

PERCEPTIONS OF ACCESS TO CULTURALLY APPROPRIATE FOODS:
A DETROIT CASE STUDY

By

Najma Muhammad

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Urban and Regional Planning – Master of Urban and Regional Planning

2021

ABSTRACT

PERCEPTIONS OF ACCESS TO CULTURALLY APPROPRIATE FOODS: A DETROIT CASE STUDY

By

Najma Muhammad

Historically planning has played a major role in the development of unequal and isolated neighborhoods that deprive underserved populations of access to basic necessities such as healthy and affordable foods. A part of accessing healthy and affordable food is access to culturally appropriate foods (CAF). This study defines CAFs and highlights the perceived barriers to accessing CAFs, as expressed by study participants across the city of Detroit, MI. Through semi-structured interviews, residents' responses are coded to develop a concise understanding of their perception of CAF and access. Participants defined CAF as foods that people are inclined to traditionally and barriers to this food include transportation, proximity, and for those seeking to shift their diets but continue to consume traditional foods, education on healthy alternatives. Most participants have access to CAF, but they typically must shop outside of the city to access quality and affordable foods. Planners must now be key players in bringing about a just food system to benefit residents, especially to already disadvantaged low-income communities of color like those within Detroit.

Copyright by
NAJMA MUHAMMAD
2021

ACKNOWLEDGMENTS

I would like to acknowledge everyone who has supported me throughout this journey. First, I would like to thank my advisor Dr. Zeenat Kotval-Karamchandani for her unconditional patience, support, guidance, and love. I would also like to thank the other two members of my committee, Dr. Trish Machemer and Julie Cotton. A special thank you to Dr. John Waller and Dr. Noah Durst for helping me improve my writing and research skills. Secondly, I would like to acknowledge Veda Hawkins for introducing me to the field of Urban Planning, thank you for hearing my vision and pointing me in the direction of how to start my journey toward it. I would also like to thank Dr. Scott Loveridge for encouraging me to pursue two degrees in Urban and Regional Planning. I would like to thank my SPDC family. Lastly, I would like to thank my father for being my number one fan since birth and helping me to accomplish so much. As well as my mother, my siblings, nieces, nephews, aunts, and uncles who have encouraged me to be great.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
KEY TO ABBREVIATIONS	ix
Chapter 1: Introduction	1
Chapter 2: Literature Review	3
2.1. Food Systems Planning.....	3
2.2. Why is this relevant to Planning?.....	7
2.3. What is Culturally Appropriate Food?.....	9
2.4. Detroit’s History with Food Systems Planning	12
Chapter 3: Methods	16
3.1. Study Area	16
3.2. Data Collection	18
3.3. Data Analysis.....	20
Chapter 4: Results.....	21
4.1. Descriptive Demographics.....	21
4.2. Participant Shopping Habits.....	25
4.3. What is healthy food?	33
4.4. Culturally Appropriate	42
4.5. COVID-19 Impact on Participants.....	52
Chapter 5: Discussion and Conclusion	55
5.1. Discussion.....	55
5.2. Implications for Planners and Policy Recommendations.....	59
5.3. Limitations.....	65
5.4. Further Research and Next Steps.....	66
5.5. Conclusion	66

APPENDIX.....	68
BIBLIOGRAPHY	76

LIST OF TABLES

Table 1: Time to Grocery Store.....	27
Table 2: Frequency of Trips to Grocery Store.....	27
Table 3: Primary Mode of Transportation.....	27
Table 4: Amount Spent on Groceries Per Trip	28
Table 5: HHS Poverty Guidelines For 2021 The 2021 poverty guidelines in effect as of January 13, 2021. Federal Register Notice, February 1, 2021 - Full text.	30
Table 6: Participants’ perceived access to healthy food.....	33
Table 7: Goals from Detroit’s Master Policy Plan.....	60

LIST OF FIGURES

Figure 1: Study Area, Detroit, MI; Race by Zip Code Boundary (refer to appendix for larger version) (Social Explorer, 2021)	18
Figure 2: Map of corporate grocery stores in and around the city of Detroit, participants, and zip codes.....	20
Figure 3: Gender of Participants.....	21
Figure 4: Median Age by Gender	22
Figure 5: Races of Participants.....	22
Figure 6: Highest Educational Attainment. [For the purposes of this study, an associates or a bachelor’s degree was considered a college degree.]	23
Figure 7: Employment status of participants.....	24
Figure 8: Grocery Stores Frequented by Participants	25
Figure 9: Map of the original study area, pre-COVID-19 restrictions.....	74
Figure 10: Study Area, Detroit, MI; Race by Zip Code Boundary (refer to appendix for larger version) (Social Explorer, 2021)	75

KEY TO ABBREVIATIONS

CAF Culturally Appropriate Food

SNAP Supplemental Nutritional Assistance Program

WIC Women, Infants, and Children (supplemental nutrition program)

Chapter 1: Introduction

Planners have a moral and civic obligation to repair communities that planning policies have often intentionally dismantled and disadvantaged (Agyeman, 2020; Weibgen, 2019). This paper will discuss the ways in which planners can use their authority to positively shape food systems by having a better understanding of access to Culturally Appropriate Food (CAF). Food systems planning is a growing field of study and practice (Raja, Morgan, et al., 2017) is known that food access has a profound impact on community wellbeing. . Kameshwari Pothukuchi and Jerome Kaufman were among the first planners to bring conversations around food systems issues to the planning forefront in the 20th century into the 21st century (Pothukuchi & Kaufman, 1999). As the field is starting to form an epistemology, it has opened various subfields relevant to planning, including the availability of CAF. This study examines the perception of access to CAF by residents in Detroit. Detroit is often featured in scholarship highlighting residents' resistance to food inequality; for instance, in response to food deserts, communities – with government support – have sometimes undertaken urban farming initiatives. The following analysis of Detroit residents' perceptions offers insight into what residents feel they are lacking and suggestions as to how local government and planners can take action to resolve ongoing scarcity.

This study of Detroit residents' perceptions of CAF is divided into the following chapters. First, chapter 1 comprises a literature review of CAF, food access, and efforts to improve access in the city of Detroit, and the relevance of these efforts to modern planners. Chapter 2 offers insight into the analytical methodology adopted for this research. Chapter 3 explains the study area, data collection, and analysis process. The results are discussed in Chapter 4, which is followed by a discussion - in Chapter 5 – which relates the findings to current research in the field. The study concludes with a discussion of the implications of this work for planners, educators, and local

government. Overall, this research contributes to the field in the following ways:(1) it presents a definition of CAF;(2) it provides insights useful and practical information about local residents' perceptions of CAF access; (3) it communicates disparities perceived by among current residents in the city of Detroit; **(4) it offers local knowledge of Detroit residents, and lastly, (5) it is replicable.**

Chapter 2: Literature Review

2.1. Food Systems Planning

Food systems are a crucial element to our general quality of life and determining innovative ways to bolster and improve them in urban and rural communities will be beneficial for all stakeholders. The term ‘food systems’ refers to the “different ways food is eaten, produced, processed, distributed, and retailed in cities” (Maye, 2019). Their place within the field of planning has gained traction within the last few decades because due to the contributions of scholars such as Pothukuchi and Kaufman (1998, 2000). However, as they point out, the principle of planning for food systems was established as far back as the work of land surveyors who laid out “cities, villages, and the roads between them to grow, and sustain food production, processing, and export” (Pothukuchi & Kaufman, 1999, 2000a; Raja, Raj, et al., 2017; Vitiello & Brinkley, 2014). Even further back, it was their attention to food systems which allowed indigenous societies to transition, in certain ecological contexts, from hunter-gatherer societies to agrarianism (Porter et al., 2017a). In much more recent times, one of the first planners to entertain the idea of integrating food systems into urban planning was Ebenezer Howard in the form of his utopian ideal of the Garden City. Howard encouraged connections among the city, industrialization, and agriculture (LeGates, et.al., 2016). Over time, however, the increase in industrial food firms created greater disconnects, between cities, people, and their food source (Vitiello & Brinkley, 2014). It was not until the end of the twentieth century that planning scholars began to urge planners to see food as being a vital part of the planning agenda (Pothukuchi & Kaufman, 1999, 2000a). Since then, local and regional governments have begun to make shifts toward including food systems into their practice through creating and adopting food plans, forming food policy councils, and incorporating programs into the curricula for training planners at a number of universities (Raja, Raj, et al., 2017). While these

developments illustrate that progress had been made, there are still large steps that must be taken for food planning to be made more relevant and sustainable in contemporary planning initiatives. Unfortunately, food systems planning is still viewed as a specialized planning area rather than a main agenda item for all municipalities to contribute to on local, regional, state, national, and ultimately global levels (Clifton, 2004; Pothukuchi & Kaufman, 2000b; Raja et al., 2008; Raja, Raj, et al., 2017; Soma & Wakefield, 2011).

Pothukuchi and Kaufman's research is at the heart of modern food system work. They provide a foundational understanding for what food systems are in relation to planning, why they are important, and how best to develop them (Pothukuchi & Kaufman, 1999). Since their initial work, many food systems advocates in the planning field have emerged (Clancy, 2004; Maye, 2019; Pothukuchi, 2004; Raja, Raj, et al., 2017). Pothukuchi and Kaufman's early work shed light on food system issues, arguing that food is not seen as an urban problem and it is often invisible or less visible because: (1) the average urban resident takes food for granted, (2) historical urbanization, (3) technological changes in transportation and food preservation and processing, and (4) the dichotomization of public policy into urban and rural (Pothukuchi and Kaufman, 1999). We still see a lack of local government and planning engagement in devising effective food systems because of a general lack of knowledge, resources, and political support when discussing and acting on food issues (Clancy, 2004; Pothukuchi & Kaufman, 2000a; Raja, Raj, et al., 2017). Scholars have outlined various steps officials can take to become more active in the food system, many grounded in the foundation laid by Pothukuchi and Kaufman (Pothukuchi & Kaufman, 1999).

Maye (2019) offers the following key elements for successful food system planning: city regionalism, connectivity/synergies, circular metabolism, and social practices. City regionalism

defines not only the geographic location, but also the connection between the inner-city, the rural areas, and any concerned stakeholders (Maye, 2019). Taking a regional approach builds a local foodshed that would hopefully reduce the amount of waste and excess in transportation associated with food distribution (Maye, 2019; Pothukuchi & Kaufman, 1999). Maye's use of the term 'connectivity' refers to the way governments may be included in the creation and maintenance of an urban food strategy. 'Synergies' are a way to achieve multiple uses from one element for instance, multifunctioning policies that allow planners to link productive landscapes within cities. 'Circular metabolism' is when outputs are recycled back into the system as inputs; this can be as simple as local compost production from compostable waste from households and restaurants. Lastly, Maye (2019) highlighted social practices used for innovation and learning and understanding the connections between stakeholders. However, absent a food system policy agenda, these sorts of innovations are less likely to stick. That is where Pothukluchi and Kaufman's suggestions are at their most relevant (Maye, 2019).

Pothukluchi and Kaufman offered a comprehensive approach to getting food system issues on urban policy agendas: creating departments of food, forming a local food policy council, and partnering with the city planning agency. These developments would be the hub for future innovations and policy recommendations. The department of food would serve a central intelligence function, a pulse-taking function, a policy clarification function, a community food security strategic plan function, and a feedback review function. These would all serve the community, the government, and the key stakeholders within the food system. The food policy council would be advisory to the government and lawmaking officials, connecting the community, the food system, and the government. However, prior to and along with these functioning offices, there should be a partnership with the local planning agency. Pothukluchi and Kaufman reminds

planners of their roles to “improve human settlements” and “incorporating linkages among different sectors and dimensions of a community”. They essentially argue that the role of a planner is to improve the quality of life of their communities, and food is one of the essentials of life and should no longer be omitted as a fundamental consideration in designing urban spaces (Pothukuchi & Kaufman, 1999).

Clancy builds from Pothukuchi and Kaufman’s ideals and argues that planners have a place in the food system, and that their apprehension calls greater attention to their lack of involvement due to a lack of education (Clancy, 2004). Unfortunately, many planners see food systems as a “rural issue” (Clancy, 2004; Pothukuchi & Kaufman, 2000a; Raja, Raj, et al., 2017). City planners are less likely to be familiar with the components of the food system – manufacturers, distributors, wholesalers, and retailers – and how these functions relate to inner-city planning prior to the expansion of industrial food firms (Clancy, 2004; Vitiello & Brinkley, 2014). County planners were more likely to be engaged in food systems activities than their urban colleagues; however, these percentages were still low (Clancy, 2004). Thus, Clancy, supported by the works of Pothukuchi and Kaufman, argues that food systems advocates approach planners on very specific and targeted issues that address common planning concerns relevant to current work (Clancy, 2004; Pothukuchi & Kaufman, 1999, 2000a). Clancy urges planners to engage with individuals who are already doing the work to learn more about the food system in their areas. There is a substantial lack of education on food systems in the planning curriculum and most learning occurs on the job and by virtue of the individuals’ own efforts (Clancy, 2004). Because local governments continue to address the “symptomatic concerns rather than remedying the systematic concerns”, we continue to see poor and historically disadvantaged communities struggle with food at disproportionate rates (Pothukuchi, 2004; Raja, Raj, et al., 2017). The lack of planners’

involvement in the food system and the indirect impacts that planners have on the food system continue to exacerbate and ignore the economic, social, and racial inequities in food systems (Pothukuchi, 2004; Raja, Raj, et al., 2017). Food systems planning is important to resident's general quality of life and placing more of an emphasis on it will benefit cities financially, socially, and otherwise (Pothukuchi & Kaufman, 1999).

An analysis of the American Planning Association's 2014 online national survey by Raja et al. (2017) highlights the steps that communities have taken toward strengthening their local, regional, and metropolitan food systems. Of the 3,103 APA members who responded, 1,169 reported that they worked for either local, regional, and/or metropolitan governments (Raja, Raj, et al., 2017). The respondents were from a variety of geographic areas including urban, suburban, and exurban spaces (Raja, Raj, et al., 2017). Questions that probed the extent which planners had engaged food in their official plans yielded very few results. For those respondents who did engage in food systems work it was most likely present in a community's comprehensive plan, land use plans, sustainability plans, and agricultural and farmland protection plans, with very few mentions in community transportation plans. Transportation plans and economic development plans were of those highlighted for hindering communities' food systems. This analysis conducted by Raja et al. exposes the level of disinvolvement in food systems by local, regional, and metropolitan governments by 2014.

2.2. Why is this relevant to Planning?

Prior to the emergence of a disconnect in the mid-twentieth century, with the advent of industrial food firms and the distancing of food production from the city's core, food was very much a part of the planners' agenda (Vitiello & Brinkley, 2014). The failure to think about food systems is very unfortunate because studies have shown direct ties to a person's physical living

environment and their physical and mental health and wellbeing. There is a strong connection between urban planning and public health. Though the two professions “co-developed”, they are not as interdependent as they once were, but now it is important to recall how they are mutually-beneficial and crucial to the future development of healthy cities (Porter et al., 2017b). Increased rates of obesity, heart problems, asthma, and other environment related illnesses has a direct tie into planning focus areas of walkability, accessibility, environmental justice/equity/racism, and social equity as these issues impact historically disadvantaged individuals at an alarming disproportionate rate (Amarasinghe & D’Souza, 2012; Martin et al., 2016; Passidomo, 2013; *Poor Nutrition* | CDC, n.d.; Raja, Raj, et al., 2017). Planners’ ability to influence a city’s walkability, access, etc. means that most of the issues which affect the wellbeing of humans and the environment are inescapably planning issues as well (Antipova et al., 2020; Kelly et al., 2007).

Conversations around terms like food deserts, food apartheid, and recent studies on neighborhood “Greenlining”, exposes how planners are indirectly impacting the food system and perpetuating severe disadvantage in communities of color (Agyeman, 2021; Byrne, 2019; Cook, n.d.). Food apartheid is a term that scholars and community activists have introduced to better capture the challenges that face low-access communities of color (Agyeman, 2021; Byrne, 2019; Cook, n.d.). This term gives greater recognition to anti-Black policies and practices that have caused de facto segregation through practices like supermarket redlining. Supermarket redlining, also known as Greenlining, occurs when there is a decrease in affordable food for low-income residents, largely Black and Latinx, with either an increase in or assurance of access to residents in white suburban areas. Such situations happen as a result of larger grocery stores or chain supermarkets either refusing to build in poorer communities, removing buildings from them, or relocating to “wealthier suburbs”. These trends are perpetuated in large part by retailers

centralizing locations in areas that are already recognized as food zones or are labeled as good markets economically (Agyeman, 2020; Zhang & Ghosh, 2016a)c. Because many areas with higher populations of people of color have been considered economically risky or have become food deserts for other historical planning reasons, the nutritional needs of local people are tragically neglected. This study seeks to reinforce awareness of the relevance of CAF and food systems to the planning profession.

