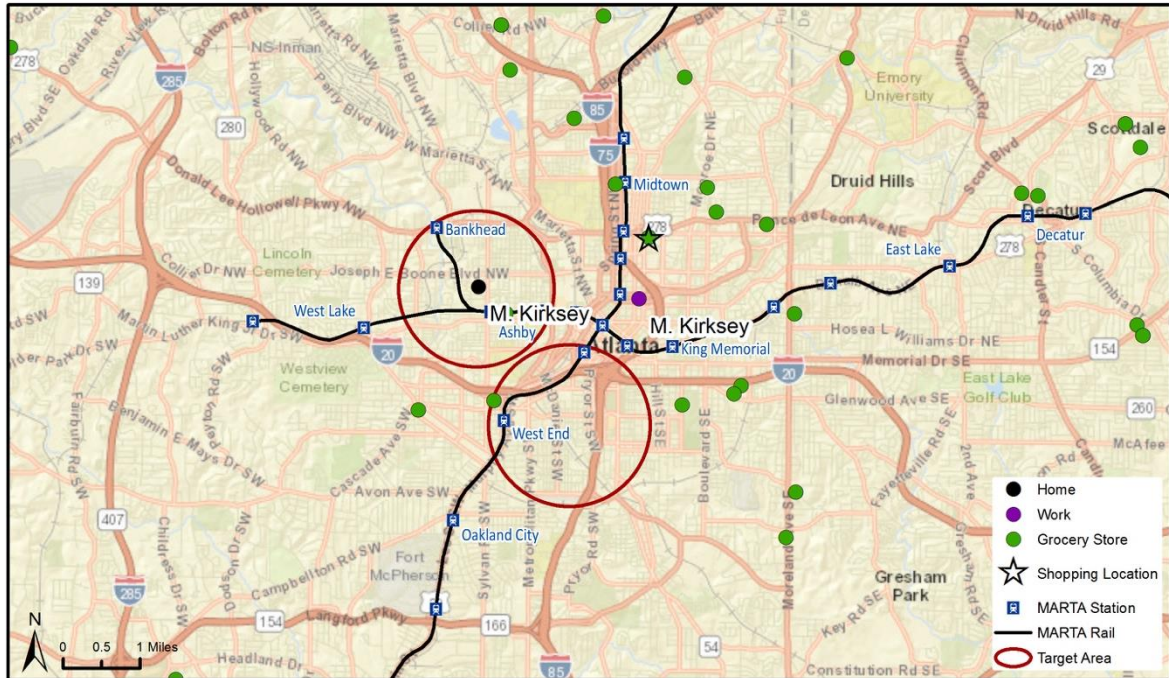


Figure 7.29 M. Kirksey's activity space

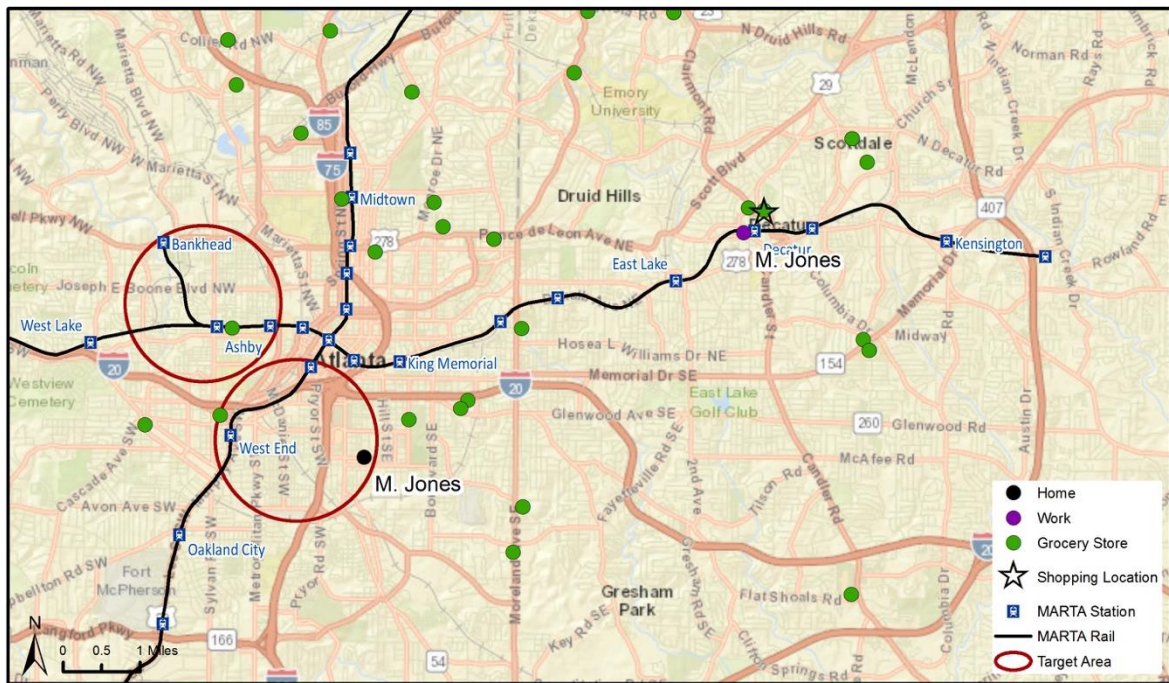


Figure 7.30 M. Jones's activity space

7.2.3 “Other/In Between” Shoppers

Four of the participants were classified as other/in between shoppers. This was due to their somewhat tangled lifestyles (compared to closer-to-home and closer-to-work shoppers) that affected their schedules and overall mobility around the city. S. Williams for instance shops at a location seemingly out of the way from her home and work locations (Figure 7.32). Difficult to indicate on the map, the location at which S. Williams shops is also the location of her second part-time job. Working at the location approximately 15 hours a week affords her the convenience of shopping for items she needs at various times, providing more flexibility for her as well.

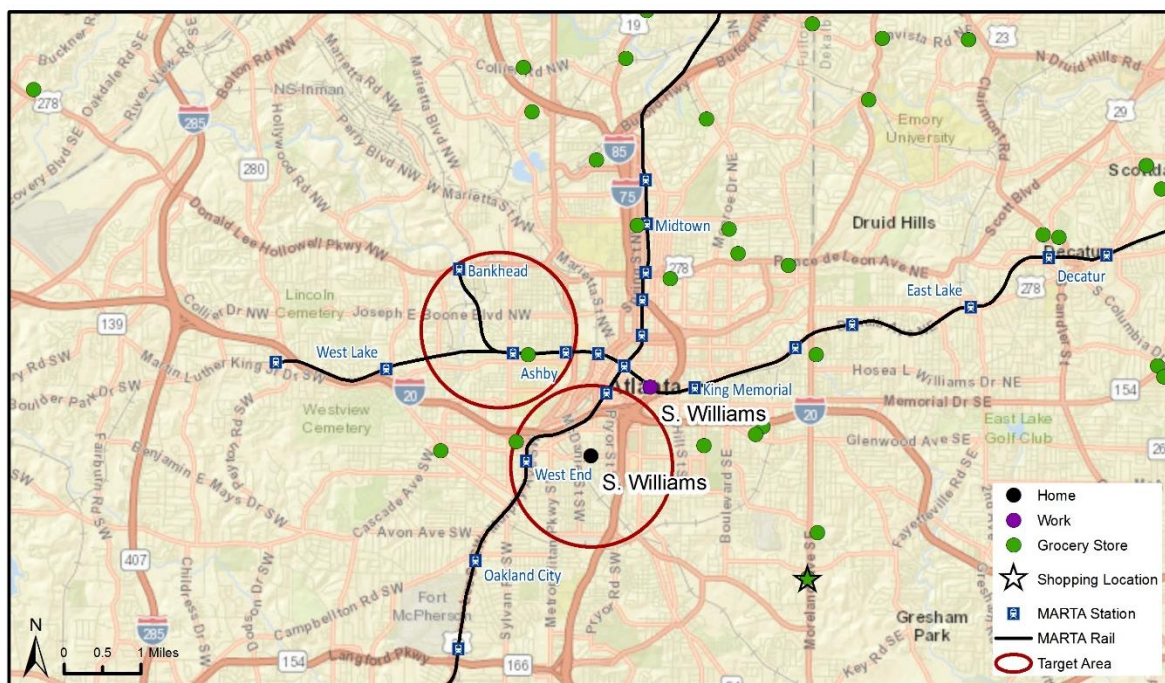


Figure 7.31 S. Williams' activity space (shopping location is also location of second job)

In observing F. Martinez's activity space (Figure 7.33), I inquired about why she also did not shop at the store location closest to her home. Not only did she not shop at the one closest, there were a couple of other stores that seemed to get passed as well. While she was aware of the stores in her somewhat immediate surrounding, she stated that she liked to shop at

the ALDI a little further away because she likes the store, but also because she has help from her boyfriend who has a car; indications of the preference and transportation variables. Her response:

F. Martinez: Well, I shop there when I go see my boyfriend; he lives over there. He has a car so that makes it easier. We might go other places too. I might spend a whole weekend there sometimes and if we go grocery shopping, I do it on the way back home, when he drops me off.