2.3. What is Culturally Appropriate Food?

While food access is a widely studied topic, access to culturally appropriate, relevant, and/or sensitive foods remains an understudied area within the field (Fleischhacker et al., 2011; Grigsby-toussaint et al., 2010). Furthermore, food access and food planning has only been on the urban planning agenda for a few decades, with so much work yet to be done. Understanding culturally appropriate foods is relevant to the planning of local food system networks as it can lead to the provision of not just healthy and accessible food, but foods that appeal to and are appropriate for different ethnic, spiritual, traditional values and encourage greater consumption of healthy, culturally- relevant foods within these groups (Grigsby-toussaint et al., 2010). Ideas of food security and food sovereignty are well-studied areas of the food system, and both point to the importance of culturally appropriate food (Armar-Klemesu, n.d.; D. R. Block et al., 2012; Duchemin et al., 2009; Hammelman & Hayes-Conroy, 2015; Leventon & Laudan, 2017; Lowery et al., 2016; Lyons, 2014; White, 2011). Food security occurs “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and food preferences for an active and healthy life” (World Food Summit, 1996). Food sovereignty is defined as “the right of peoples to healthy and **culturally appropriate food** produced through ecologically sound and sustainable methods, and their right

to define their own food and agriculture systems” (*Declaration Of Nyéléni - Nyeleni - Via Campesina - Newsletter, Bulletin, Boletín*, n.d.). It is now widely understood that food access, or the lack thereof, entails far more than physical access (Agyeman, 2020; Clifton, 2004; Cummins et al., 2014; Eckert & Shetty, 2011; Lowery et al., 2016; Passidomo, 2013; White, 2011). Food access is measured objectively, taking into consideration the cost of food and socio-historical barriers that perpetuate food insecurity. The inability to procure healthy and affordable food are factors that lead to increasing food insecurity. A food desert has been defined by the United States department of Agriculture’s 2008 Farm Bill as “area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower-income neighborhoods and communities” (*PUBLIC LAW 110–246 | 2008 Farm Bill*, 2008). However, with greater understanding of racially exclusionary and systemic practices that have led to some areas being more barren of healthy and affordable food than others, it is now often referred to as ‘food apartheid’ (D. R. Block et al., 2012; Bradley & Galt, 2013). Issues of food access are multi-faceted and will require a multi-disciplinary approach to find solutions. Indeed, studies have shown that simply adding grocery stores or farm stands will not solve the problem (Cummins et al., 2014).

While reviewing planning literature, there was only one study that truly highlighted culturally appropriate food and it was conducted in 1992 by Sharon Stowers. Stowers’ study highlighted planning policy’s inability to accurately depict the food needs of the general population (Stowers, 1992). In addition, I found various studies in other areas of cultural appropriateness in relation to community interventions (Marin, 1993), assessment models (Padilla, 2001), communicative approaches (Ellis, 1996), health policies (Shaw & Armin, 2011), and pedagogy (Au, 1980). This section will discuss the current research on culturally appropriate/

relevant/ sensitive foods and how it relates to food access. Culturally appropriate food is often mentioned in relation to food sovereignty and indexes in other countries. However, no one has truly defined it from the perspective of the individuals who desire access to these foods.

Questions then arise as to what is considered culturally appropriate, by whom, how it is to be measured, and how it relates to food access. This is the gap that my research intends to fill. Before addressing those questions, it is important to understand that everyone regardless of their background should have a right to healthy and affordable foods, including fresh fruits, vegetables, and whole grains. At present, of course, there is an imbalance in access to healthy *and* affordable food (Fleischhacker et al., 2011; Grigsby-toussaint et al., 2010). A systematic review of fast-food access found that there is a much higher concentration of fast food restaurants in low income communities and communities with higher concentrations of “ethnic minority groups” than in middle-to-higher income areas and areas with higher concentrations of Caucasians (Allcott et al., 2017; Fleischhacker et al., 2011; *Food Access*, n.d.). Many other studies have led to similar findings (Grigsby-toussaint et al., 2010; Ledoux et al., 2017; White, 2011), clearly demonstrating that areas with higher concentrations of low-income people of color have greater access, physically and financially, to fast food, liquor stores, and convenience stores than to fresh produce and healthy food options (J. P. Block et al., 2004; Bower et al., 2014; White, 2011). Another study showed how low availability of culturally specific and commonly consumed fresh produce within a neighborhood may serve as a barrier to the consumption of fruits and vegetables among people of color (Allcott et al., 2017; Cheadle et al., 1991; *Food Access*, n.d.; Grigsby-toussaint et al., 2010).

Culturally appropriate food may be difficult to define in part because culture is itself highly variable. Defining one’s culture first may lead scholars to understand food appropriateness based

on cultural subgroups. This is not to neglect the fact that an individual could easily have a cross-cultural background. However, understanding culturally appropriate food for larger groups can help food systems planners better work with local food systems to incorporate more culturally appropriate foods for various populations. The incorporation of cultural food items in grocery stores is seen more now than in previous decades, as larger chains seek to accommodate different groups in “international food aisles”. Some communities have created culturally appropriate food oasis for themselves like Hamtramck, MI, Dearborn, MI, or Mexican town in Southwest Detroit. In these areas you can find grocery stores and other retailers that cater to the populations that live there. However, when looking at other neighborhoods in Detroit that are majority black, you begin to see a shift in the grocery and restaurant retail “diet”. There are more fast-food restaurants, liquor stores, and convenience stores. This is not necessarily representative of the culture of black people; instead, it is a direct result of institutionally racialized practices that have created large areas desert of healthy and affordable food. In the process, perpetuating a robbed food culture that started during slavery.

2.4. Detroit’s History with Food Systems Planning

Detroit’s colonial history with food systems spans back to Cadillac’s ribbon farms in the 1700s, to Mayor Hazen Pingree’s land allocations for subsistence farming in the late 1800s (Pothukuchi, 2015), and into the Black Power Movement (BPM) in the mid to late 1900s when black nationalists worked to empower their communities through building establishments and growing food for themselves. These movements birthed the establishment of the city’s first Black-owned grocery store in 1967 by Pastor Jaramogi Agyeman and the Shrine of the Black Madonna. This was followed by Mayor Coleman Young’s Farm-A-Lot program, meant to assist the growers

coming up from the South and address the growing issues of vacancy due to white flight in the 1970's (Pothukuchi, 2015).

Since the 1990s many avenues to food access have been established in the city, some still present today and other that may not have lasted but live on in the initiatives that inspire today's activists. Initiatives like the establishment of Earthworks Urban Farms on the city's east side in 1996, or the Catherine Ferguson Academy established to assist pregnant and parenting teen mothers with an urban farm attached, also started in 1996. Grassroots organizations like the Detroit Black Community Food Security Network (DBCFSN) inspired by the movements and initiatives of their BPM predecessors to bring healthy food access to Detroit residents through farmer's markets, educational programming, assistance with starting a garden, and networks to garden resource programs (most prominent Keep Growing Detroit) (Pothukuchi, 2015). As well as the most recent, Detroit People's Food Co-op, with founders and community support that has the collective effort Detroit residents by providing them with access to healthy food, along with education and other resources.

According to Raja et al. (2017), the responses that local governments make in response to food systems problem are most often addressed with the adoption of a new policy, instead of investing into the community's food system. This has been witnessed in the decisions that Detroit's local government has made over the past decade. For example, the city of Detroit adopted the Urban Agriculture Ordinance in 2013 which legalized and regulated agricultural activities in the city. While the adoption of this ordinance aided Detroit's grassroots urban farmers and growers in producing food in urban spaces, it also exposed gaps and biases in the governments support of a growing food system network in the city. Such as the city's selling of about 140 acres of lots to an outside investor, John Hantz, for large scale urban agriculture operation, in the same year

(Pothukuchi, 2015). Hantz was able to purchase the land for 8 cents per square foot which is about two to three times less than what the Detroit Land Bank Authority charges residents and community partners. This caused resident growers to look at the city with scrutiny, as their previous requests as well as continued requests were often not addressed by the government in a timely manner if at all. Still in 2013, Detroit decided to bring in grocery retailers Meijer and Whole Foods investing millions of public funds to these projects, in lieu of supporting local grassroots and community owned establishments (Pothukuchi, 2015, 2017). Meijer received \$3.3 million from the state in brownfield tax credits through the Michigan Economic Development Corporation and \$6.5 million from local government entities (Zemke, 2011). Whole Foods received various financial aids from developers, development corporations, as well as state and local grants and tax credits, adding up to nearly \$15 million allowing Whole Foods to cover less than half of the projects total costs (Pothukuchi, 2015). While Whole Foods was adamant about making the Detroit store communal, locally operated and sourced, affordable, and accommodating, its development still counteracted and took precedence over that of grass roots initiatives with goals of empowerment and self-determination (Pothukuchi, 2015). The evident lack of support by local and state government and other development entities, for these local groups, implies that they have placed greater value on profit and conventionalism,.

With the placement of these markets in areas that already appear to be well served and saturated with access to other food options – Whole Foods (Midtown) and Meijer (1-8 mile at the border of Ferndale; 2- Grand River) – this creates a larger food divide for those living further from these hubs (Pothukuchi, 2015). Detroit is nearly eighty-percent Black (U.S. Census, 2019). Studies have shown that a lack of access to healthy foods burdens communities of color at a higher rate (Allcott et al., 2017; Baker et al., 2006; Grigsby-toussaint et al., 2010; Kaufman et al., n.d.; Raja,

Raj, et al., 2017). This means that the choice to place these markets far from residents who are already without makes the issue increasingly worse and shows a lack of progress toward rectifying this issue. There is little scholarship and engagement on the ways that racism impacts food systems and food injustice in the planning practice, although various studies show the disproportionate rates that Black and Latinx communities face in accessing healthy and affordable food (Allcott et al., 2017; Anguelovski, 2015; Baker et al., 2006; Passidomo, 2013; Raja et al., 2017; Zhang & Ghosh, 2016).

As of 2017 when Pothukuchi wrote her account of the sentiments of people within the food system and the government toward urban agriculture as a solution to vacant lots, the city of Detroit still seemed to be averse to enhancing the local food system. The City's inaction and lack of response to the Detroit Food Policy Council formed to offer such insight, as well as the lack of transparency with city departments and agencies like the Detroit Land Bank Authority, suggests no desire to gain knowledge of the food system nor engage in supporting it (Pothukuchi, 2017). The city of Detroit's commitment of over 5 million dollars of public funds to assist corporate grocery entities does not suggest a lack of resources (Pothukuchi, 2015). Detroit has a robust local food and urban agriculture foundation, due to grassroots activist and engaged citizens. The only thing these communities lack to be able to provide a sustainable local food system is political will and commitment to support internal efforts (Clancy, 2004; Pothukuchi & Kaufman, 2000a; Raja, Raj, et al., 2017).

Chapter 3: Methods

The goal of this study is to understand the connection to food resources across the city and Detroit residents' perception of access to culturally appropriate foods, with the purpose of developing a definition to CAF and providing insight to planners interested in food systems. The initial study area was the neighborhoods of Virginia Park and the North End (ref. Appendix). Since these neighborhoods, approaching Detroit's midtown and downtown areas, have experienced increased development in recent years, focusing on this area of the city would have allowed an assessment of the perceptions of barriers to accessing CAF in neighborhoods close to areas with access to more resources. Due to the State of Michigan's and Michigan State University's heightened mandates restricting non-mandatory travel in light of COVID-19 at the onset of the interviewing phase of the study, methods changed. The restrictions coupled with limited funds made the initial participant gathering stage difficult and after over a month of low interview rates, the study area expanded to the entire city of Detroit to increase interviews.

This study aimed to answer the following research questions:

1. What is culturally appropriate food?
2. What are the perceived barriers to accessing culturally appropriate foods?

This chapter details site selection, data collection, and analytical methods used to conduct this study.

3.1. Study Area

Detroit is 139 square miles, bordered by several cities in the metro area, and encompassing two other cities: Hamtramck and Highland Park. Detroit's population as of 2019, according to census 5-year estimate data, is 674,841 residents (*Census - Geography Profile*,

2019). This is approximately 4,700 people per square mile, though in the city there are pockets with dense populations, with much of the occupiable lands being either vacant or abandoned. According to a 2017 Detroit Future City report, the city has over 24 square miles of vacant land with 72,172 publicly owned vacant parcels (Goss-Foster, 2017). The city is 78.3% Black or African American, 14.7% White, 0.4% American Indian/Alaskan Native, with 3.1% identifying as some other race and 1.8% identifying as two or more races (U.S. Census, 2019). The population mostly speaks English, but there is 6.5% that speaks Spanish, that likely represents the high population of Latinx/Hispanic identifying individuals in the Southwest area of Detroit, as well as all throughout the city, and 5.7% that speaks other languages (U.S. Census, 2019). The median household income is \$30,894, with about 35% of the residents below the poverty line, not accounting for those who are only slightly above it. The median income for females is \$33,437 and \$36,044 for males (U.S. Census, 2019). Only 15.3% of residents have a bachelor's degree or higher, with 81% of residents having completed a high school education. According to the census, 19.2% of Detroit's residents have a disability, 6.6% higher than the country's average of 12.6% (U.S. Census, 2019).

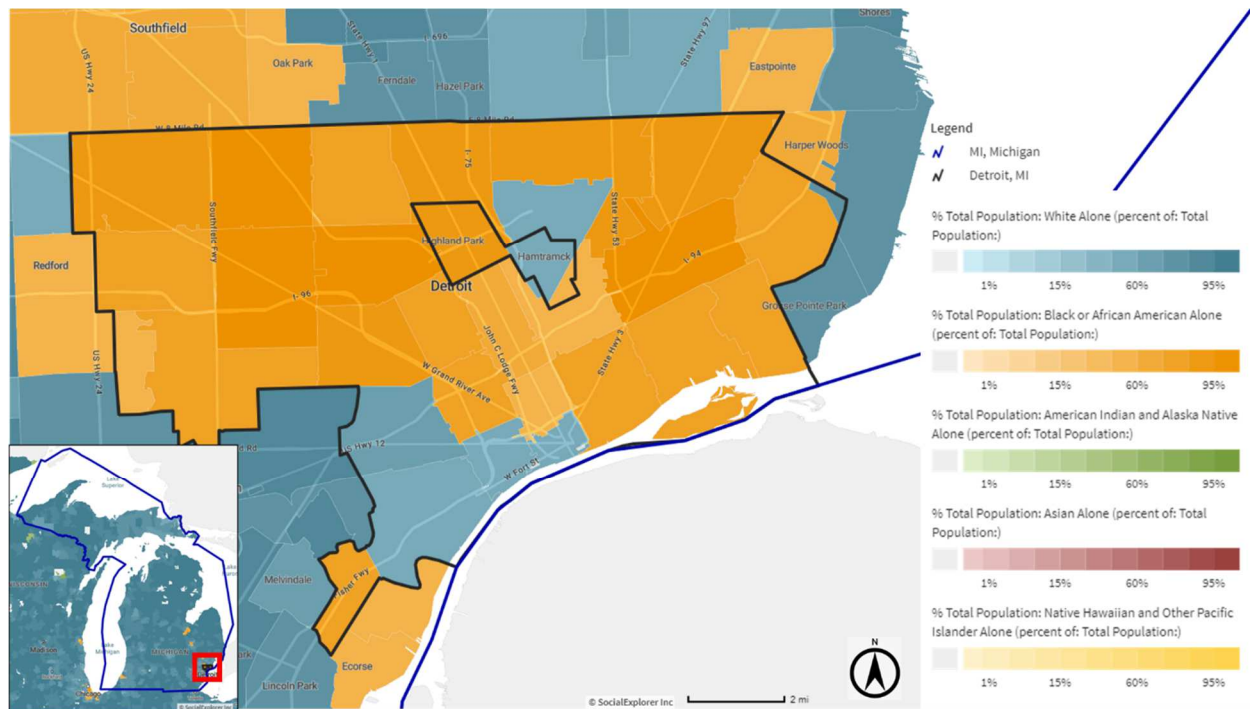


Figure 1: Study Area, Detroit, MI; Race by Zip Code Boundary (refer to appendix for larger version) | (Social Explorer, 2021)

3.2. Data Collection

Prior to starting interviews, Shakara Tyler Ph.D. from Michigan State University helped establish connections with key community members in the study area. They provided connections which resulted in an email list that allowed for the advertisement of the study. After making initial connections with these individuals through email, they began to assist me in connecting with residents. Lisa Johanon, founder of Central Detroit Christian CDC assisted with flyer dissemination on their food box distribution to the Virginia Park neighborhood, representing the first set of interviewees. Monica Edmunds, the Vice-President of Community Engagement and Planning for Vanguard Community Development invited me to present my study at their cabinet meeting to individuals connected to various networks in the community, through one of the initial contacts. After several interviews, one interviewee referred several individuals in their network which resulted in at least 10 interviews as a direct result.

After the initial interviews, incentives were offered to those who participated to recruit more interviewees. Due to COVID-19 restrictions the initial plan to have in-person interviews was no longer an option and thus all interviews were offered via phone call or Zoom. During the interview participants were informed of their \$30 gift certificate incentive to a local grocery store – Family Foods, Meijer, or Aldi – for their participation and an additional one-time incentive of \$10 to the same local grocery store if they referred new people and their referrals participated. The additional incentive was not extended to the last 5 interviewees due to the study ending. Initially the local grocery store, Family Foods was the only gift card incentive offered. However, after the expansion of the study to the entire city, as well as some interviewees apprehension to use the Family Foods certificates, we also expanded the store selection to include Meijer and Aldi. Following these additions, certificates were distributed based on location, shopping habits, and distance. Figure 2 shows the general location of residents in reference to the grocery stores.

The software Signup Genius was used to schedule and track interviews throughout the data collection process. Participants were emailed or texted a link to Signup Genius to schedule interviews, and for those without access or familiarity, I personally scheduled the interview. A text or email reminder was sent to participants prior or the day of the scheduled interview. Interviews lasted approximately 30-60 minutes, with some completing in less time and others taking much more. Despite our best efforts, there were 10 no shows. Additionally, 5 referrals did not respond to emails, and 5 people indicated interest but did not follow up on scheduling and/or rescheduling an interview. The goal for participants was 80 residents, and at end 79 individuals were interviewed.

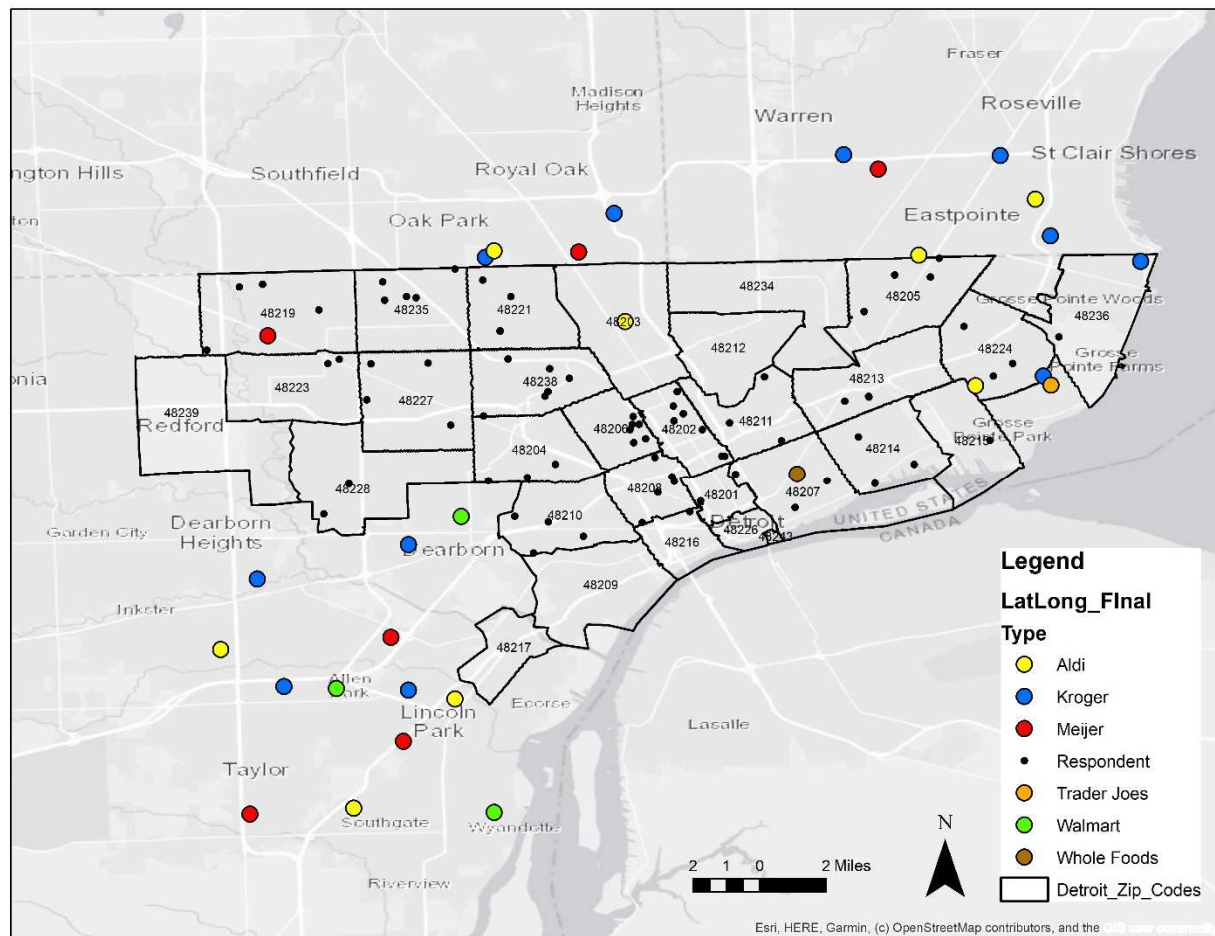


Figure 2: Map of corporate grocery stores in and around the city of Detroit, participants, and zip codes.

3.3. Data Analysis

Data was collected in two ways from participants: a short demographic survey, and an open-ended interview. After speaking with participants over Zoom or phone, their responses were transcribed and analyzed using NVivo software. I used descriptive and axial coding to analyze the interviews and organize the data systematically, based on grounded theory methods. I compared the data collected from the demographic survey to the data coded from the interviews to identify trends in Detroiters' perceptions of culturally appropriate food access based on race, zip code, and other identifiers. I used descriptive coding to identify recurring topics, while axial coding was used to identify common themes that arose from participants.

Chapter 4: Results

This chapter discusses results from the data collected from the Qualtrics survey and the semi-structured interviews to examine the potential implications of the perception of Detroit residents' access to culturally appropriate food. The chapter begins with a descriptive analysis of the participants. Followed by general crosstabulations and trends between their demographic information and information they provided concerning their health and responses to question about culturally appropriate food access. Lastly, we will discuss the analysis of their responses to the questions around culturally appropriate food and access, to answer the research questions posed in chapter 3.

4.1. Descriptive Demographics

At the start of the interview a Qualtrics survey was used to collect basic demographic information.

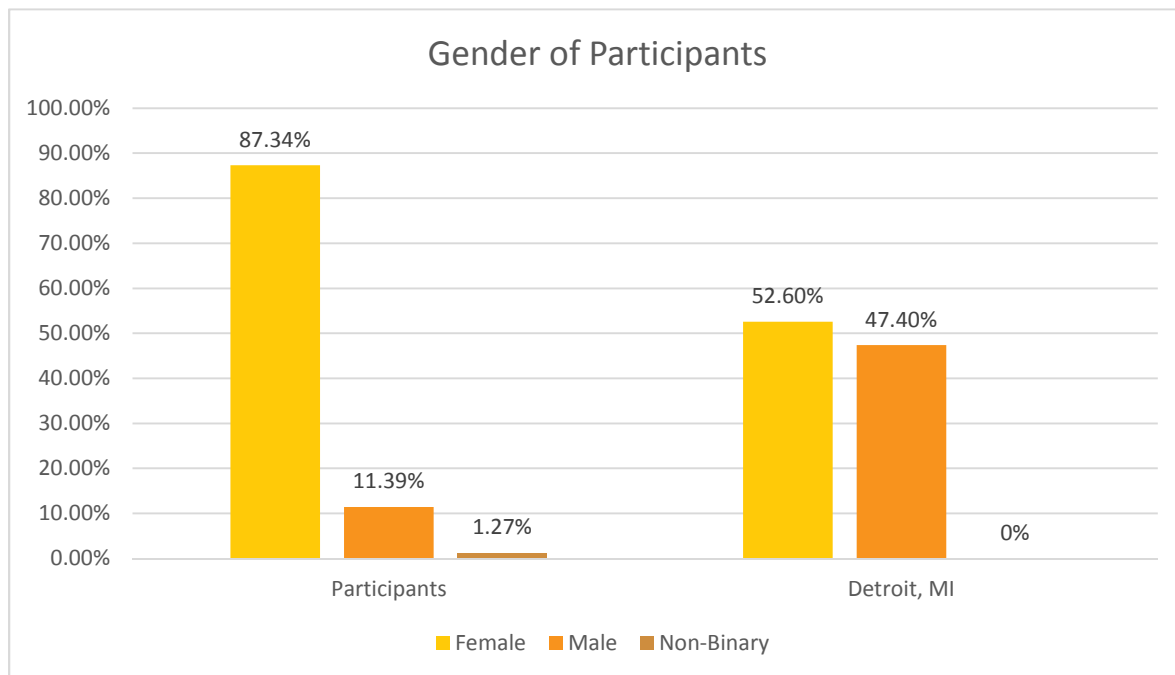


Figure 3: Gender of Participants

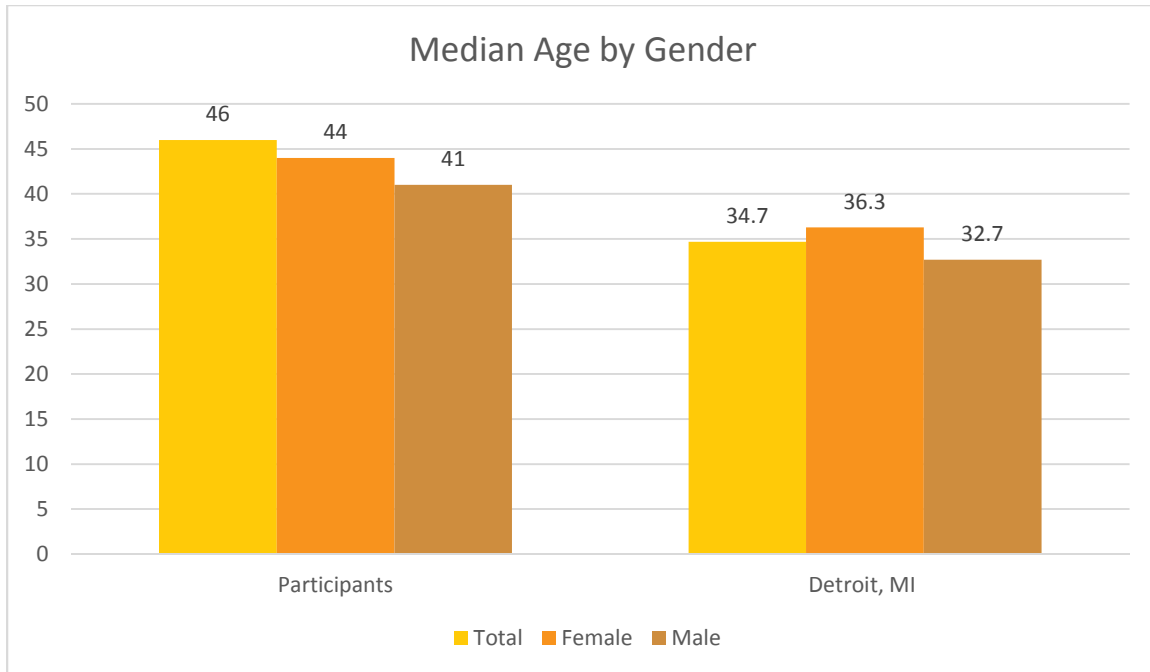


Figure 4: Median Age by Gender

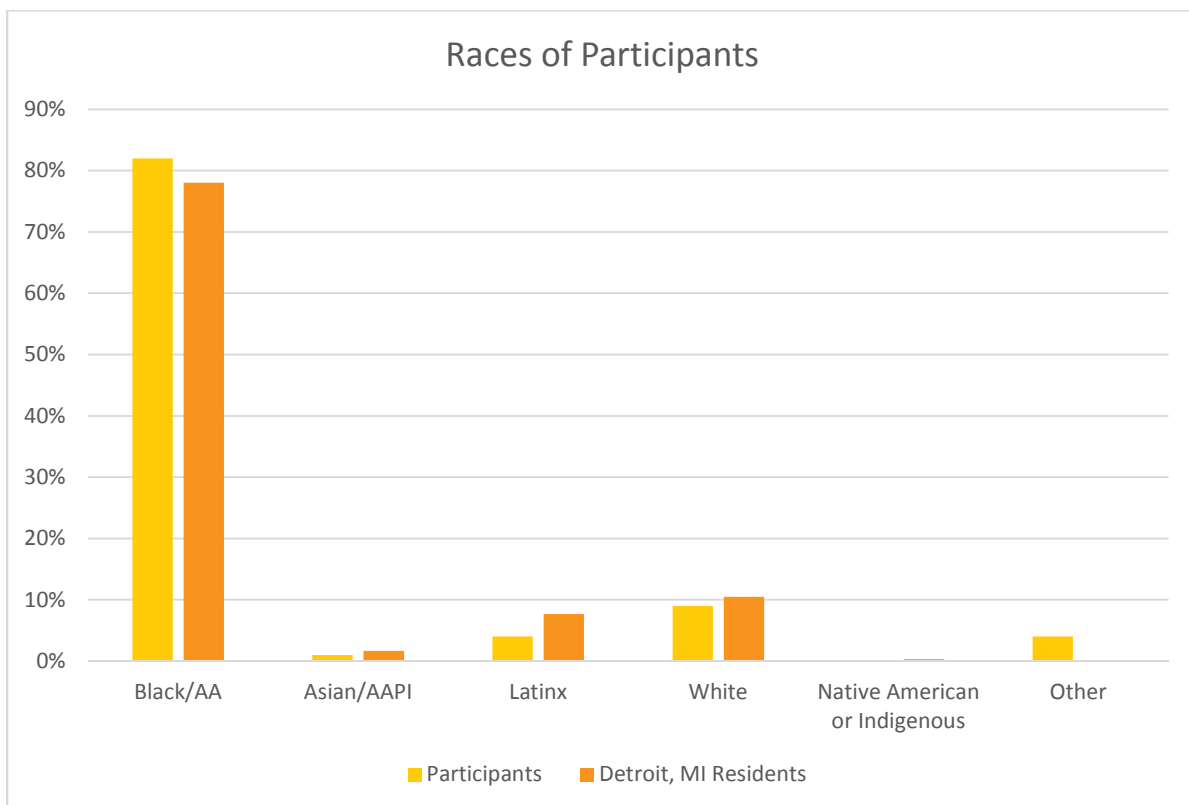


Figure 5: Races of Participants

The “Other” category included self-identifications such as, Detroit African or New African and identification with one’s ethnic identity rather than census designated categories such as, Greek, Filipino, Afro-Caribbean, Afro-Latino, or Multi-racial.