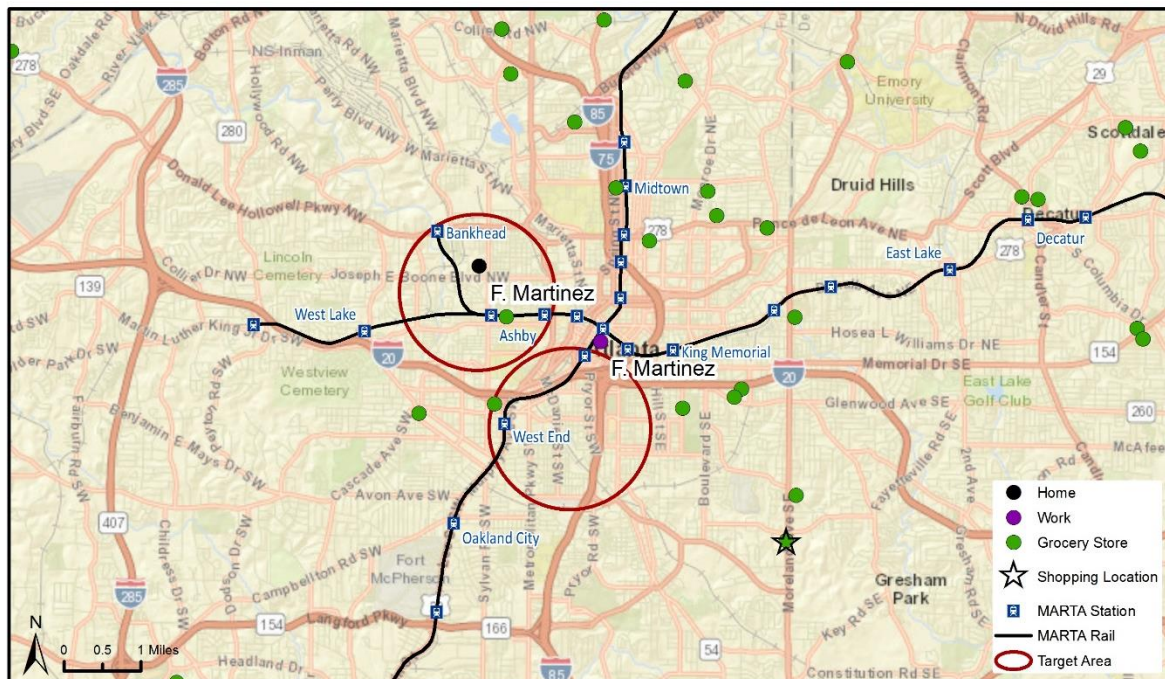


Figure 7.32 F. Martinez's activity space

F. Martinez's case is similar to S. Williams' and M. Reyes' reasons for shopping where she does in that there is an influence of family, transportation, and convenience. M. Reyes shops at Dekalb Farmers' Market and Kroger near the Georgia Perimeter College campus she attends. While she works full-time near the downtown Atlanta area, she goes to school a couple of days out of the week. M. Reyes will also visit, and sometimes stay, with a family

member who lives near the school. M. Reyes also owns a car, but tries to limit driving it to the days when she goes to class.

M. Reyes: I guess I never really thought about it. And I don't really think about going shopping after I get off work, so I never paid much attention to what was around me there. Now I'm wondering if it would be easier to go then and to go to one of those stores. I sometimes shop when I'm out by school, because I also stay with my sister sometimes, if I'm too tired to come back. I definitely will pick up groceries on the way back home the next day if I stay with her.

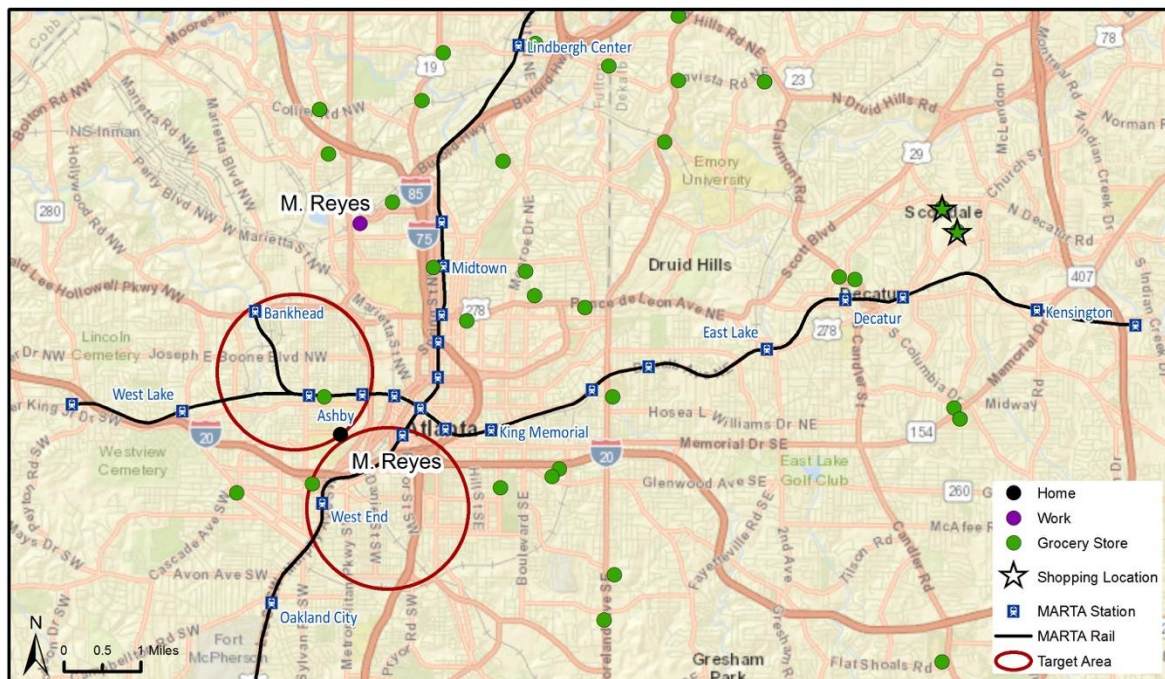


Figure 7.33 M. Reyes' activity space

Both F. Martinez and M. Reyes demonstrate the importance of a social or familial network and how it can impact their food purchasing schedules and locational decisions.

Another element that influences when and where participants shop is their work schedule. I use D. Perry as an example of how preference and convenience play roles in where one might shop. Earlier, it was noted that D. Perry shops at the ALDI on Moreland Avenue due to his preference as well as having to work around his untraditional schedule. It seems he has

opportunity to shop at a few other stores in between his home and workplace, yet he still chooses ALDI. D. Perry also owns a car but he relies on public transportation as his primary mode of transportation. As he tends to work second and/or third shifts, he may not always be able to make it to certain stores before they close. If working third shift, he prefers to shop at the ALDI on his way home from work because he likes the store's products and prices.