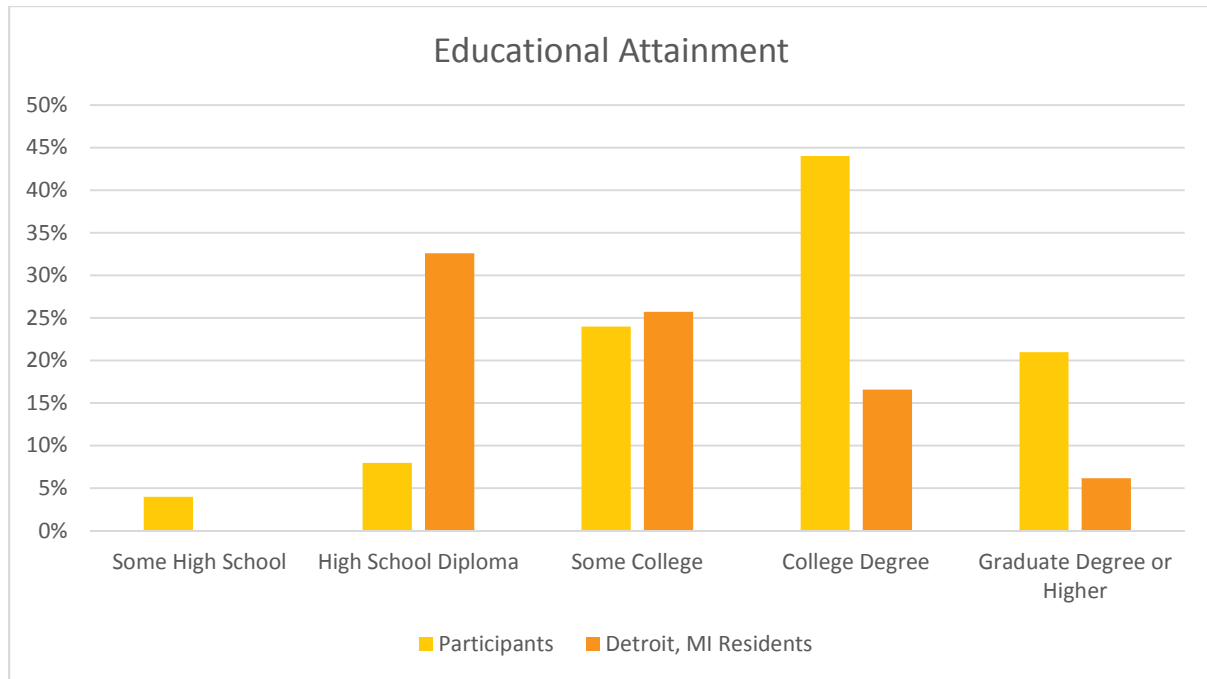


Figure 6: Highest Educational Attainment. [For the purposes of this study, an associates or a bachelor’s degree was considered a college degree.]

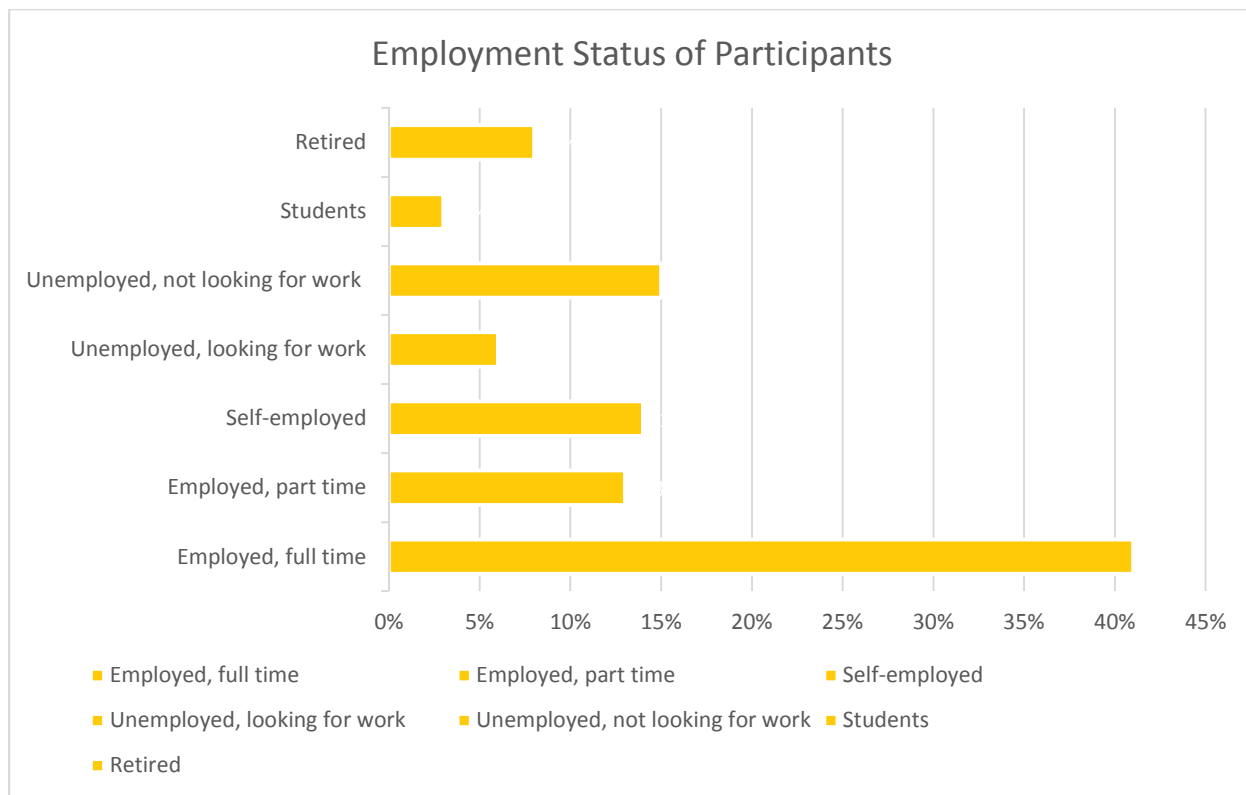


Figure 7: Employment status of participants

Those unemployed and not looking for work included individuals who were stay at home parents, those taking care of close others, and or those who receive Disability/SSDI or other supports. Some participants were both students and working full and/or part time positions. Those calculations are not accounted for in these percentages, as they have been absolved into the category that was most relevant for the individual.

4.2. Participant Shopping Habits

After participants completed the survey, subsequent interview questions were open ended. The main grocery stores frequented by participants in the city of Detroit and the closer metro-Detroit cities are Meijer, Kroger, Walmart, and Aldi (Table 8), followed by bulk stores like Sam's Club and Costco. After analyzing and coding the stores participants named, they resulted in 11 codes, with each frequently shopped at store receiving an individual code, and the grouping of others such as Local Grocery Stores, Farmer's Markets, and Ethnic Stores.

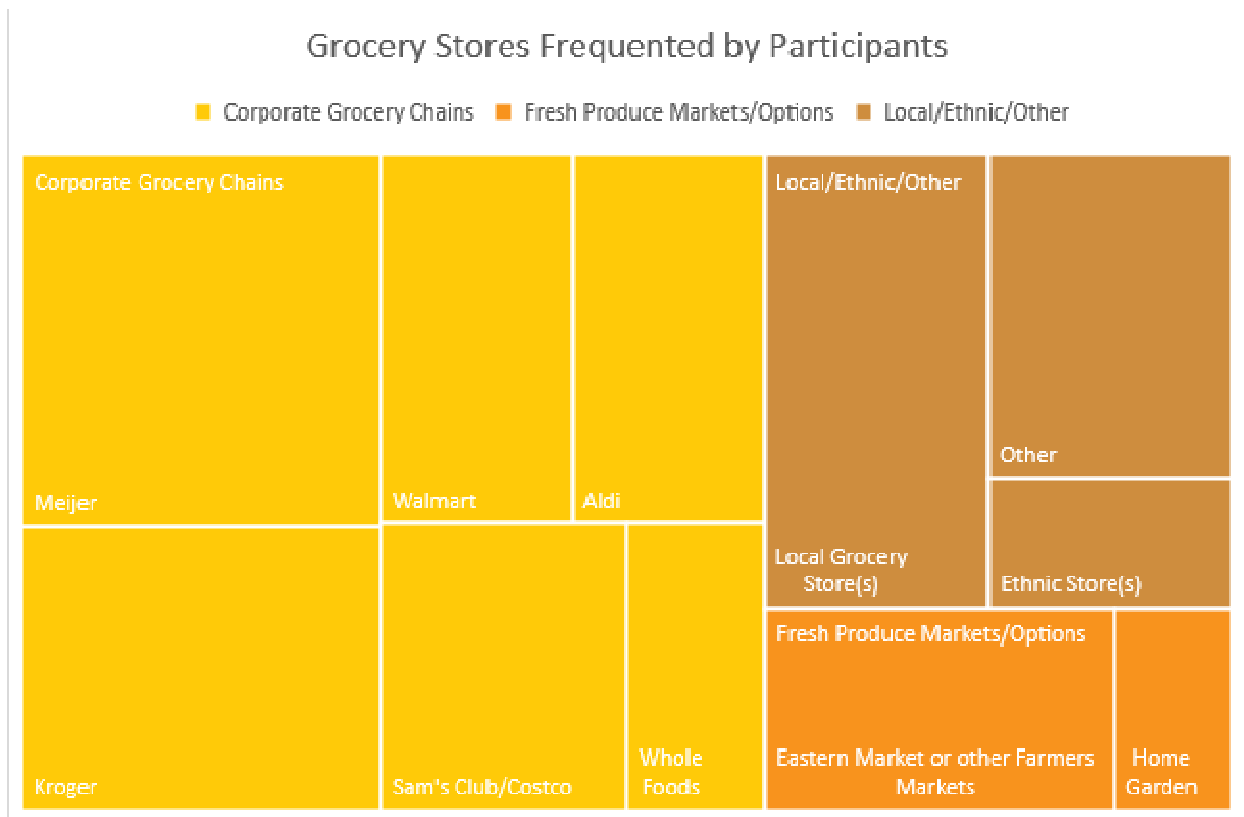


Figure 8: Grocery Stores Frequented by Participants

Driving made up 85% of participant responses of how they get to the grocery store (ref. Table 11). For participants who stated that they drive to the store, this was not always indicative of them owning a personal vehicle. Many are driven to the store by a relative or close other. Only 6% reported that they walk to the grocery store, 5% reported biking as a mode of transportation to

get to the grocery store, and one participant (1.15%) reported taking a bus to the store. A little over 3% reported using other services like rideshares and carpooling. Over 50% of participants reported that it takes them 16 minutes or more to get to the grocery store driving, meaning that walking to the store would either be impossible for the average resident or would take over 25 minutes both ways. 32% stated that it takes them about 13 minutes to get to the grocery store, and about 15% reported that it takes them about 8 minutes to get to the grocery store. Two participants specified that they worked in a grocery store, thus their average travel time to the grocery store was calculated by the time it takes them to get to work. Over 50% of participants shopped 2 – 3 times per month, 40% shopped 4 or more times, and less than 7% shopped only 1 time per month (ref. Table 10). Participants distinguished their shopping as either shopping when the refrigerator or pantry is low, regular planned shopping trips, and monthly bulk shopping, from small trips to the store or trips to grab just a few items that were missed. About 69% of participants reported to spend anywhere from \$75 to \$150 on groceries per trip, 23% reported spending \$250 or more per trip and 8% reported spending \$25 or less per trip. A cross tabulation of this data shows that majority of the participants (56%) who spend \$75 per trip and shop for groceries on average 2-3 times per month, spend approximately \$150-\$225 monthly. For most participants (50%) who spend \$150 per trip and make an average of 4+ trips to the grocery store per month is likely to spend between upwards of \$600 on groceries monthly. For majority of participants (72%) who reported spending \$250+ on groceries and average 2-3 monthly visits, they spend an average of \$500-\$750+ on groceries.

Time to Grocery Store	Percentage
2.5 minutes	0%
8 minutes	15%
13 minutes	32%
16 minutes or more	53%

Table 1: Time to Grocery Store

Frequency of Trips to Grocery Store	Percentage
1 - 1< / month	7%
2-3/ month	53%
4+ / month	40%

Table 2: Frequency of Trips to Grocery Store

Primary Mode of Transportation	Percentage
Car	85%
Bus	1%
Bike	5%
Walk	6%
Other	3%

Table 3: Primary Mode of Transportation

Amount Spent on Groceries Per Trip	Percentage
\$25 <	8%
\$75	33%
\$150	36%
\$250 +	23%

Table 4: Amount Spent on Groceries Per Trip

Either during the interview or after, many participants made a point to speak to their privilege to have access to foods, and their understanding that this is not common in the communities they come from. They highlighted that many of their neighbors or family members struggle with access to food, particularly those that are healthy and affordable, due to the lack of transportation and lower incomes.

“Yes. I have access because I have transportation. Some people in my community have limitations on their transportation. The store closest to me I don’t go into - Family Foods. I don’t go to them because of quality, plus I grow my own food.”

-Participant 17

One participant had extremely negative sentiments toward food access in the city stating the following:

*“Um, no. In the city of Detroit grocery shopping f***ing sucks. It's very expensive. It's, you know, it's just expensive as hell, like just even buying meat. It's outrageous how much groceries are. You gotta go somewhere so far, you know, like the reason why we shop at Aldi is because [its closer]. Aldi doesn't even have everything that you need all the time, cause they're constantly restocking with different things. So, we have to go out to Grosse*

Point to go to Kroger or to Southfield to go to Kroger or something like that. A lot of the time, it's a food desert. So, you have a lot of people who aren't able to get in the car and drive who eat very unhealthy food, because it's about what's accessible and affordable."

- Participant 76

Shopping Habits and Participant Demographics

Participants who reported grocery shopping 2-3 times per month made up 52% of responses, and they spent between \$75-\$250+ on groceries per trip (14 participants reported spending about \$75, 12 reported spending \$150, and 13 reported spending \$250+). Most participants who reported going grocery shopping 4 or more times per month reported spending about \$150 per trip. Only 5 participants reported going to the grocery store once per month. Of that 5, 4 reported spending \$150 (2) – \$250+ (2) per trip.

When comparing the employment status and household income to the amount spent on groceries per trip, the following results were generated. Of participants who reported the lowest household income (\$0-\$15,000), 40% reported the highest per trip cost for groceries (\$250). Participants who reported the highest incomes (\$75,000 - \$99,999; \$100,00 - \$149,999), reported spending between \$150 - \$250+ on groceries. Of the participants who reported their employment status as *Unemployed, not looking for work* about 28% reported spending \$250 or more per trip. Of those who reported that they are *Unemployed, looking for work* 11% reported spending about \$150 per trip. Between 39% - 46% of participants who reported full time employment spent between \$75-\$150 on groceries per trip. Comparing these findings to the household size, household income, and the income poverty matrix (shown below in table 13), those who make less tend to spend more on groceries.

2021 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA	
PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
For families/households with more than 8 persons, add \$4,540 for each additional person.	
1	\$12,880
2	\$17,420
3	\$21,960
4	\$26,500
5	\$31,040
6	\$35,580
7	\$40,120
8	\$44,660

Table 5: HHS Poverty Guidelines For 2021 | The 2021 poverty guidelines in effect as of January 13, 2021. Federal Register Notice, February 1, 2021 - Full text.

Based on Table 5, 20% of participants' household incomes would fall below the U.S. poverty guideline. However, because we took their income using ranges it is possible that 35% of participants' income fall below the poverty line. Participants had an average household size of about 2 – 3 individuals living in their household. Twenty-four participants (30%) reported a household size of 2. Of those 24 participants, 25% reported a household income of \$0-\$15,000 annually and 21% reported \$50,000-\$74,999. Sixteen participants (20%) reported a household size of 3. Majority of low-income participants (more than 40%) reported a household size of two, while about 47% had household sizes over the size of 3. This data shows that participants with larger household sizes need to spend more on groceries, many of whom have lower household incomes.

Sentiments Toward Local Grocery Stores

Some people felt that local grocery stores cater to the community they are in, while others felt the opposite. Participants described local grocery stores using terms like *accommodating, decent, and shitty* – ranging from positive, neutral and negative. Many participants voiced concerns about the cleanliness of the stores, the freshness and the quality of the meats and fresh produce, and the price of groceries. Due to the proximity or constraint of choice, manifesting in lower quality and overpriced produce and meat, some participants believe that local grocery stores take advantage of residents. Participants voiced their worries about the quality of the meat being past expiration, on the verge of expiring, dyed to appear fresh, or relabeled to be marked as newer meats. Other concerns were that the meat is processed in unsanitary and unclean areas, instead of in formal sanitary kitchen or deli facilities inside the store. Others stated that the vegetables and fruits are often rotten, expired, or smaller than produce at commercial stores like Meijer and Kroger, and yet still overpriced. One participant stated that the fruits never seem to be rotated and that the berries are not to be trusted.

“Up the street from me. I don't like them at all, the produce at all. Like when I bought strawberries from there, more times than not, the strawberries are bad on the inside, so I don't think they do a good job of, like putting out food that's good, that's not gonna go bad quickly and don't check the food. So, I really have to inspect the food that I get from these stores.”

- Participant 53

Another participant described the quality of the groceries as poor and lousy, as if the local grocery stores received the scraps that other stores did not want. They further described how the poorer communities seem to pay more money for lesser quality produce.

“... it's like my area is the last stop on the fruit and vegetable truck. You know, where they take off the good stuff and leave the rest, take up the good stuff and leave the worst stuff. And by the time it gets to my neighborhood, like I said, the bell peppers are tiny. The you know, the potatoes, you know, have a bunch of eyes on them. It's the produce in this area at all the stores. I'm not just getting on Glory. I'm talking about any store in my area. It's not a major food chain like Meijer. The produce is ridiculous. The prices are just ridiculous. [...] So, this is what happens in my, in these areas the poor communities pay more for lousier produce and vegetables. You see what I'm saying? Lousier cuts of meat, you know, things like that. Poor communities right up here, pay more for less...”

- Participant 40

Conversely, some participants did feel that the local grocery stores catered to the community. One participant even stated that at their local grocery store, if the vendor did not have what they wanted they could tell them and the vendor would order it. This was true for a few participants living in African American communities that identified foods like ham hocks and other pork products, turkey chops, and collard greens as foods being a part of their culture. Some participants mentioned that chains like Meijer and Kroger try to tailor their products to individuals who live in the adjacent community, such as having Kosher options in communities with higher Jewish populations, or collard greens during the Fall/Winter holidays in predominantly African American communities. Yet, some participants stated that the Meijer on 8 mile and Woodward price gouges because they know they are the only option for many in the city with its close proximity to one the cities only two transit centers, along with being one of the only major grocery stores in the city proper.

4.3. What is healthy food?

Participants were asked how they define healthy food. This was followed by questions on how, if at all, they implement healthy eating into their lifestyles. Questions about access to healthy food and healthy eating had varying responses. From eating healthy food being a privilege to the awareness of the necessity to eat healthy but the complete lack of desire to do so.

Access to Healthy Food

Perceived Access to Healthy Food	
Yes	71%
No	5%
Yes, due to car ownership or resilient nature	20%
Did not respond	4%

Table 6: Participants' perceived access to healthy food.

Participant often stated that healthy food is simply unaffordable and is not feasible, yet about 71% of participants perceived themselves to have access to healthy food. About 5% reported that they did not have access, and about 20% reported access with a specification that a car or because personal dedication was required; others specified that healthy food was available but lacked quality or affordability of the food. However, many of *Yes* responses came with a caveat or a justification. Some examples include:

“Yes. I have access to healthy foods but most of the time when I really want healthy, I do have to go out to the suburbs. I find more healthier foods in the suburbs than in Detroit. I have to go to Dearborn if I want raw juice and I don't want to make it myself. I go to this place called Cedarland. I find Mediterranean places have more raw juice.”

- Participant 12

“Yes. I am very aware that I am at an advantage that I can afford to have and drive to get what I want. “

- Participant 24

“Yes. Because I have transportation. Cause I think if I didn't, well, I know if I didn't have transportation, my options would be extremely limited. [...]yeah, we have one store that, in fact, it just burned down this summer. And when I was younger, everyone went to the store even though, you know, it was lower quality meat and the products up and everything. But, you know, your mother would take all the food stamps go and shop at these places because that's the only place you can go and you can afford if you couldn't catch the bus.[...]You know them canned goods, they will have all those canned goods. Knowing damn well, canned goods is horrible for you and stuff inside of canned goods. You know, That's why so many black women got cancer.”

- Participant 25

“Yeah, definitely. I think it's, because, like, just to add to that, I feel like definitely because I have a car. If I didn't have a car, going to Aldi would be a lot harder, because it's like, 10 minutes away driving. But that's like up Woodward. You know, it'd be like 20-30 minutes walking, too far to drive to walk that far out to get healthy food and the grocery stores right near me are like discount supermarkets and they're a lot more expensive, and it's not healthy.”

- Participant 26

“Yes, I fortunately, I do. I really do. Because I have transportation now. In my neighborhood, there's one grocery store. It's a Spartan grocery store, and I refused to go in there And I reported them to the department of agriculture because they were burning incense at the front door. They know that store was funky. And what makes something funky is that something is rotting and my best guess, they got rodents back there, where they're cutting up that meat is dropping everywhere. Clean it. That's why it's pink. So but that's the only grocery store in this neighborhood until you get all the way down to Livernois and that's a good five miles. And I see people carrying, you know, two bags in each hand, which means they've been grocery shopping for maybe a week. And they've gone to that grocery store that's up here on Seven Mile, and they've had to walk carry at home and they don't They produce department. You can't even really call it produce. It's pitiful. Yeah, they're basically canned goods store. Because I have, oh. It's your Spartan. Well, it's a spartan store. They carry Spartan products. Yeah. So I can get the things that I want, but I have one out of what did I run of? I ran out of apples, and I read I went up there to get a bag of apples, and I ended up not buying anything from the extra because the apples were all withered and weren't fresh, and it smelled terrible. They were burning incense at the front door.”

- Participant 31

“Yeah, I do. But like I said, like the grocery stores that I go to that are affordable or like a little bit of a drive away. And it's not as easy as I would like to.”

- Participant 66

“Yes, for the most part, not local. Not like hyper locally. I have to go a little further. No, no, no. Because the ones near the city don't have inexpensive organic sections.”

- Participant 75

“Not in a 10 mile radius. I have to go out for it. Luckily, I can access it, but it's definitely nowhere near me.”

- Participant 76

“In my immediate area, no. I was just complaining with a neighbor. The store right on the corner from me. Their stuff is old, and it's ridiculous. I don't even understand why the store is still in business.”

- Participant 77

“I do, just because I'm the kind of make a way out of no way kind of person. Where I can hopefully I can take whatever I'm given and make the best out of it, but then there are times that I have to research and go out of my way, like when I have to go to H Mart. “

- Participant 78

The one participant who stated that their main source of transportation is the city bus interrogated access, because while they felt determined to have access they know that the same is not true for many Detroiters who find themselves in similar situations.

“And see, that's that would be my thing, would be the access question. Do I have access? Because I'm self-determined, willing to go as far as I need to go to get it. But if I was just like a general person, I would say that because I got to catch the bus with so many hours or, you know, drag today that it's not like a necessarily easy grocery stores in the neighborhood. The foods are not always as fresh, as good as Walmart or could be. You know, um, stuff is not, uh, readily available, you know? I mean, so I'm answering these

questions for me, but most of the time, my heart is for my community, so I'm saying access to me is cool, but access in general is a struggle.”

- Participant 33

One participant spoke to the lack of access to regionally specific international produce and having to use online stores to access certain items.

“For the most part yes, I would like I mean, you know, I look up some foods online, and I think that there are more expensive food. There's more healthy food, but it's just not available in our area and then also, probably not even available. Most of it's not available in the United States, like those real special fruits and vegetables that are supposed to be for medicine and things like that. I think that that would be the best type of food, but, um, I probably should have said that earlier, but it's just that we don't think about those things because we don't have access to them.”

- Participant 74

Healthy Eating

To gauge participants' understanding of healthy food, they were asked to define healthy food, and what healthy eating was for them in a way that was true and realistic, based on their definition. Majority of participants defined healthy eating as fruits, vegetables, grains, with minimal meats, fatty foods, processed foods, and carbs. A few participants defined it as salad or foods that do not taste good. Others went more in depth on the lack of processing, nutritional value, foods that contribute to life and energy and helps you to avoid being sick. Another common theme was the mention of the expense of healthy food, with many saying that is expensive and costs the most out of all their grocery items.

“Things that are nutritious to the body, like fruits and vegetables. A lot of I would say organic food because, I look, I don't fast food isn't healthy to me. It's just convenient for a lot of people. And it's cheap so people consume it. Smoothies and all that. Clean eating in my opinion. But really, I guess healthy eating is to a lot of people are just being able to eat in the first place because a lot of people go hungry.”

-Participant 53

“I don't know why. I hope this isn't like a conditioned feeling. Like healthy food is a status thing. I'm fortunate to not be in poverty, but also, I'm not super well off. But like people who are in poverty, they literally have to eat what they can get, so it literally they eat whatever or they starve. And that happens a lot in Detroit. Then they eat whatever, and then their health is impacted because they're eating all this food that isn't good for them, but then they can't even go to the doctor, because they can't even afford food, let alone a freaking doctor. It feels like a really negative cycle, which is why I think a lot of people in the black community has an unhealthy relationship with food. Which is also why I think a lot of starchy foods, are the main source of food for a lot of people. Especially for like me. Carbs are cheap, you can get a bag of rice for a dollar in most places, you can get pasta, you get a lot of things that are carb based for really cheap and make your dollar stretch, the unfortunate thing, is it's just not good for you. Fortunately, my cousin works at a meat market, so we don't have to worry about meat. I wish it was a vegetable market, I wish the farmer's market was actually open, and I just think like the processed foods are very conveniently places in our community. Getting to the corner store is easier than getting to an actual grocery store, and you're going to get what you can get. So, you're going to get a pack of Ramen noodles even though the sodium content is so high, but you need to eat. I

feel like unhealthy foods are conveniently placed in our communities.” | “Expensive, like of course what you really want is the fresh food. It is expensive it doesn’t last long, cooking. Good when you make it right, it’s very delicious. I had okra for the first time this year, it was fried, but then I had regular okra and it was delicious. It feels like a status, it feels like for healthy food you have other things together in your life and it sometimes feel unattainable. Like you have to shop at Whole Foods, and the closest one to me is downtown and I’m not going all the way downtown to go to a damn grocery store. And also, why is it so expensive. It’s just so expensive. I would love to eat all organic food, I would love to eat possibly less meat, but it’s difficult to find alternatives sometimes, because they are so pricey.”

- Participant 57

Healthy Food and Perceived Health Status

When comparing participants’ responses to questions about healthy food and their responses to their perceived physical health status, there was generally a positive connection between the two. Generally, participants who reported healthy eating as a factor in their physical wellness also reported that they believe they generally ate healthy. The same was true for participants who attributed the lack of healthy eating to their perceived poor physical health. Many participants reported trying to eat healthy as a factor in their physical wellbeing but reported *No or Somewhat* to whether they believe they generally eat healthy. One participant who reported eating well as a factor of their physical health also reported that they do not think they generally eat healthy, and for them eating healthy is a 50/50 chance. Another admitted while although it appeared like they ate healthy based on their responses to previous questions and having reported that eating healthy was a factor in their physical health, they do not eat healthy.

Participants were also asked about food they enjoy, whether they believed them to be healthy, and whether they had access to them to make a distinction between foods that were not necessarily included in what participants considered healthy food. There was no observational difference between participants response to whether they had access to healthy food versus foods they enjoyed. Those who stated they had access to the food they enjoyed also specified that they have easier access to junk food, fast food, carbs, and other potentially unhealthy foods, than they do to healthy foods options.

Many participants answered that they are only eating healthy a percentage of the time. One even highlighted the privilege of eating healthy.

“Generally. I'm not perfect I don't think anybody is, [...] also in our world there is a privilege to eating well, and I'm not breaking the bank and so if I'm having a stressful day and I need a pick me up I'm not ashamed to say that I'll eat a bag of chips. But I'm also not going to subside on that and I'm fortunate enough to have been taught that I think a lot of people unfortunately do not have the nourishment and guidance that provides them with that knowledge. Again, I think it is just making sure that we are more often than not making the good decision and that makes it a lot easier to make the bad decision occasionally.”

- Participant 5

These same sentiments were echoed across other participants' responses throughout the entirety of the interview. One highlighted that they felt society has made accessing healthy food elitist or a status symbol, that only a certain “kind” of person with a certain level of income and other forms of accessibility and freedom could obtain it.

One participant maintained a plant-based diet and alluded to their physical health being positively impacted by what they eat, but admitted it was difficult. While they know how to eat healthy, they often are not.

“No, not for the most part. I can, but that's a discipline. That could be a discipline or an emotional issue as well for me. I will have cabbage and fruits and veggies in the refrigerator and still order a pizza. And I can cook very well. And it's not because I'm lazy. In my opinion, it can be a form of [food] abuse.”

- Participant 23

Several other participants attributed some of the difficulty factors of maintaining a healthy lifestyle to the environment they live in.

Mental Health and Healthy Food Consumption

Participants were asked to rate their mental health and wellbeing on a scale from 1-Very Good to 5-Very Poor, with the other options of 2-Good, 3-Neutral, and 4-Poor. Over half of the participants reported being either *Good* or *Very Good*, 36% and 32% respectively. Twenty four percent of participants that reported *Neutral* mental health and wellbeing, followed by 5% who reported *Poor* and 3% who reported *Very Poor* on this question. Between 70% and 80% of participants reported they perceived themselves to have good physical health, which correlated to their sentiments on whether they generally ate healthy and their positive perceptions of their mental health and wellbeing. This was solely based on how participants perceived their health, with no outside definitions given.

4.4. Culturally Appropriate

Before participants answered the questions asking them how they defined culturally appropriate and, more specifically, culturally appropriate food (CAF), they were asked how they defined the culture they belonged to, the foods they identified as being part of their culture, and whether they believe the foods they defined as being a part of their culture to be out of choice, tradition, or necessity. For the later question, participants defined necessity as either food needs to survive, or food chosen because they have a lack of access to other choices. Tradition was defined as foods passed down from parents, grandparents, or other ancestral lineage; and choice was defined as food chosen from a place of access or desire.

Defining Culture

Participants were asked, “*How do you define the culture you belong to?*”. Responses fell into the categories of race/ethnicity, religion, regional/location specific, and/or qualitative descriptors. This question was used to start to inform whether participants’ food buying and consumption habits were culturally inclined, specific, and /or appropriate. This inquiry was followed by what foods participants used to define their culture.

Choice, Tradition, Necessity

The question asking about the food they consider to be part of their culture gauged whether participants felt like the foods they ate were foods they were inclined to culturally or otherwise. After answering this question, they were asked if they would consider the foods they defined as being part of their culture were due to choice, tradition or necessity. Their response was attributed to their larger food diet, rather than individual food items. Most answered the question in terms of what their present diet consists of, while others gave detail into their diets from childhood and even early adulthood. All but 3 participants answered this question. The most popular combination was

Choice and Tradition, chosen by about 26% of participants. Participants by the selection of all three responses, Choice, Tradition, and Necessity, chosen by about 22% of participants. Tradition alone was the third most popular response (~15%), then Tradition and Necessity (~13%), and Choice alone (~12%). The remaining participants chose Necessity alone (~5%) and Choice and Necessity (~7%).

As previously noted, majority of the participants identified as Black/African American in the demographic survey, which closely aligned with how they defined their culture. This was similarly true for other participants as well. Participants who identified as Black were more likely to suggest that their food choices were out of '*Choice and Tradition*' or '*Choice, Tradition, and Necessity*'. This was followed by '*Tradition alone*', '*Choice alone*' or '*Tradition and Necessity*', and lastly, '*Necessity alone*' or '*Choice and Necessity*'. There were only six participants who identified as White. Two out of six participants chose each of the following respectively, '*Tradition alone*' or '*Choice and Tradition*', and one out of six chose '*Choice and Necessity*', with the other choosing all three. Because of the low number participants who identified as Native American/Indigenous, Asian/AAPI, Latinx, or Other, there is no evident pattern in their choices, as each individual from these categories chose differently.

A few participants noted that suggesting food is a necessity is a privileged statement. Those who made this conclusion understood necessity to be eating what the body needs, those who concluded the opposite interpreted necessity as the food that one has to buy in order to survive, often cheaper less healthy options. Generally, most others saw suggesting food as a choice was a privileged statement. As it implied the ability to choose what is going into your body on not just an intellectual level, but from a position both financial and physical accessibility.

“Tradition and necessity because healthier foods are more expensive. Don’t get food stamps. Have to cook daily to fit my children’s’ palettes. Cultural.”