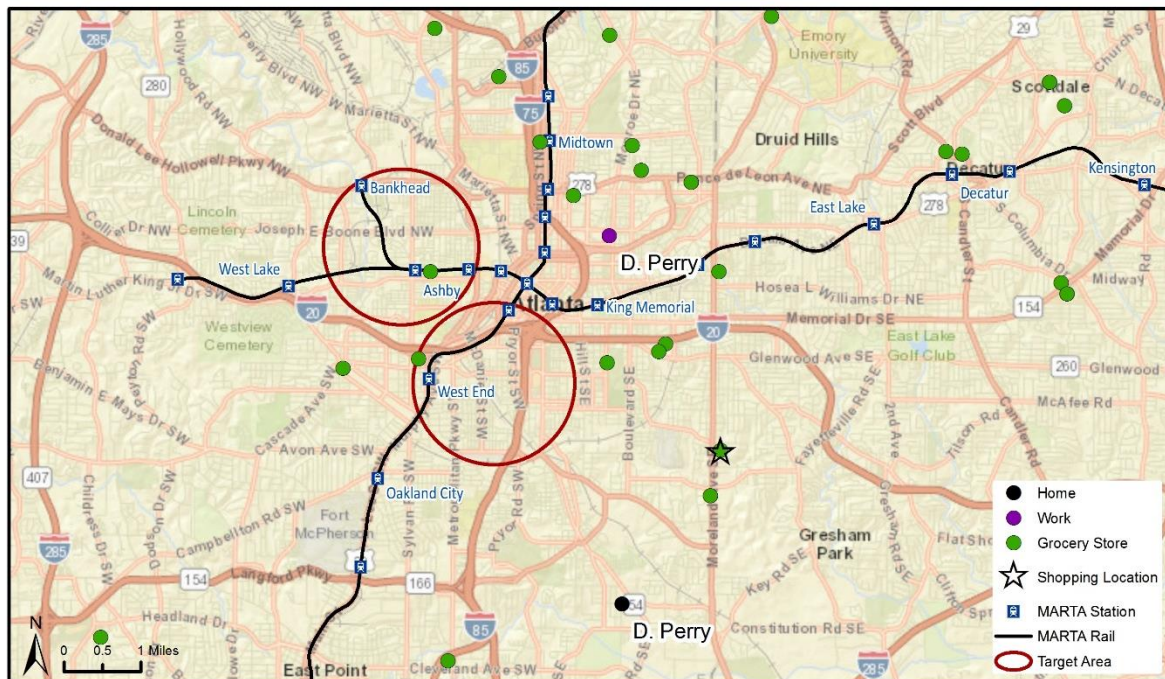


Figure 7.34 D. Perry's activity space

D. Perry also seemed to be an exception to most other participants in the study: owning a car, working odd hours, and also being able to choose where he shops. With all of these factors affecting where and how he shopped, I was curious to find out if he and others would consider using alternative measures to obtain food, such as home delivery companies. Continuing the inquiry into why participants shop where they do, I turned the conversation to these alternatives.

7.2.4 Food Service and Shopping Alternatives

Food service alternatives include home food delivery options that go beyond the popular pizza and Chinese-food deliveries. Many companies have essentially contracted out delivery drivers for bags of groceries that people would normally have gotten themselves in-store. Home food delivery has become increasingly popular in recent years as more people become reliant on technology to do the work for them.

Online, mobile, and smartphone applications that allow consumers to shop and set delivery dates and times make living much more convenient. The company, Instacart, performs delivery services for a variety of stores such as ALDI, Publix, Whole Foods, Kroger, CVS, and Costco. Customers can order their groceries online and have them delivered through this contracted service. Home grocery delivery seems to have grown in popularity in recent months. Another company, SHIPT, also delivers food from local grocery stores to customers in as soon as an hour. Companies such as Amazon.com, Walmart, and many others have also stepped in to allow greater flexibility to their consumers in being able to obtain food items at their convenience, usually for a convenience fee.

But how do these food service alternatives help? Do they help, especially those in disadvantaged communities who may be on limited income? The main objective for these services is of course to make grocery shopping more convenient, but as many are well aware, this comes at a price. I was interested to see if these convenience fees were something participants in these areas are willing to pay in order to get the groceries they want or if it is a luxurious option that lower-income consumers may not be able to afford. Asking the participants about these options and why they do not use them tended to result in responses of confusion and surprise/awe, but also varying degrees of interest and consideration for the

services. The idea of having groceries delivered seemed so strange to some that even if they could afford it, many seemed to not even take it into consideration. These dismissals were either due to the idea of paying a fee, strict personal shopping habits (wanting to see all the options in front of them before making a decision—not being limited to an online selection) or just the apprehensiveness of having someone delivering their food. As D. Perry and M. Clark, both single males living on somewhat limited income note:

D. Perry: It might be hard for me to get to the store sometimes, but I still try to go. And I don't want someone else picking my fruits and vegetables. I want to see what they look like. I am picky about my stuff and I wouldn't want them to bring the wrong thing. Not like I chose apples and they brought oranges...but I like to see and feel what my grapes are like before I get them. Sometimes I won't buy them if they are too soft. Stuff like that.

M. Clark: I saw an ad for that when I went to ALDI last time...but you have to pay a fee. I'd rather have that money go toward my food than a delivery fee, you know? But I guess I could see where it would be useful especially if I didn't have a way of getting to a grocery store. I don't make that much money, I can barely pay rent some months, and I don't have a car. I doubt I'll be using that delivery service any time soon.

For people like B. Owens, who works unconventional shifts, either third or second shifts, food delivery services sounded like an interesting idea, simply for the matter of convenience. As stated earlier, the stores he would want to shop at are closed by the time he is able to make it there:

B. Owens: Hmm...I could see where I might use it sometimes if it didn't cost too much. A lot of times I can't get to the store before they close. If I work third shift, it works out better because I can get stuff on my way home, but I'm not usually thinking about grocery shopping when I get off work. I'm ready to get home to go to bed. If they offer something like a two-hour delivery, I know I could get used to that. Maybe I could order before leaving work and then have something at my door when I get home? But how much is it? All of it just sounds funny.

7.3 Conclusion

As evidenced by the participants in this study, food access is not just a geographically-bound issue. Merely living in a food desert does not always limit people from accessing the foods they need. Other factors such as transportation, finances, preference, and time are more significant for participants in this study. Even with alternative measures in place to assist in obtaining food, these measures may be missing the mark in that they are either not utilized by people in food deserts or they are too costly to be of benefit.

The examples of the underutilization or general lack of interest of food delivery service by participants illustrate that the location of the food stores may not actually be the issue for why people cannot access food. Even when the opportunity arises to have food delivered to their home, likely for the sake of convenience for most of the customers, the participants in this study have varying reasons for why they would not use the service. But who are these companies with food delivery services targeting? Is their target consumer one who already makes a decent wage, already owns a car or two, and just cannot tear away from that extracurricular activity to go grocery shopping? Or are they actually targeting the lower-income consumer who lives in a food desert and has a hard time accessing his or her own food?

Many of the food delivery services are not too lenient with having a minimum purchase amount, and if there is no minimum purchase amount, the associated fee seems high. One could essentially just have an item or two delivered—while still paying a convenience fee. This however is not a luxury many of the participants in this study can and will afford. So is this a viable solution? Participants felt there are prices to pay in general in order to be able to access

more food more easily. One could live in a more expensive neighborhood and have food stores all around, because the stores know they will have a steady flow of consumers as well as revenue. Stores in more affluent areas will be in abundance, while disadvantaged areas will continue to be overlooked. One could spend more money owning a personal vehicle and be able to have the freedom of going to whatever store they wished to frequent, while being able to take home as many groceries as their car could fit (within reason). Or one could save money on either real estate or transportation, either by choice or necessity, and live in a declining neighborhood and not readily have access to these options. The cost of obtaining food is more than just the cost of the food item and residents in these areas have managed to find ways to work around these obstacles.

8 APPLYING A POLITICS OF RESOURCEFULNESS AND SCHOLAR-ACTIVISM

Two major components in the politics of resourcefulness that I apply in this research are the ideas of community activism and the practice of ethical scholarly research or scholar-activism. Ethical scholarly research relies heavily on asking the right questions and including or resourcing the participants as collaborators to ensure these ethical avenues are being instituted (Derickson and MacKinnon 2015). Also, the idea is to put into practice principles of solidarity, act by doing, and “find, generate, and resource potential rather than only provide intellectual critique to contribute to practices that are aimed at social transformation rather than merely the production of knowledge or the solving of local problems” (Derickson and Routledge 2015, 6). In order to answer my research question regarding what participants feel is the best path forward in alleviating the food access issues, I turned to them.