-Participant 19

Many participants noted that the foods they ate growing up were out of necessity or often tradition. However, some explained how through education on healthier more nutritious food they have shifted their diets. Those who listed traditional foods such as Soul Food or Authentic Parsi Cuisine occasionally lean on traditional foods for a sense of comfort and enjoyment. Many noted that foods that were once bought out of necessity, for example due to a lack of financial resources, later turned into traditional foods either in their family or within the culture they identified with. Some participants who identified as Black/ African American and/or Afro-Latino stated that prior necessity was often rooted in slavery - noting foods that ancestors with blood ties to the African continent had depended on to survive in the Americas. This is where many believe Soul Food originated, foods that enslaved Africans and their children had to make suitable for themselves. Often parts of the animal discarded by their slave masters, along with fruits, vegetables, and beans that stuck to the stomach or had a longer shelf life.

What is culturally appropriate?

Before participants were asked their definition of culturally appropriate food (CAF), they were asked how they would define “culturally appropriate”. This was used to gauge their understanding of the term and how that contributed to their definition of CAF. Although 72% participants gave definitions to culturally appropriate, 15% did not give a definition, and 6% jumped right into defining culturally appropriate food or used the same definition to define both culturally appropriate and culturally appropriate food. Eleven participants skipped the question to answer the

succeeding question of how they would define CAF. Responses were later coded in several categories – *Values*, *Foods*, *Practices*, *Identity*, *Accessibility*, and *Appropriation*. In defining “culturally appropriate” many participants used words like respect, symbolic, and traditions, which influenced how definitions were coded during the analysis process. Approximately 58% of participants attached cultural appropriateness to tradition in some form, *Values*, *Food*, or *Practices*. This included traditional values and symbolism, such as respect for elders and others, manners, “traditional” households (having both male and female heads of household present), courteousness and assisting those in need, which 22% alluded to; these were coded as *Values*. Participants whose responses were coded as *Values* included concepts such as morals, traditional values, and respect for others. This varied from respect for your elders, for your parents, for youth, to simply respecting other people’s cultural values and identities. Twenty-eight percent of participants related to traditional practices or displays of cultural relevance; these responses were coded as *Practices*. Participants whose responses were coded as *Practices* included practices like family gathering, attending church, people’s vernacular, the way music is made, stories are told, and hair is styled.

Those responses coded as *Food* that had a definition separate from how they defined CAF related it to the preparation styles, from the method use to cook the food and seasoning and ingredients used to prepare a dish, this made up 9% of participants. For example, some Black participants specified the use of seasonings on chicken and the absence of raisins and cranberries in potato salad which is often stereotyped as White cultural norms. About 6% participants defined culture as being a part of their identity. At least two participants addressed how culture is not monolithic or dichotomous, and how often intersectionality blurs cultural “lines” creating

subcultures and variations amongst those who may physically, racially, ethnically, or otherwise be assumed to share a common culture.

“Something that includes elements of my identity. Which may or may not always be African. You know I was raised in this country so there are things, like you know I kind of reject the dichotomy that you’re either bougie or ghetto. I was raised with certain things that are considered elite and European, but I was raised with certain things that are considered African and African American. So culturally appropriate to me is something that is inclusive of my identity and that resonates with me.”

- Participant 9

Some participants answered the question of how they would define culturally appropriate as culturally acceptable, culturally specific, culturally relevant and even cultural appropriation. Those who understood it as appropriation, 6% of participants, defined what culturally appropriate is not, rather than what it was. They defined it as not being exploitative or benefiting off others culture for personal or financial gain. They went further to say taking credit for a cultures traditional way of being with no appreciation to the appropriated culture, essentially claiming a cultures’ norms as one’s own with no direct or indirect attachment to the culture. Examples they gave included an Indian restaurant run by White that did not benefit Indians or have connections to Indian culture in any way (Participant 32), and Boba Tea shop run by a White person with no connections to Taiwan, only for financial gain (Participant 65). Another example highlighted being respectful and not mocking or appropriating other cultures’ language and practices, like if there is an interest in anime and you visit Japan to simply enjoy the culture and not try to assimilate into it in a way that is disrespectful (Participant 53).

Others spoke to the depth of cultural appropriateness. One participant spoke about how culturally appropriate could be defined as both traditional practices and necessity.

“I guess I'm kind of like a literal person. And...culturally appropriate views in terms of food,...it just comes at me as somebody is trying to do something negative to me when they talk about what's culturally appropriate...there are things that people have traditionally eaten, based upon what they had access to. And I know you know that. I mean, we ate chitlins, because that was the only part of the meat that when meat was prepared, black people that were in slavery could eat. But then I know too as a Farmer, you use all parts of the animal, you know, I and I know from my Indian ancestry. I don't know if they ate the guts, but I know that they used intestines and bladders and that kind of thing, skins to carry water. Everything was used. So, and I guess I'm literally placing usable with appropriate, you know, and that's confusing. [Foods] like Nutter butters [are] culturally inappropriate because they don't feed the body.”

- Participant 31

About 6 participants, defined culturally appropriate as either having access to certain amenities (4%) or as something that is not harmful and only serves as a benefit (4%). Examples of accessible amenities were quality grocery stores, or shoveled snow in the suburbs versus in the inner city.

What is culturally appropriate food?

Participants responses to *what is culturally appropriate food*, were coded based on recurring themes and sentiments resulting in four categories – Tradition, Accessibility, Taste or Preparation Methods, and Healthy Food. Tradition was based on what a participant identified as personal, family, or perceived cultural traditional practices. Accessibility was based on both

physical and financial access to foods. Taste or preparation methods came from participants expression of the way foods are prepared differently based on the culture they come from, from seasonings to the way a meal is cooked. Lastly, healthy foods were largely defined as fruits and vegetables, and foods that are nourishing to the body.

When analyzing participants' responses to how they would define CAF, 43% connected it back to *Tradition*, 5% defined their current culture apart from their traditional norms. These traditional norms were often linked to slavery for African American and Aro-Latino participants. This included traditions around Soul Food, that some people referenced as slave food. Foods consumed by enslaved Africans out of necessity due to the need for substantive meals and restricted diets from slave masters. Overtime this resulted in commonly consumed foods in these communities that became a part of these communities' cultures. Thus, while these foods may not be rooted in cultural norms (i.e. foods consumed by indigenous and African ancestors) they are now deemed culturally appropriate due to the adaptation of them by a particular group of people.

Accessibility was the sentiment behind 8% of participants' definitions to CAF. What they deemed as culturally appropriate was largely based on what they had access to and what they did not. *Taste or Preparation Methods* made up 10% of participant definitions. Participants defining it in this way made note that many cultures eat the same foods – i.e. chicken, rice, pasta – but the preparation (baked, fried, steamed, broiled), seasonings (spicy, umami, savory), and even flavor combinations may vary or be definitive of a certain cultures' norms or appropriateness. *Healthy Food* made up another 8% of participant definitions. This included participants who may have affinity with traditional Soul Food but has a greater desire to consume healthy food. Many took on this definition, proclaiming that it fit outside of the stereotype of their perceived culture.

Lastly, 6% of participants defined it in other ways, like appropriation or not feeling like they belonged to any culture and their food habits reflected that. Participants who identified as White admitted to having a hard time defining initially their culture and eventually CAF. A few White participants noted that as a White person they didn't feel like they had a culture, and their taste were influenced by what they ate growing up, but largely now living in communities that are predominantly Black and Latinx. Although some participants spoke to Soul Food as being of their culture, some noted that they are moving away from traditional preparations into more healthy methods as part of their newly established culture for themselves and/or their household. Therefore, they were more inclined to enjoy foods they defined as Mexican or "Black" food, Soul Food. Out of all of the participants 19% did not believe that CAF was something to be defined. As most participants who responded in this way felt that people should be free to eat whatever they want and have access to it, whether it is a part of their traditional food palette or not one should have the freedom to explore, and because of this variance by household and place there is not a singular definition for CAF.

Below are participant responses that captured resonant sentiments in each category:

"I think everybody's [food is] culturally appropriate food. I think maybe they grew up on [it], but as they age or learn to try different things then they adapt. So, their culture, even though they may have grew up eating one sort of food as they get older, they have adapted to another. So most of cultural food. I guess it's not. You have a lot of people that are not African American that eat fried chicken, baked chicken, boiled chicken. I guess that's how much you consume it and what people consume... like my husband, he eat[s] oysters. I don't too much care for them, ... He likes oysters. I mean, he used to be a sous chef, so he tries different things. So, me, I just look at it and it don't look appetizing me, but to him at one

point, that was his thing. So culturally appropriate, I think every culture has, there are certain things that they may out of tradition like to eat, and that may bring a definition of their culture. But it just, I guess, in some ways, depending on what people have access to. If you can't get to the store and this store sells, certain types of food, then people adapt to that and then that's what they choose to eat, because that's what they can get to, and that's what they can afford. So it's unique."

- Participant 42

"Vegetables [...] I don't know if my answer is going to be considered racist, but I'm being honest. I would define culturally appropriate food out of the African American box for me, the fatty foods, the greasy food. Those are not culturally appropriate for me. Because to me, that is like the number one demise of African Americans. You know, we're so big on flavor, but we're it's all about the food tasting good. But what about the food being good for you? So I'm really big on the food being good for me. I don't care how it tastes. You know, I always tell my daughter, you know, cause she don't want to eat vegetables and like you want to say ew now, than ouch later, cause you didn't put the right foods in your body, you know?"

- Participant 55

"Is it something that is accessible at an affordable price? Are you able to get there without barriers? Fruits and veggies. Affordability. Able to be preserved. Can I use it. Do I know how to use it?"

- Participant 18

"I don't think there is such a thing as culturally appropriate food. Food is food. I wouldn't mind if a white person had some fried chicken, or if I wanna eat some pasta or tahini or

garlic paste or something. Food is food, you don't restrict yourself to one kind of food. You want to eat other things to expand your palette, expand your experience. Or you eat what you can afford to eat, what you can afford to buy."

- Participant 4

"In terms of food, if it's culturally appropriate, I think you know food that is tasty and seasoned well."

- Participant 45

"I would call that being a well-balanced diet. I don't think it's one specific food over another and maybe not even, I guess when I think of culture, I think to some degree the different ethnicities and I'm of the opinion that as long as it's healthy as long as it's tasty, I wouldn't mind trying something. I know that within the African American race, they say Soul Food, but quiet as it's kept not all soul food is healthy food. So yes I like greens, but I probably don't make my greens the way that the average Black person or "African American" person may make it. I'm not going to boil out all of the nutrients out of it, you gotta keep those nutrients, and they can be tasty, but you know they're not what perhaps, is "culturally accepted". So that's what I'm saying, you gotta be careful, or at least I try to be careful and understanding of the differences and what not. "

- Participant 61

Access to CAF

Participants were asked whether were able to buy CAF from the places that they bought their staple groceries, as self-reported at the beginning of the interview. As mentioned previously, some of the most popular stores participants frequented are outside Detroit city boundaries, and

majority of participants reported having access to transportation by way of car. About 62% of participants reported that they are able to purchase culturally appropriate food from the places they buy their staple groceries. About 11% specified that they have to go outside of Detroit to the surrounding cities and suburbs like Madison Heights, Troy, Grosse Pointe, Hamtramck, Dearborn, and some as far as Utica, Novi, or Ann Arbor to obtain better quality produce, cheaper, and more culturally appropriate foods. About 10% stated that they could find some items, but are more likely to go outside of their normal stores to get them, including places outside city limits. Lastly, 13% reported that they did not have access to CAF from the places they buy their staple grocery stores.

When looking at the participants responses to the question on CAF access in combination with where they shop for groceries, we get more in-depth results. Of the 62% of participants who reported that they can purchase culturally appropriate food from the places they buy their staple groceries, 20% reported that they had to go to regular stores outside of the city to purchase them, about 6% reported going to ethnic grocery stores outside of the city, and 4% reported using online shopping, personal gardens and farms, or other's farms to obtain CAF. Of those reported having to obtain CAF from outside the city 33% reported that they were the same chain stores in the city or bordering the city, but in further suburban areas and 22% stated that they go to ethnic stores outside of the city. Of the eight participants who reported that they could access CAF from the places they bought their staple groceries and other stores outside of the main stores shop at, four were able to find CAF from stores in the city, two had to go to regular stores outside of the city, and two used online shopping, personal gardens and farms, or other's farms to obtain CAF.

4.5. COVID-19 Impact on Participants

Due to the coincidence of the global pandemic and the research study place, it was important to ask participants about how the COVID-19 Coronavirus pandemic impacted their food

buying habits, their work or income, and their physical and mental health and wellbeing. This informs our interpretation, considering whether the answers participants reported were impacted by the pandemic. As to be expected, most participants were impacted in at least one of these categories (food buying habits, work/income, and physical/mental health and wellbeing). While the pandemic shifted the lives of everyone, not all responses were negative. The first participant was interviewed in September 2020, about 7 months after the World Health Organization declared a pandemic and the U.S. President declared it a national emergency. Therefore, since the first wave of interviews happened during the height of the virus, responses varied from those interviewed toward the end of the study; with the last interview taking place in January 2021 nearly a year after the advent of the virus. Those in the beginning, expectedly were very cautious and worried, while toward the end it seemed many had found rhythm and some level of “normalcy” amidst a more accepted global reality.

Participants responses to whether the pandemic impacted their food buying and consumption habits generally related to stores’ low stock, the desire to stock pile food in case of an emergency, reduced trips to the grocery store, and either eating out less or ordering in more. Many participants were upset about the increased price of meat since the pandemic, along with what some referred to as excessive price gouging in neighborhood stores.

When asked about physical wellbeing, some participants admitted to gaining weight, while others offered that the stay in place orders executed by Governor Whitmer offered them the opportunity to work out more. For those who mentioned gaining weight, it was mostly attributed to increased sedentary behavior while being at home and working from home. Apart from the Qualtrics survey, the open-ended question about physical and mental health and wellbeing gave more nuance to participants’ emotional states, leading to varying responses in relation to their

mental wellbeing. Some felt a sense of relief from lowered responsibility, while others fell into depressive states. They attributed feelings of depression or mood swings to the number of deaths caused by the pandemic; some were directly impacted by losing a relative or close other, contracting the virus, or having anxiety about the virus. Other factors contributing to some participants' reporting depression was the lack of physical connections, the impacts of social distancing, and lack of contact with family. Along with factors such as job loss, a heightened social awareness of systemic racism that came to a head during the summer of 2020, and other events across the world caused many people to detach or desensitize.

Chapter 5: Discussion and Conclusion

5.1. Discussion

Based on the responses collected from participants, culturally appropriate food is typically related to foods that people are inclined to traditionally, foods that are healthy, and foods that are accessible. Participants' responses shed light on the roots of some traditional foods coming from necessity that became normalized traditions overtime. So, while foods may be culturally relevant, they are not always the best or healthiest foods. Many participants highlighted this during their interview, where some made distinctions in the foods they consume now versus those they consumed during their upbringing, and how their food culture may have changed over time. Amongst the Black participants there seemed to be general understanding that many traditional foods are unhealthy and there is a percentage of people that are starting to seek access to food that is healthy, good quality, affordable, physically accessible, and balanced. Access to basic quality and affordable produce items and meat options was a general desire for participants regardless of background, and until it becomes a norm, healthy food will be a privilege reserved for those who have access to reliable transportation, sufficient income, and live-in areas that carry these items within a 1-5-mile radius from where they live.

Majority of participants' reported having access to healthy food or CAF, though other variables showed that this access came with caveats. Some of these caveats were articulated by participants directly, for those who characterized their access with their position of privilege, by having access to a car, loved ones who are willing to take them where they needed to be, or the determination to get what they wanted where they wanted. However, the data exposed other unspoken inequalities. It showed that many low-income households spent more on groceries monthly. It also showed that more than half of participants must go outside of the city to nearby

suburbs to access CAF and staple goods (Anguelovski, 2015; Cook, n.d.; Zhang & Ghosh, 2016b). While the sample size was not large enough to apply the findings to the entire population of Detroit, they did reinforce the disparities predominantly Black communities' experience.

One of the most relevant takeaways from the research was the affirmation that access and education influences diet. Many Black participants identified soul food as part of their diet, either currently or from childhood. Some noted how soul food is not the healthiest, particularly when cooked in traditional ways. Because of its unhealthiness, some have begun to either move away from these traditional foods all together or have adapted preparing the foods using methods that better suit a healthier lifestyle. Participants throughout the study highlighted the amount of access they have to low quality, unhealthy foods, that are often easier, faster, and more affordable (J. P. Block et al., 2004; Fleischhacker et al., 2011, 2011). The lack of access to healthy and affordable foods has created a detrimental culture around food, food access, and food education.

The varying responses from participants about how they would define CAF, resulted in some key points around what CAF can mean, which in turn could lead to multiple definitions depending on individuals, communities, and context. The ideas that came up most amongst participants were foods that people are inclined to traditionally, foods that are healthy, and foods that are accessible. These may not always coincide, as many noted traditional foods such as soul food can be accessible it is not always the healthiest. The study also allowed for an understanding of the way individuals in underserved communities understand and view CAF. For some, there was no definition for this term. For others it was about honoring heritage, tradition, and creating new ones. Others saw it as accessibility and/or health foods. Healthy food is nutritionally dense and high quality, and accessible means affordable regardless of socio-economic status, conveniently placed, and provided with equitable education for its highest use. While this study

may not have come to a clear understanding or general consensus of what CAF is, I believe it highlighted the still prevalent issue of food access in Detroit, regarding the lack of physical accessibility, affordability, and education.

Local Grocery Stores, Land Use Planning, and Access

Through one-on-one interviews with 79 residents of the city of Detroit, this study exposed what some residents see as gaps in their food system. Majority of participants carried distrust and disappointment towards local grocery stores, with several complaining of the poor quality of produce, the lack of cleanliness, and the excessively high prices (Bower et al., 2014; Passidomo, 2013), leading some residents to conclude that they take advantage of them by price gouging (Bower et al., 2014). Others noted that they see local grocery stores owners as having a lack of respect for residents, leading them to care less about the quality of what they are selling them. While 13% reported that they shop at local grocery stores, only a few had positive associations.

Overall, the results showed that participants are willing to travel to access the foods they need, with over 80% reporting having to drive more than 8-16 minutes to get to their regular grocery store, many of whom shop at more than one per trip. It is important to recall that the participants of this study on average had higher educational attainment and income than the average Detroit resident, which might suggest that they have different choices and access than other residents. At least 10% of participants mentioned either gardening themselves or shopping at local farmer's markets (White, 2011). This begs the question, what if Detroit residents could have access to the foods they need in a convenient location that does not sacrifice quality or affordability? Particularly residents of color who have been underserved and neglected for decades.

Transportation Planning and Access

When participants were asked about how they perceived to healthy food and CAF, more than 60% of participants reported that they have access. However, responses to where they typically shop for groceries and CAF revealed that majority shop at grocery stores outside of the city, reinforcing that many lack access to these foods within the city. Whole Foods and Meijer are the only two chain grocery retailers inside of Detroit city limits, and generally sell better quality produce in comparison to local grocery stores. Though their high prices, as well as their locations, make them virtually inaccessible to residents. Twenty percent of participants reported that they had to travel miles outside of the city to get better quality and more affordable foods, although there are grocery retailers such as Kroger, Meijer, and Aldi in or adjacent to the city. Multiple participants explained that because they have access to a vehicle or because they are self-determined they can access the foods that they need.

2019 ACS Census data shows that about 83% (~566,566 residents) of Detroiters depend on a car either driving alone or carpooling to get to work, about 7% (~47,239 residents) depend on public transit, and about 4% (~26,994 residents) walked (U.S._Census_Bureau, 2019). These percentages show that majority of Detroit residents must depend on cars to access what they need. Detroit has a difficult past with public transit in Southeast Michigan in the past few decades, most of which can be attributed to racism and finances/funding (Anderson, 2014). The city currently has two bus transit systems – the Detroit Department of Transportation (DDOT) which is public and the Suburban Mobility Authority for Regional Transportation (SMART) which is private and not controlled by the city. The lack of transportation has been a deal breaker for many large corporations interested in bringing businesses into the city, this has helped to inspire projects like the QLine, and catalyze greater efforts into redeveloping neighborhoods and multi-modal

transportation on major thoroughfares like Woodward, Livernois, and Cass (Williams et al., 2018). The city has yet to improve bus routes, access, and dependability and restore citizens trust in the bus system. In light of the COVID-19 pandemic, this may prove more difficult, especially with bus transport

Public health emergencies such as obesity, asthma, heart problems, and others can in part be attributed to planning. Through the lack of pedestrian-centered transportation, the improper placement of industrial sites, and the like (Antipova et al., 2020; Kelly et al., 2007). These health complications are exacerbated by low access to CAF. Such issues are deeply rooted in systemic injustice and will not simply be solved by placing grocery stores in these communities (Allcott et al., 2017; Anguelovski, 2015; Cheadle et al., 1991; *Food Access*, n.d.; Grigsby-toussaint et al., 2010; Zhang & Ghosh, 2016b). As this study shows, current local grocery stores do not address food problems in various neighborhoods across the city of Detroit. Scholars have revealed that issues of access deal with race, income, education around healthy and nutritious foods, and other inequalities such as reliable public transportation (Agyeman, 2020, 2021; Byrne, 2019). All of which stem from long standing systemic injustices.

5.2. Implications for Planners and Policy Recommendations

As the profession of planning expands, so does the understanding of its necessary interdisciplinarity. The next few paragraphs will highlight implications and propose policy recommendations that planners can use to positively influence citizen's lives in the way of food access. These policies address areas of transportation planning, land use planning, local government funding, community engagement, development, and outreach measures. Policies will be directed to private and public practicing planners, planning educators, developers, and public officials who impact city and regional planning efforts. Detroit has taken the first step by

incorporating food access and relating topics into their master plan of policies by identifying the issues the city face in relation to food such as,

*“The lack of nutritional education, **prevalence of unhealthy food**, and poor exercise habits contribute to health problems and increase vulnerability to disease and illness.”*

- *Detroit Master Plan of Policies, Health and Social Services Section*

They have determined to solve these issues with some of the following goals and policies:

Goals from Detroit’s Master Policy Plan – Health and Social Service Section	
<ul style="list-style-type: none"> - GOAL 2: <i>Improve physical fitness and diets</i> <ul style="list-style-type: none"> ○ <i>Policy 2.1:</i> Encourage collaboration between city agencies and community organizations to provide nutritional and physical fitness programs. ○ <i>Policy 2.2:</i> Discourage the availability of food products with low nutritional value in schools, recreation centers, and other public facilities. ○ <i>Policy 2.3:</i> Encourage and facilitate community gardens to increase availability of fresh produce. ○ <i>Policy 2.4:</i> Develop a plan to insure access to quality and variety of nutritious food. ○ <i>Policy 2.5:</i> Advocate for more and access to fitness facilities and safe places to walk. 	
	<ul style="list-style-type: none"> - GOAL 8: <i>Increase support services for the City’s homeless population</i> <ul style="list-style-type: none"> ○ <i>Policy 8.1:</i> Expand mobile health and food distribution teams to provide outreach to the homeless population.

Table 7: Goals from Detroit’s Master Policy Plan

For Local Government

The city should fund community efforts fighting to “insure access to quality and variety of nutritious food”. Goal 2, Policy 2.4 is a noble start, though developing yet another plan for this issue may take time this issue no longer has. It important to take action now and actually listen to what the community needs. The city can start by building bridges with the pre-existing community organizations already doing the work to sustain the food system and provide access to low-income people of color. For example, Detroit Black Food Security Network’s efforts

towards a Detroit People's Food Co-Op (DPFC) has been a vision in the works for nearly a decade. During the initial visualization, funding, planning, development, and openings of both Meijer and Whole Food's Detroit natives and other individuals passionate about the mission of a food cooperative began to develop plans for DPFC. The Co-Op has a four part mission that all works toward serving citizens of the Detroit community through access to fresh and healthy food, education on nutrition and sustainability, supporting local businesses, and providing DPFC Members access to resources they need (*Mission & Purpose | Detroit People's Food Co-op*, n.d.).

Creating more policies to address situations such as these will be null without significant action and greater efforts supporting financial investments in local businesses and organizations, particularly those that represent the communities they are supporting and have dedicated themselves to the work of improving their communities (Raja, Raj, et al., 2017). Support for these businesses and community builders will support the economic development of the community and strengthen the community fabric by having locally grown entrepreneurs who have greater understandings of what their community needs. Another example of where Detroit can fund community owned grocery stores is the young man who, two years ago, began his mission to transform an abandoned liquor store into a grocery store for his community. This will be the first and only black owned grocery store since 2014 (Golston, 2021).

For Planners and Community Organizers

Planners have a moral and civic obligation to repair communities that planning intentionally dismantled and disadvantaged (Agyeman, 2020; Weibgen, 2019). Planners must plan more in real time, as planning for a future they hope to see, more often than not leads to them not planning for those who need help in the now (Weibgen, 2019). Evident in Detroit, as many Black

residents have expressed that the newest planning and development efforts over the last decade seem to be for the affluent white population the city hopes to attract rather than its current residents. Planners in the city influence master plans, development, and redevelopment monthly. In relation to food access and health planners can assist the community through anti-racist planning efforts through zoning practices, coupled with restorative community engagement throughout planning and development processes.

There are scholars that liken zoning to redlining, as many codes create restrictions that disproportionately impact low-income communities of color. Exclusionary zoning codes, limit housing to single family units, that are generally unaffordable to low-income families (Weibgen, 2019). Many cities are only recently beginning to write agriculture into city/urban zoning ordinances, like agricultural overlay zoning (Coffey, n.d.). Zoning can also influence mixed-use corridors in city neighborhoods to incorporate room for multiuse compounds providing housing, food access, educational services, health and walkability. In turn, pairing commercial units and with more flexible housing increases financial and locational access.

Planners should use these practices to influence access to CAF. Planners can influence development by encouraging zoning that permits neighborhood grocery stores in more accessible areas throughout the city, where residents can access them by various modes of transportation – walking, biking, public transit – and not just in areas like Midtown and Corktown. It should be noted that simply placing a grocery store in neighborhoods is not an “end all” solution, as proven by various scholars in this area, it will take further actions and upkeep (J. P. Block et al., 2004; Bower et al., 2014; Eckert & Shetty, 2011; Ledoux et al., 2017; Pothukuchi, 2004, 2016). Options for planners to support that do not require extensive development is contractual agreements with urban growers that allow them to set up fresh produce stands in certain neighborhoods on a weekly

basis that allows for the use of supplemental government funds toward food, such as SNAP, WIC, etc. These contracts should also financially supplement growers to allow them to sell produce at an affordable rate for residence, but also maintain their own business operations in a way that is not extractive. Providing food inside places like corner stores, liquor stores, dollar stores, and gas station has proven to be ineffective, as the association of purchasing dependably fresh foods from these spaces does not exist (Pothukuchi, 2016).

Planners should ensure protections for residents and their communities by making provisions for them through the projects they approve. This could take shape as planners only permitting new projects in underserved neighborhoods if a portion of development and proceeds go towards improving the infrastructure of the community within a certain mile radius, they provide CAF, and the pricing matches what people in the community can afford based on the income of the community. On the other end planners should also offer incentives for business owners building in neighborhoods that are not as economically stable as Detroit's most popular areas.

A common misconception is that people of color, particularly Black people, do not desire or like development. To believe this is to erase the years of historical trauma caused by “development” that Black communities have faced. The use of restorative and therapeutic planning would encourage increased levels of patience, sensitivity, and action in these communities (Porter et al., 2017b; Sandercock, 2010). Such practices are unconventional and ineffective when lacking consistency and action, but they can be effective in restoring relationships with disaffected residents. Those who are in positions to help and serve residents must maintain a balance, as not to risk participating in exploitative community engagement practices, which would require justly compensating community members who are offering ideas, time, energy, experience, and local

knowledge to further a project along (Arnstein, 2019). It is also suggested that governments and planning officials include larger amounts of community members that are typically left out of the conversation like single parents with school age children, people who work odd hours, older adults (55+), the homeless, and children. Sixteen (20%) of my participants were older adults, with six retired, this small sample size shows that the elders of our communities' care and wish to engage in conversations that impact their livelihood and their communities.

For Educators

Lastly, educators have a large impact on the profession of planning and complementary fields because they are the ones teaching and preparing the next generation of planners, public health officials, public officials, educators, and scholars who will pave the future of our cities. Planners of color have instigated discussions, reflection and change in the field (Pitter et al., 2019). Intentionally including more diverse curriculum, amplifying the work of Black scholars and other people of color, including the experiences from underrepresented or disproportionately impacted groups create more realistic classroom environments that are reflective of the communities they claim to serve and better work environments where planners of color can be a part of important conversations where their expertise and lived experiences are valued (Pitter et al., 2019). Another educational suggestion is for extension educators. Extension program across the nation have programs that seek to expand people's knowledge and access of healthy food, urban agriculture, cooking, preservation, and more. Pairing with cities like Detroit, that has a goal to improve education and outreach and areas of fitness, nutrition, sustainability, and how to cook health food and adapt traditional recipes can get educational resources to citizens on a larger scale.

5.3. Limitations

Due to the time span, the COVID-19 Coronavirus pandemic, and the nature of the project this study had limitations worth noting. Only 79 individuals were interviewed. While the racial demographics were reflective of the city of Detroit's, 79 participants make up less than 1% of Detroit resident's and does not offer a large enough sample size to generalize to the entirety of the city's population. A larger study over a longer course of time is necessary to draw more representative conclusions. Additionally, as mentioned in previous chapters the COVID-19 pandemic also had an effect on how the study was conducted. While the initial plan was to interview participants in person or host focus groups, heightened risk of infection from the virus, state stay-at-home restrictions, and university travel restrictions made this impossible. Initially this altered the way we sought out participants, and ultimately changed the study from a neighborhood study to a city-wide study. This large of a change in scope of the study area, shifted the way data was to be interpreted as well as its relevance to the city.

Another limitation was participant apprehension. Some participants expressed concern about the study, particularly if they were not referred by someone they knew who had already taken part in the study. One participant expressed relief that I was not White, explaining that they were tired of white people coming into the community interviewing people for personal gain with no connection to the community or real intention of helping the people in it. One potential participant changed their mind about the project with no explanation why. Sentiments like these may have kept other potential participants from signing up or even inquiring about the study. Lastly, during the interview many participants expressed that the questions being asked were difficult to answer. Having either phone or video interviews made it more difficult to gauge participants emotions in real time, which may have caused me to miss instances where greater clarity or rephrasing was needed. One participant was particularly hostile and took offense to some

of the questions, and in turn stifled their own responses. Future studies of this nature could benefit from having simpler survey questions for participants to fill out on their own time or in person interviews or focus groups. A more open setting such as a self-paced survey or in person meeting can allow for the reading of social cues that may get lost in translation through the use of technology.

5.4. Further Research and Next Steps

This study was only the start of research in culturally appropriate food and food systems planning. Studies like this on a larger scale may lead to great break throughs in the field especially inter-culturally. First, second, and third generation non-American participants mentioned difficulties finding certain CAF in the city and having to go elsewhere to buy it. Having a greater understanding of this dilemma could help planners, localities, and other stakeholders who seek to attract diverse groups of people make CAF more accessible for international residents and even American natives who seek to broaden their food palettes. Food systems planning advocates have tried to get food problems on the planning agenda for well over two decades. By now we should recognize the implications that the lack of access to healthy, affordable, and now culturally appropriate food has on communities.

5.5. Conclusion

The goal of this study was to understand how residents in Detroit perceive their access to CAF and their health status. It also sought to define CAF for the field of planning and for future food systems planning work. The effort began with a review of the literature, which covered the small yet expanding field of food systems planning, Detroit's history with these efforts, the still growing body of research about culturally appropriate food, and the current implications for planners that other scholars have called attention to. To develop a greater understanding of these

areas, Detroit residents were sought out to engage in conversations that would indirectly underline how they interact with their food system, what CAF was for them, and whether they have access. Ultimately, this study showed that those who responded to the study have access to CAF, mostly due to transportation by car and determination. However, many lack access to quality and affordable foods within the city and depend on grocery stores outside of the city upwards of 20 miles away. This study sought out to determine how participants defined CAF and perceived their access to it. Participants identified foods that people are inclined to traditionally as culturally appropriate. The barriers highlighted throughout the study to these foods included transportation, proximity to quality foods, and education around healthy food and healthy alternatives to CAF.