Combining these elements of scholar-activism with the community-based efforts I came across in this study, in this chapter I discuss the varying activities, attitudes, opinions, and conversations that came about from working alongside and resourcing the participants during the research. Another major component of this chapter are suggestions from participants regarding what they feel are paths forward in alleviating the issue. Participants’ experiences and voices are discussed more in relation to aiding future research and proposing a possible solution and potential policy changes. Many participants enjoyed and appreciated being involved and maintained an attitude of optimism, while few others were ambivalent to the research and any cause that it may have.

I first examine the efforts some participants in the community have taken part in or are currently still working in. Later in the chapter, food social movements are highlighted. In recent years, food social movements have become a way of mitigating the food access issue in

communities. The following sections highlight both the trends in the food access arena, while also overlapping and combining these with what participants in this study have been taking part in. These movements are the basis for the suggestions in future food desert and food access research, which illustrate the actions taken in performing scholar-activism and resourcing the individuals.

8.1 Resourcing

My approach to resourcing the participants in this study involved inquiry into what residents' experiences are living in food deserts, but also what they were involved in to mitigate the food issue in their neighborhoods. This resulted in the finding of a few members' (N=6) organized efforts, ranging from small farmers' markets and volunteer work to delivering food within their neighborhoods. In performing this study and sifting through various researchers' work on food deserts and access, I was also made aware of the growing trends that have emerged to fight the food issue, which were also evident in the neighborhoods I visited. I thought it fitting to combine these trends with the participants' information, to hopefully contribute to practices aimed at solving the problem, but also performing social transformation, even at a small scale. I addressed participants by asking what they were doing or what they felt should be done in order to alleviate the problem of food deserts in their neighborhoods. From this came discussion of the current programs, but also their thoughts and feelings regarding those programs and their effectiveness.

8.1.1 *Local Food Networks*

Local food networks (LFN) have become more popular in communities, such as the ones I researched in Atlanta, that struggle with food issues. Local food networks are organized around the idea that the community is empowering itself to effect change and to address the

inefficiencies in structural change and create their own system of local food (Sadler et al 2016). This philosophy is also centered on the community not relying on retail stores to help them. They essentially create their own food networks and support themselves. These LFNs can vary in their makeup from being individual food production to urban agriculture maintained by neighborhoods and communities, to food pantries and soup kitchens. Problems arise, however, when the local governments do not step out of the way and allow these efforts to take place, especially as they restrict local land use (Salder et al. 2016, Bedore 2014). Local food networks are seen as realistic opportunities to effect change in the food system (DeLind 2011) and these have also appeared to be the choice that is more agreeable and convenient to many. Residents are still determined to make these local food networks succeed.

One participant, N. Sloan, is active in a community food bank and in our interviews, I gathered more information regarding her activities. N. Sloan began volunteering at the food bank when a friend at her church was recruiting for volunteers. As N. Sloan also has struggled to obtain food in the past—for reasons related to transportation and income—she thought it was the least she could do to assist others in need. The food bank N. Sloan volunteers at is just one of many in the area. A cursory Internet search yielded a site (www.suntopia.com) that lists the food banks, food pantries, and food funds for the metro-Atlanta areas. Many of these are organized by churches. Residents in this study have also relied on them for support during times of unemployment or general hardships. The organizations provide food and some miscellaneous services to residents in need. Table 8.1 lists organizations operating in the in-town Atlanta area.

In continuing this conversation with the participants, I inquired whether these were helpful alternatives to their food issues. Many felt that these solutions such as food banks and

Table 8.1 Operating Food Pantries in Atlanta

Organization	General Services	Address
Midtown Assistance Center	basic needs, food pantries, general clothing provision, food stamps/SNAP, misc.	30 Porter Pl NE
Providence Missionary Baptist Church	basic needs, food pantries, general clothing provision	2295 Benjamin E Mays Dr SW
Hunter Hill First Baptist Church	basic needs, food pantries	166 Edwards St NW
Action Mission Ministry, Inc	basic needs, food pantries, general clothing provision, government surplus food	18 William Holmes Borders Dr NW
Georgia Avenue Community Ministry	food pantries, soup kitchens	645 Grant St SW
Sullivan Center, Inc	basic needs, food pantries, general clothing provision	643 Dill Ave SW
Calvary United Methodist Church	basic needs, food pantries	1471 Ralph D. Abernathy Blvd. SW
Atlanta Community Food Bank, Inc	food pantries, soup kitchens	732 Joseph E. Lowery Blvd NW
Feed the Hungry Foundation, Inc	food pantries, soup kitchens	1440 Dutch Valley Pl
Haitian Ministry Theopile Church in Christ, Inc	basic needs, food pantries	930 Custer Ave
Greater Piney Grove Community Development, Inc	basic needs, food pantries	1879 Glenwood Ave SW
First Mount Pleasant Baptist Church	basic needs, food pantries	816 Maynard Terrace
Clifton United Methodist Church	basic needs, food pantries, food cooperatives	2918 Clifton Church Rd SE
Buckhead Christian Ministry, Inc	basic needs, food pantries	2847 Piedmont Rd NE

food pantries were not designed for them, but those in greater need of food. As the majority of the residents were employed, they expressed their understanding of the food pantries as those resources available for the unemployed and underemployed, the elderly, and those experiencing a hardship. As some participants note:

W. Brown: I felt like if I showed up to a food pantry, they might look at me funny because I can afford to buy my food...I just might not be able to shop where I want all the time. It's not like I think they would turn me away, but I don't need to take advantage of it just because it's there. I'll leave it for people who need it more than me.

K. Rodriguez: We have money to get our food. And not to be so picky, but those pantries provide some weird stuff sometimes. I know that a lot of the items are donated, but we are not struggling that much to need to go there. I think it's for people who are in a lot worse situation than us. Yeah, we would love to make more money, but we get by.

W. Brown feels that she would somehow be shamed by the people at the food pantries, even though she technically qualifies to go to some. K. Rodriguez also feels that the food pantries "aren't for people like them." This seemed to be the sentiment among many of the other participants in the study. W. Gardener, mentioned earlier as having to care for her mother and her own child in her household, does however shop at these pantries. She learned of this type of assistance through her mother's former caretaker and will make it to the pantries as often as she can. "Any little bit helps. Especially with my WIC vouchers and what mom qualifies for, I can make it most months," she explains. While some feel they are able to get by on their own, others have relied on these pantries and food banks from time to time.

Continuing further on the idea that the food pantries were designed for certain people, I asked the participants if they thought these pantries were helpful at all, and if not, what they would suggest as an alternative. The most common theme that emerged from this was the suggestion of having smaller markets around the neighborhoods that actually sold the items they needed—“not just beer and cigarettes,” as was expressed by a few of the participants.

N. Sloan: Those stores know they can sell better stuff. It's not that hard to get some fruits and vegetables in there. Even if they only had one day out of the week that they sold them, I bet they would sell out. I even asked one of the owners once why he didn't sell anything good and he told me it's because the guys (customers) he makes the most money from don't ever want that.

“Those stores” N. Sloan mentions are those convenience stores that seem to only carry snacks and “other crap” and do not seem to have sufficient food to even make one meal. N. Sloan continues: “I'm not even asking for a lot, but they can at least act like they want us to survive out here. I know lottery tickets and alcohol sell, but so do bananas and lettuce.” These sentiments were common among participants as they tend to notice the smaller shops around their neighborhoods do not appear to cater to their needs, leading them to wonder who they actually are targeting.

R. Jenkins: Me and my wife work. We make ok money and we have a car. But I can't ever seem to find anything I need here at the stores by us, especially to feed my kids. Sometimes it's just milk that I need to get. I have gone to that store up the street a lot, but they either don't have the milk we buy, or it's expired. Even when I tell the owner, or whoever, that it's expired, they don't care. They still want to charge full price. So it would be nice if these little shops would sell something I actually need to buy. I swear they have had the same box of diapers in there for years. It's too expensive and the stuff isn't that good.

Problems such as the ones R. Jenkins describes became impetus for why some organizers decided to take action themselves. As the main request among the neighborhoods involved

access to simple, staple items such as milk and bread, the local food networks and organizations concentrated their efforts here. In researching the different organizations, even as informal as some were, it came to light that within these communities, local advocates for food justice were quite busy involving neighborhoods and forming neighborhood association-type groups.

8.1.2 Community Activism: It Takes a Neighborhood

While in the recruitment stages, I came across a couple of neighborhood associations that were heavily involved with alleviating food issues in the community. These included organized efforts to initiate farmers' markets or other smaller informal marketplaces for residents to purchase foods. As these were somewhat stumbled upon by myself through a search on the Internet for something else, I was curious to know if the residents were aware. During the participants' interviews, I inquired about any of these activities or organizations they may have been aware of that were designed to help the food access issues.

K. Smith: Yeah, they are pretty good about letting us know. I come home and see flyers every once in a while—for when they are going to have something going on. I haven't gone to anything, but I know they have them. They do a lot on the weekends so people can go when they aren't working. Other times I've seen them have something going during the week. I never really pay much attention unless I know I might go.

R. Jenkins: I know the lady who organizes one of them. It's nothing fancy. She has a cousin who works at the farmers' market in Forest Park and they somehow set up being able to get some produce every once in a while. I don't know if it's extra—like overstock, or if it's just not high quality because I don't think she has to pay for any of it. Anyway, she does a little stand in front of her place every once in a while. It's almost like a yard sale but she's selling fruits and vegetables. They also put out flyers any time they are about to have market days.

Market days are as informal as setting up at a specified residence or public location (such as the neighborhood church). Organizers plan for having various food items such as

fruits and vegetables and many non-perishable items and these are displayed on folding tables. From the participants, I learned that many of the items were received in a variety of ways. Some food was donated from groups from the church, as a result of an organized effort for a food drive at the church location. Other items may come from residents from different neighborhoods who happened to have organized their own charitable food drive within the neighborhood (door to door requests for donations). It was also explained that there is usually a wide range of requests for donations, as there is a range of ages and needs of the recipients.

Those neighborhood residents most in need included the elderly and those who were struggling financially. Overall, the attendees had varying socioeconomic and familial situations—ranges of ages as well as income—which contributed to varying views about how to tackle the issues of obtaining food in their neighborhood. As noted in my participant list, some have their own vehicles, others do not. Some have children, others do not. The efforts made by those in the community were thorough and inclusive of residents and participants praised the efforts made by the different organizations.

One Atlanta neighborhood organization, Friends of English Avenue, has among its primary goals of its food project to provide easy access to fresh produce in order to improve food security, while also empowering its residents to grow produce and support themselves and their own neighbors (FOEA.org). As M. Kirksey notes, the help she received from the organization is what piqued her own interest in getting involved:

M. Kirksey: It was a couple of years ago when I had to find a new job and then also take in my nephew; my brother got into some trouble. I didn't know if I would be able to afford keeping him and feeding him. My church friends got the word out—even though I didn't want them to...I was too proud. Anyway, they invited me to go to an urban farm they had been helping with. I felt so blessed because the people were nice and it wasn't just about farming. I made good

friends there. After that I thought I could help out too, so I asked how I could volunteer.

M. Kirksey described her new social connections and network that she acquired from a time in need. She was appreciative of the help she received and the information she gained about urban farming. The Friends of English Avenue organization also made her more aware of what was going on in the surrounding neighborhoods and she did not feel “so alone” in her struggles to obtain food. In asking other participants how they felt about the urban farms, some felt they were the only way some of them could get produce, but that they were still difficult to get to.

L. Butler: I like the idea of them, but they aren’t everywhere. It’s almost just as hard to get to the urban farms than it is to get to a grocery store. I might as well just try to get to the grocery store and get more fruits and vegetables than to try to figure out when one of these farms is going to be open for me to go to.

K. Rodriguez: It’s not just trying to get to them, it’s also being able to get whatever they are offering. I don’t feel comfortable just walking up to them and just asking to buy stuff without feeling like I should also be helping them out somehow. The two times I’ve been just happened to be when I was off and going to visit my friend. She told me about it and we walked over to see what was going on. But they—the people who work them—aren’t there all the time.

Statements such as those from L. Butler and K. Rodriguez led me to ask participants their thoughts on how the urban farms could improve. Many of the participants stressed the point about still not being able to get to the resources. Even the smaller farmers’ markets that have popped up around the city in recent years, still are not concentrated in my participants’ neighborhoods (see Figure 8.1). Therefore, the idea of mobile stores or markets was brought up as a possible solution; having resources come to them.

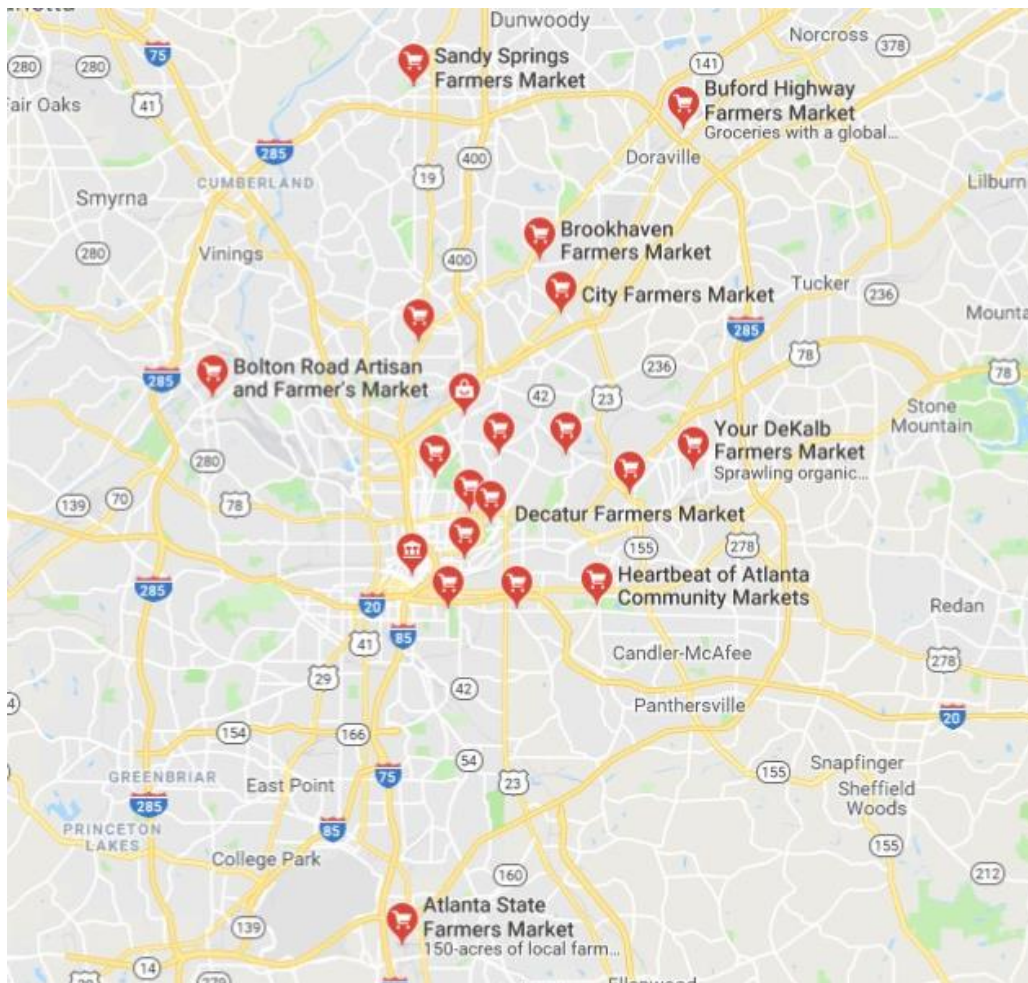


Figure 8.1 Map of Atlanta area farmers' markets

One such concept is the Fulton Fresh Mobile Farmers' Market. This mobile market sets up in various predetermined locations around the city and sells fruits and vegetables to the community. One of the main goals of the Fulton Fresh Mobile Farmers' Market is to "give residents the option to choose healthy foods" ("Fulton Fresh Mobile Farmer's Market to Hit the Road") as the organizers of it also recognize the need for these items in these neighborhoods. Many markets are seasonal, including the Fulton Fresh Mobile Farmers' Market. Their plan is to increase their operating days from just two days a month, as the need is present, but there still remains the issue of the geography it can cover. Residents may still have a difficult time getting

to the mobile market when it remains limited in scheduling or the market remains parked in certain areas still some distance away.

8.2 Conclusion

These efforts, all initiated by those wanting to assist the underserved, were prime examples local food networks successfully operating in neighborhoods. Participants overwhelmingly agreed that these are positive actions that are being made, yet they are still missing a major point. As one participant, W. Brown, so eloquently put it: “What difference does it make how close the store or market is if I don’t have money to buy anything?” While finances were not an issue for all participants, it raises a set of additional socioeconomic concerns that need to be addressed before participants can adequately tackle the problem of their food access.

Many of the residents in this study are involved in or aware of the practice of trying to alleviate the issue of food deserts in their neighborhood. In keeping with one of the basic tenets of resourcefulness—that just futures in the social world should be generated in conjunction and cooperation with the marginalized communities (Derickson and MacKinnon 2015)—I sought after ways in which the communities I engaged were trying to put forth some change by their own activism. If they were not actively involved, I explored ways in which they thought the situation could be improved. Highlighting their ideas and efforts allowed me to include and enlist the participants in the research to propose future research and policy efforts.

Derickson and Routledge (2015) stress that scholars engaging in a scholar-activism approach should resource the individuals they are researching, being careful to not just treat the participants as research subjects but as collaborators in the research. A coproduction of knowledge should be the result and it is tantamount to traditional research methods. As also

suggested, historically marginalized groups should always be taken into consideration in the research design. In this chapter, I discussed my application of Derickson and Routledge's proposed methodology of scholar-activism with current and actual examples of what some participants are engaged in or would like to see. The previous chapters addressed the experiences of participants living in food deserts while this chapter took this further to highlight efforts and activities outside of just the individual alone. In this chapter, I also aimed to highlight those efforts the community has been engaged in, and to present these as a jumping-off point for continuing efforts in research and in policy that may help to remediate the food desert and food access issues marginalized communities experience.

9 CONCLUSION & IMPLICATIONS

“Low-income people and people of color have been systematically denied access to the means of food production and are often limited in their abilities to consume healthy foods. However, the food movement narratives ignore these injustices, which reflects its adherents’ race and class privilege.” (Alkon and Agyeman 2011, 331).

The main intent of this research was to examine what people’s experiences are living in food deserts. I was also specifically interested in how people go about obtaining their food while living in an area with little access to food. Using a scholar-activist and critical race perspective, I wanted to gain a better understanding of how research on food deserts could be tailored to better address the needs of the people being affected. Food deserts affect aspects of everyday life and these aspects were highlighted in this research. Factors related to people’s living situation, income, and race all play a role in how people experience food deserts.

Drawing on Derickson, MacKinnon, and Routledge’s work (Derickson and MacKinnon 2012, Derickson and Routledge 2015) on resourcefulness and scholar-activism, a way I set out to make this study different from previous food desert and food access studies was by resourcing participants in order to better articulate what some of the actual issues may be and provide first-hand accounts of their lived experiences. Coproduction of knowledge was essential in this project, especially as it assisted in helping me begin to propose a plan for a different path forward in food desert research. In this chapter I revisit my research questions, providing final discussion of each. To conclude the chapter, I also provide my observed limitations of the study as well as suggestions for future research.

9.1 Summary and Discussion of Research Findings

9.1.1 *Conceptualizing and Experiencing Food Deserts*

How do residents conceptualize food deserts? What are the residents' experiences living in food deserts? In chapter five I discuss the residents' conceptualizations of food deserts and then in chapters six and seven highlighted their experiences of living in food deserts. The conceptualizations of food deserts by the participants in this study are situated in both their class status and race. The lived experiences of 29 lower-income people of color living in food deserts were captured throughout this study. Six variables regarding their experiences in accessing food in a food desert emerged from their interviews: finances, transportation issues or limitations, neighborhood factors, preference of food stores, availability of food stores, and convenience.

In examining participants' activity spaces—where they shop in relation to where they work and live—it was discovered that the store locations are not of as much consequence as are the other factors related to their socioeconomic and demographic situations. Examining these experiences through a critical race perspective while also keeping in mind the practice of ethical scholarly research, it was my goal to ensure this research on food deserts and food access did not coincide with previous research, which fails to account for these factors. By asking the participants what is important to them and what factors are most significant in their food access, I was able to shed light on more important elements in the food desert problem. The problem is not strictly where the stores are located and the solution is not simply to open more stores.

Alkon and Agyeman (2011) note the significant issue of low income people and people of color having been systematically denied access to the means of food production. This leads to

being limited in their abilities to consume healthy foods. Factors in this study that appeared the most in regard to obstacles or issues people faced in obtaining their food involved finances and transportation, which both created overall inconveniences. If participants could not make a decent wage to afford their own personal transportation, they resort to reliance on public transportation to be mobile—either for work or play. Accessing food then becomes, at the very least, a tertiary concern for many. Social determinants have far more influence on the individuals in my study than what has been suggested in previous research—in short, the lack of food stores within a reasonable distance or within a neighborhood. Food deserts can be linked to neighborhood decline, which is linked to institutional racism and residential segregation.

Apart from those structural elements, it is also important to note what Shannon (2011) describes as another problem in food desert research: that it is often assumed that food deserts are a static problem and restricted or bound in space. This is a point that much of the previous research has failed to address. Food access issues cannot be viewed as just strictly a problem of geography and store locations. While a food desert itself can be delineated spatially, the issue indeed is not static and bound to a specified area. Food deserts can continually be identified but the problem of access within them has not been examined enough, especially in regard to mobility.

To that end, the problem of mobility should increasingly be included in the discussion of food access (Shannon 2017, Kwan 2012, Chen and Kwan 2015, Clifton 2004) and as some researchers (Shannon and Christian 2016, Sadler et al 2011, Clifton 2004) suggest, the issue that should be examined more closely in relation to food access is the residents' mobility in accessing food. Mobility in this context is defined as how a person moves around in their day; from home to work and to wherever else. This is not to say that the issue of fewer stores in

lower-income neighborhoods is not an issue as well, but it is also an indication that perhaps the proper questions have not been asked regarding food access. Sufficient mobility includes a person's ability to travel to other parts of the city for their shopping needs (Clifton 2004, Shannon 2011). As illustrated by participants in this study, there is limited mobility for the residents and this thereby affects when and how they access their food.

Lower income consumers, as noted earlier, also tend to spend more on their groceries due to not having sufficient mobility to travel outside of areas lacking grocery stores and supermarkets, resulting in having to shop at convenience stores. These stores do not have the same quality of foods, in addition to maintaining higher prices than those stores in the suburbs (Chung and Myers 1999, Freedman 1991), thereby exacerbating the problem. Food access problems cannot and should not be limited to just examining the lack of stores in particular areas. For participants of this study, the bigger issue was *how* they access their food as well as how their mobility affected access. "Food shopping becomes a question of not what one would like to buy, but what is available, given mobility restrictions" (Gottlieb et al. 1996, 12).

Also to be taken into consideration is the significant finding that most of the participants in this study do not access their food closer to their homes, but closer to work. And those who did access their food closer to home may still bypass the closest store. The reasons for this had to do with convenience, personal preference for the store, and neighborhood factors that either deterred them due to fear and/or comfort of the surroundings. These participants provide support for the argument that agency plays a major role in the shopping behaviors of people, even in food deserts (Pescosolido et al. 2000; Williams 2003; Cockerham 2005). As Cockerham (2005) contends, proponents of structure emphasize how social conditions have the power to influence an individual's dispositions and behavior along socially

prescribed lines and advocates of agency accentuate the capacity of individual actors to choose their behavior regardless of structure (p. 51).

People do not always shop where one might think is most logical or convenient. This was an important finding in this research. A common solution to the problem that has been proposed repeatedly has been to just open more stores. Much of the food desert and food access research tends to focus the location of food stores and how far away they are from a given neighborhood. If farther away, this is less access for the people living in the area. Especially after doing this research, it became clear that, at least for the neighborhoods and participants involved in this study, the problem cannot so easily be solved by just opening more stores. This is a popular misperception, one that even I had at the start of the study, that opening grocery stores in food deserts would solve the issue at hand. As Sadler et al (2016) also mention, this happens because it is an easy and simple idea to just open more stores. However, stores in these neighborhoods do not and have not made sufficient profit in order to remain open, therefore they have left. So, opening more stores may not be the answer.

9.2 Implications

9.2.1 *Racialization of Food*

As Shannon (2013) and Bedore (2014) stress, by merely focusing on opening more stores, there is insufficient attention being paid to the structural economic causes of the problem. Institutional racism has pervaded throughout our country's food system. This has produced even more negative consequences for the disadvantaged groups in our society. As Del Casino contends, "there is a complex social geography to food deserts that is not simply based on proximity and accessibility, but is part and parcel of processes of racialization." (Del Casino 2015:801). In conducting this research, I maintained a critical race perspective. At the beginning

of this paper, I highlighted some of the socio-structural factors that have shaped the city of Atlanta, to include institutional racism and residential segregation. What also became apparent after reviewing food desert literature is that the food system is not racially neutral. Just as the distributions of wealth and income are unequal and racialized, so too is food.

As indicated by participants in this study, the proximity of the grocery store to place of residence had little bearing on how the participant accessed their food even though they technically live in a food desert; this was the biggest discovery for me while performing this research. The effects of the lack of money, time, and transportation were far-reaching, and all these factors contributed to the principal story of convenience. Residents experience multiple inconveniences living in a food desert that are not just related to food or the unequal access to healthy foods. Many noticed the decline of their own neighborhoods and saw the connection between lack of resources and food deserts.

There are theoretical, sociological, and geographical implications that came about from this research. It could be understood that people in similar situations and circumstances, living in the same neighborhood can experience food deserts in similar ways. However, I found this was not necessarily the case. Inherent in this understanding is the avoidance of the ecological fallacy, in which it became clear that one cannot merely assign characteristics of a group to an individual. Living in the same geographical area, i.e. neighborhood, composed of similar general socioeconomic characteristics does not allow one to conclude that everyone living in that space will be the same. Everyone in this space does not experience food deserts the same way. The participants in the study all seem to share the experience of difficulty finding adequate sources of food in a convenient manner. While I was specifically examining people of color living in low-income neighborhoods, the problem extends beyond this demographic.

9.3 Limitations of Study

There were some limitations in this research. While it was not expected that I would be able to perform my study without any limitations, some that arose were more significant than anticipated. First, regarding my sample; my sample is not representative. This study was designed to avoid the ecological fallacy in that I recruited participants from a specific area of the city and asked questions about where they shop or access their food. This was done at the individual level. As this was a mixed methods study, with a large portion being qualitative data, I cannot make generalizations about larger populations, such as other urban areas across the country. Participants I interviewed were from two similar neighborhoods in the city of Atlanta and as such, should this study is restricted to that location. My sample is also not racially diverse as I was specifically recruiting people of color as my approach to the research was also done with a critical race perspective. I wanted to capture those cultural viewpoints from people who have a common history of oppression in this country and also include analyses that affect their everyday lives, a major principle of critical race theory (Delgado and Stefancic 2001).

Second, regarding my methodology, I originally proposed to observe participants on their shopping routine or trips. I was unable to perform this task as it was increasingly difficult to either obtain permission from the participants or to actually have a set time and place to do so. By not being able to perform this task, I was also unable to further investigate how any of the nuances of how participants access their food affect their daily lives. Some individuals require the use of multiple modes of transportation and thereby decreasing the amount of time available to perform other daily duties or tasks. For example, some participants' reliance on both the bus and train to get to their destinations decreases the time available to be spent on other activities. Adding this element in the idea of purchasing food requires the researcher to

consider other factors in a person's life that can be affected, such as family. Some of the participants have children. As one participant noted, time is taken away from her children, especially time she can spend on helping her child with homework. More time is spent on trying to access a grocery store via various modes of transportation than is desired. These family dynamics, activities, and structures are often overlooked in the discussion of food access, and I also was unable to delve into these topics further.

Other limitations are present regarding my sample. While food deserts are not just limited to low-income, African American populations in urban areas, this was the sample I targeted. While most of my sample fit this description, not all did. Early on, I was interested in comparing the shopping behaviors and experiences of older participants. As the oldest participant I was able to include was only 54 years old, with a 51-year-old and 50-year-old trailing just slightly behind, there was not a good representation of an older resident. For this, I imagined at least someone at retirement age, but the oldest participants in this study were still just in their fifties and were still working. Not having a wider age range with my participants left interpretations about older residents' shopping behaviors still somewhat of a mystery. It would also be ideal to have more than just 29 participants to gain more people's experiences. Generalizations cannot be made from this sample size. Due to constraints in time and resources, my study was not capable of more long-term research with the participants or extending recruitment stages to obtain a larger total of participants. Still, I hope that my study allows for a different direction in food desert research, one that considers different perspectives of research subjects—such as through a critical race lens—while also working with the participants in an ethical manner.

9.4 Suggestions for Future Research

What is the plan forward for food desert communities? Can this research be translated into policy to create more effective solutions for food access problems? This study is not meant to only highlight the lived-experiences of residents but to also act as a vehicle to have their stories told and to possibly change the direction of research in the future. While this study just focused on a small number of residents from a couple of different neighborhoods in Atlanta, the policy implications can be far-reaching. As I experienced in this study, it can be difficult to engage economically disadvantaged groups. Many of the participants felt the same story was being told repeatedly but nothing was being done about it. Engaging with these communities took some time and some participants were still apprehensive.

While cooperation with residents was essential to produce this research, cooperation with political powers and influential organizations is also essential and efforts should be initiated there as well. This could be as simple as attending neighborhood and city council meetings to present the various groups with information from the residents. As neighborhood ambassadors and councilmembers are ideally at least listening to their constituents' concerns, it would be in their best interest to not dismiss research such as this. If seriously taken to heart, officials should have some way of helping to remedy the food access issues in their neighborhoods. As suggested by some of the participants, this information should continue to stay in the faces of their elected officials until some change is made.

It is also difficult to obtain the interest of private companies and local government administrations in trying to change the economic geography of communities, especially when not in their best interest. Sadly, as their best interest tends to be related to capital or making a profit, it is likely that communities with low access to foods will remain. If lower-income

communities continue to be viewed as places where companies cannot actually profit, the cycle seems never-ending. Perhaps local governments could incentivize companies to locate in particular areas, much like educator programs incentivize teachers to teach in high-needs schools. Although, as previous research has noted, just opening more stores is not always the answer, there needs to be some action taken by those in power to do so and effect the change that is overdue.

So, what is to be done to alleviate the problem of food deserts? Shall researchers shift the thinking from limited geographic access to limited socio-economic access or limited mobility? If the stores will not come to the neighborhood, then perhaps items can be delivered—such as with the food delivery services. If the areas are of lower socioeconomic status, then bringing items closer to them (i.e. opening more stores) will not do any good if they still cannot afford to purchase food. Or, if residents still will not buy the product or shop at the location due to preference (agency) or other factors, it still does little good to have the store close by.

Mobility has a significant impact on how people access their food (Clifton 2005), particularly the nation's poor. Especially as it relates to accessing healthy and affordable food, among other necessary resources, mobility is often overlooked. As Shannon and Christian (2016) note, perhaps a solution could be to redraw transit routes to incorporate those nodes which contain those grocery stores people can easily shop at or make new store locations available along those major routes and at those nodes. Also on that same line of thinking regarding transportation, as suggested by Slocum (2010) and Battersby (2010), it might be more useful to determine people's access to transportation options versus just the locations of stores near their homes or workplaces. The majority of the participants in this study relied

heavily on public transportation. There are especially fewer stores available to shop at along those transit lines and even more problematic when the train is the primary mode of transportation.

For those few participants who owned their own vehicle, the issue of convenience still arose. Just because they own a vehicle does not always mean they have the necessary time and money to get the food they need. Having to juggle work life, educational pursuits, and familial obligations—among other life events and factors—makes the simple equation of people shopping closer to home a bit more complicated. The issue of the family dynamic is also one that should be explored in much more detail. If further research is to take place on food access and food deserts, diving even further into the family structure and activity could yield even more nuanced information about the overall experiences of living in food deserts. Engaging the research with this approach may highlight still that there is not one exact problem that affects all residents living in food deserts. The issue should be examined in a more holistic method.

I highlight the family dynamic for needing further research, though all aspects could as well. The family dynamic is a major factor that seems to be neglected in food access studies while the others covered in this study appear quite frequently. Family structure may be discussed but usually in relation to how to feed one's family. Other studies could approach the family and food access issue through a life course perspective—taking into account more of the socio-structural and cultural contexts. Due to time and resource constraints for this study, these issues could not be examined in further detail.

The experiences of residents living in food deserts in Atlanta are similar to experiences living in a disadvantaged society. These are the same experiences of living in poor economic conditions and those living in the world of the underclass. Going forward, institutional racism

and examinations of racial formation should inform the conceptions of food justice in order to adequately address the issues. The issue to focus on is not just food and food access, but these become major ones to add to the long list of social exclusions experienced by the disadvantaged. Broader sociological and socioeconomic aspects must be examined in conjunction with these more common issues in food access to get to the root of the problem. If structural changes do not take place, which account for many of the detriments and inequalities in our society, these resulting effects will have a long way to go before they are remedied. One cannot merely address the problem at the surface, but the foundation needs to be addressed and redressed. Then it may be possible to see adequate change. Until the structural problems—such as inequality and poverty—are addressed and corrected, one cannot realistically believe that an issue such as food deserts can be extinguished.

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APPENDICES

Appendix A: IRB Approval Letter

INSTITUTIONAL REVIEW BOARD

Mail: P.O. Box 3999
Atlanta, Georgia 30302-3999
Phone: 404/413-3680
Fax: 404/413-3504

In Person: Deiberg Hall
30 Courtland St, Suite 217



March 06, 2017

Principal Investigator: Deirdre Oakley

Key Personnel: Oakley, Deirdre; Ruel, Erin; Tate, Lakeisha B

Study Department: GSU - Sociology

Study Title: Navigating Food Deserts: A Geo-ethnography of Atlanta Residents' Experiences, Routines, and Perceptions

Review Type: Expedited, 6,7

IRB Number: H17359

Reference Number: 342708

Approval Date:

03/06/2017

Expiration Date:

03/05/2018

The Georgia State University Institutional Review Board (IRB) reviewed and approved the above referenced study in accordance with 45 CFR 46.111. The IRB has reviewed and approved the study and any informed consent forms, recruitment materials, and other research materials that are marked as approved in the application. The approval period is listed above. Research that has been approved by the IRB may be subject to further appropriate review and approval or disapproval by officials of the Institution.

Federal regulations require researchers to follow specific procedures in a timely manner. For the protection of all concerned, the IRB calls your attention to the following obligations that you have as Principal Investigator of this study.

1. For any changes to the study (except to protect the safety of participants), an Amendment Application must be submitted to the IRB. The Amendment Application must be reviewed and approved before any changes can take place
2. Any unanticipated/adverse events or problems occurring as a result of participation in this study must be reported immediately to the IRB using the Unanticipated/Adverse Event Form.
3. Principal investigators are responsible for ensuring that informed consent is properly documented in accordance with 45 CFR 46.116.
 - The Informed Consent Form (ICF) used must be the one reviewed and approved by the IRB with the approval dates stamped on each page.
4. For any research that is conducted beyond the approval period, a Renewal Application must be submitted at least 30 days prior to the expiration date. The Renewal Application must be approved by the IRB before the expiration date else automatic termination of this study will

occur. If the study expires, all research activities associated with the study must cease and a new application must be approved before any work can continue.

5. When the study is completed, a Study Closure Report must be submitted to the IRB.

All of the above referenced forms are available online at <http://protocol.psu.edu>. Please do not hesitate to contact the Office of Research Integrity (404-413-3500) if you have any questions or concerns.

Sincerely,



Cynthia A. Hoffner, IRB Vice-Chair

Appendix C: Recruitment Script

Hello, my name is Lakeisha Tate—graduate student in the Sociology department at Georgia State University. I would like to invite you to participate in a research study I am doing for my dissertation.

You may participate if you live within this neighborhood (which is classified as a food desert).

As a participant, you will be asked for 3 to 5 hours of your time over the course of 1 to 2 days.

You will be interviewed and observed on your route to buy groceries.

Any information collected will be confidential and I will use a false name for you.

If you would like to participate in this study, please let me know and we can proceed.

Do you have any questions at the moment? If you do have questions later, again, please feel free to contact me at the email address or phone number on the flyer.

Thank you for your time.

Appendix D: Questionnaire

Choose one response for each of the following:

	Strongly Disagree		Agree or Disagree Equally		Strongly Agree
1. In my neighborhood, I have plenty of food options.	5	4	3	2	1
2. I prefer to shop for food at the grocery store.	5	4	3	2	1
3. I feel that grocery stores are accessible in my neighborhood.	5	4	3	2	1
4. In my neighborhood, it is easy to buy healthy foods.	5	4	3	2	1
5. The stores where I shop have a wide selection of fruits and vegetables.	5	4	3	2	1
6. Whether or not I go grocery shopping depends on my mode of transportation.	5	4	3	2	1
7. I feel that I always have enough food in my home.	5	4	3	2	1
8. Fast food is easily accessible in my neighborhood.	5	4	3	2	1

9. I worry about how I will pay for my next meal. 5 4 3 2 1

10. I'd rather have fast food than have to prepare food myself. 5 4 3 2 1

11. How long have you lived in your current neighborhood?

- A) Less than 1 year
- B) 1-3 years
- C) more than 3 years

12. How often do you purchase foods from online stores?

- A) never
- B) rarely, 1-2 times every 3 months
- C) occasionally, 3-4 times every 3 months
- D) frequently, more than 5 times every 3 months

13. Do you ever have groceries delivered to your home?

YES NO

14. If you have had groceries delivered to your home, was this by a particular food store or company?

YES NO

15. Do you receive any assistance for food, such as WIC, SNAP/EBT, etc.?

YES NO

16. If you answered YES to receiving assistance for food, which program is it from?

17. What is your annual household income?

- A) < \$25,000
- B) \$25,000 – \$49,999
- C) \$50,000 – \$74,999
- D) \$75,000 – 99,000
- E) >\$100,000
- F) Do not wish to disclose

18. Including yourself, how many people live in your household?

- A) 1, I live alone.
- B) 2
- C) 3
- D) 4 or more

19. How many children (under age 18) are in your household?

- A) none
- B) 1
- C) 2
- D) 3 or more

20. Are you...?

- A) Single
- B) Married
- C) Divorced
- D) Widowed
- E) Partnered
- F) Other (please explain): _____

21. What is the highest level of education you have attained?

- A) less than high school
- B) high school diploma or GED
- C) some college or an Associate's degree
- D) college degree (Bachelor's)
- E) graduate degree (Graduate or Professional)
- F) terminal degree (MD, PhD, or similar)

22. You identify as

- A) Male
- B) Female
- C) Trans
- D) Prefer not to say
- E) Other

23. Do you own a car? YES NO

24. Do you utilize public transportation? YES NO

25. Do you receive government assistance for food, such as WIC, food stamps/EBT, etc.? YES NO

26. What is your age? _____

27. What is your gender? MALE FEMALE TRANS

Appendix E: Semi-Structured Interview Guide

Thank you again for agreeing to participate in this study. The additional questions I have for you are regarding your responses. I would like to continue the discussion regarding your food purchasing routines and habits.

1. You identified Store A as your primary grocery store location. I noticed this was farther away than another store closest to you. Can you explain your reasoning for this?
2. Can you explain why you do/did not shop at Store A? (whichever store might be closest to their place of residence).
3. Do you find that you often shop in one particular store for certain products and another store for other items?
4. Do you feel you can always get all the groceries you need? Why/why not?
5. Do you tend to shop at one particular store on all your trips? Why/why not?
6. Do you find you are limited in food shopping due to transportation?—If using public transportation, are you restricted by the routes the buses or trains take?
7. If traveling outside of your own neighborhood, are there particular elements in the surrounding areas that you notice you do not have in your own neighborhood? e.g. different types of stores or businesses
8. You stated earlier that you receive government assistance for food. Do you feel this limits your selections of foods when you are shopping? How does this affect your shopping?
9. What do you feel is the most challenging aspect/obstacle/issue in accessing food?