APPENDIX

APPENDIX

Access to Culturally Appropriate Foods

Consent Form

You are being asked to participate in a research study to investigate your perception of culturally appropriate food access. You are being asked to participate in an online interview (Zoom or phone call) to help us understand these associations. You must be at least 18 years old and living within the North End or Virginia Park neighborhoods in Detroit to participate in the survey.

All information that you give us will be kept strictly confidential and anonymous and only be evaluated in combination with other responses received. Participation is voluntary, you may choose not to participate at all, or you may refuse to answer certain questions or discontinue your participation at any time without consequence.

The interview should take about 60 minutes to complete. All participants who complete the interview will be given a gift certificate for \$30 and if you refer another person (you may provide only 1 referral) to take part in the study and they complete the interview, you will get another \$10. We will ask you for your address so that we may mail your gift certificate to you. We will also keep track of your referrals so that upon successful participation (completing the interview) by them, you will receive the extra \$10 certificate mailed to your address as well. We will disclose to the person you have referred, that their referral has come from you. Every participant will be given the option to refer someone else to participate in the study and we will follow up with each person referred. We will also let you know the status of each person you have referred to this study of their intent to participate and your eligibility for the extra \$10 compensation.

Dr. Z. Kotval-K, assistant professor of Urban & Regional Planning at Michigan State University and Najma Muhammad, graduate student in the same program, are available to answer any questions you may have about the survey and can be reached via email at kotvalze@msu.edu or muhamm80@msu.edu or via telephone at (517) 353-5460.

Please indicate your consent verbally, yes or no, to participate in this study at the beginning of the interview.

Demographic Questions ([Qualtrics Survey](#))

1. What is your age? _____ years
2. What gender do you identify with?
 - a. Male
 - b. Female
 - c. Other
 - d. Prefer not to say
3. Educational attainment
 - a. Some high school
 - b. High School Diploma
 - c. GED
 - d. Some College
 - e. College Degree
 - f. Graduate Degree or higher
4. Employment Status
 - . Employed, full-time
 - a. Employed, part time
 - b. Self-employed
 - c. Unemployed, looking for work
 - d. Unemployed, not looking for work
 - e. Student Retired
5. Number of people in your household (including you): _____
6. Household Income
 - . \$0 - \$15,000
 - a. \$15,001 - \$24,999
 - b. \$25,000 - \$34,999
 - c. \$35,000 - \$49,999
 - d. \$50,000 - \$74,999

- e. \$75,000 - \$99, 999
- f. \$100,000 - \$149,999
- g. \$150,000 - \$200,000+
- 7. How many employed in the household (including you): _____
- 8. Number of HH members that are 65 and older: _____
- 9. Number of HH members that are children under 18: _____
- 10. Race (White/ Black/ Asian/ Native American /Other)
- 11. Ethnic Origin/Country of Origin
- 12. How long have you been in the US?
- 13. How long have you lived in this neighborhood/home?
- 14. Address: (if they wish to receive the gift certificate)

The next set of questions will gauge your perception of your health status:

- 15. Do you consider yourself to be physically healthy?
- 16. If yes, why do you consider yourself to be physically healthy?
 - a. Do you exercise weekly?
 - b. Do you walk often/
 - c. Do you complete house chores?
- 17. If no, why don't you consider yourself to be physically healthy?
- 18. How would you rate your mental health and wellbeing?
 - . 1-Very Good
 - a. 2-Good
 - b. 3-Neutral
 - c. 4-Poor
 - d. 5-Very Poor

Semi-structured Interview Questions

1. Are you the person who shops for food for your household?
2. Where do you shop for food?
 1. How long does it take you to get to these places?
3. How often do you shop for food (at these places)?
4. How do you typically get to the grocery store?
5. How much do you spend on groceries?
6. How would you define the culture you belong to (religious, tradition, ethnic communities, etc.)?
7. What food do you consider to be part of your culture?
 - a. Are these foods out of choice, tradition, or necessity?
8. How would you define something that is culturally appropriate?
9. How would you define culturally appropriate food?
10. Are you able to get culturally appropriate foods from the places you buy your staple groceries?
 - . Where do you shop for culturally appropriate food?
 - a. Why do you go to these particular places as opposed to others?
 - b. How many different stores do you visit for regular food versus CAF?
11. How often do you shop for these kinds of foods?
12. How do you get to the stores that have culturally appropriate foods?
13. How much do you spend/ how much are you willing to spend on culturally appropriate foods?
14. What is your relationship with food?
15. What is your first memory of food?
16. What foods do you enjoy?
17. Do you have access to the food you enjoy?
18. Are the foods you enjoy the foods that you are inclined to culturally?
19. How do you define healthy food?
20. What does healthy eating look like for you? In a way that is true and realistic?

- 21. Do you think you generally eat healthy?
- 22. Do you believe the foods you enjoy are healthy foods?
- 23. Do you have access to the foods you consider healthy?

COVID-19 Impact

- 24. How has the COVID-19 (Coronavirus) pandemic affected your food buying and consumption patterns?
- 25. How has it changed your work and income?
- 26. Has it changed your health status (physical and mental)?
- 27. Is there anything else you would like to share?
- 28. If you know of another person who fits the criteria who would be willing to participate please provide their contact information (name/ phone number/ email address).

Initial Study Area

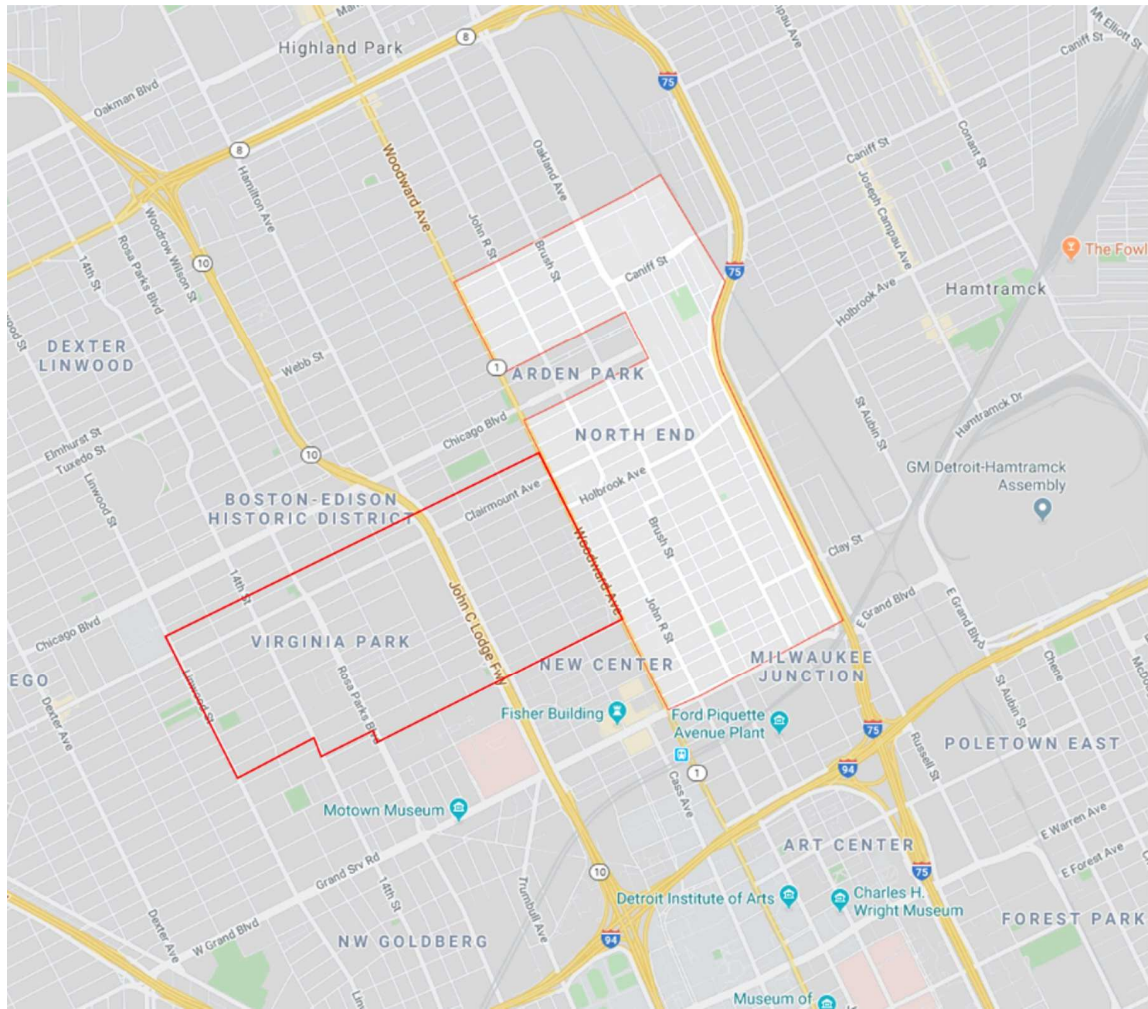


Figure 9: Map of the original study area, pre-COVID-19 restrictions.

Final Study Area

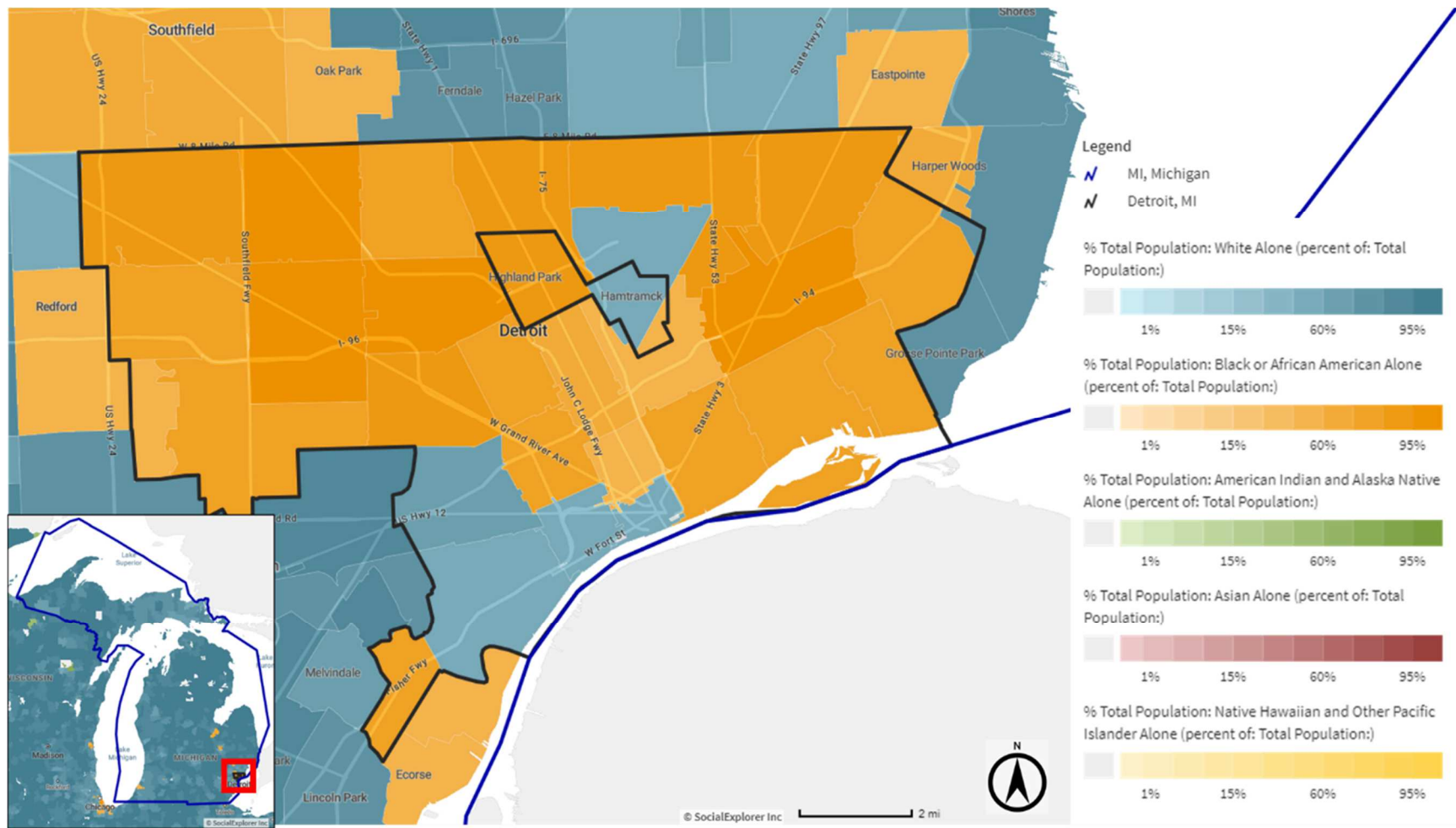


Figure 10: Study Area, Detroit, MI; Race by Zip Code Boundary (refer to appendix for larger version) | (Social Explorer, 2021)

BIBLIOGRAPHY

BIBLIOGRAPHY

- Abel, Jennifer. 2000. Assessing the Involvement of Pennsylvania professional planners in food system activities. Master's thesis, Pennsylvania State University.
- PUBLIC LAW 110–246 | 2008 Farm Bill*, 2039 (2008) (testimony of 110th Congress).
<https://www.congress.gov/110/plaws/publ246/PLAW-110publ246.pdf>
- Agyeman, J. (2020, July 27). Urban planning as a tool of white supremacy – the other lesson from Minneapolis. *The Conversation US*. <https://theconversation.com/urban-planning-as-a-tool-of-white-supremacy-the-other-lesson-from-minneapolis-142249>
- Agyeman, J. (2021, March). How urban planning and housing policy helped create “food apartheid” in US cities. *The Conversation US*. https://theconversation.com/how-urban-planning-and-housing-policy-helped-create-food-apartheid-in-us-cities-154433?fbclid=IwAR20uJCPGYc0ss8Hrb3v86UBFNHDFAJB9tjT8uUjWMqYbp_H8Iv16d9AdCw
- Allcott, H., Diamond, R., Dubé, J.-P., Handbury, J., Rahkovsky, I., Schnell, M., Chuan, A., Currie, J., De Loecker, J., Duranton, G., Gyourko, J., Kastl, J., Liebttag, E., Kuziemko, I., Sinai, T., Schanzenbach, D. W., Shapiro, J., Vogl, T., & Weinstein, D. (2017). *NBER WORKING PAPER SERIES FOOD DESERTS AND THE CAUSES OF NUTRITIONAL INEQUALITY*. <http://www.nber.org/papers/w24094>
- Amarasinghe, A., & D’Souza, G. (2012). Individual, Social, Economic, and Environmental Model: A Paradigm Shift for Obesity Prevention. *ISRN Public Health*, 2012(1), 1–10.
<https://doi.org/10.5402/2012/571803>
- Anderson, S. (2014). *Funding Structures and Competing Priorities for Regional Transit in Metro Detroit*.
- Angelovski, I. (2015). Healthy Food Stores, Greenlining and Food Gentrification: Contesting New Forms of Privilege, Displacement and Locally Unwanted Land Uses in Racially Mixed Neighborhoods. *International Journal of Urban and Regional Research*, 39(6), 1209–1230.
<https://doi.org/10.1111/1468-2427.12299>
- Antipova, A., Sultana, S., Hu, Y., & Rhudy, J. P. (2020). Accessibility and Transportation Equity. *Sustainability*, 12(9). <https://doi.org/10.3390/su12093611>
- Armar-Klemesu, M. (n.d.). *Urban Agriculture and Food Security, Nutrition and Health URBAN AGRICULTURE AND FOOD SECURITY, NUTRITION AND HEALTH*. Retrieved August 15, 2019, from http://futuresdirections.org.au/wp-content/uploads/2015/05/1391511018Urban_agriculture_adn_food_security_nutrition_and_health.PDF
- Arnstein, S. R. (2019). A Ladder of Citizen Participation. *Journal of the American Planning Association*, 85(1), 24–34. <https://doi.org/10.1080/01944363.2018.1559388>
- Au, K. H. (1980). Participation Structures in a Reading Lesson with Hawaiian Children:

- Analysis of a Culturally Appropriate Instructional Event. *Anthropology & Education Quarterly*, 11(2), 91–115. <https://doi.org/10.1525/AEQ.1980.11.2.05X1874B>
- Baker, E. A., Schootman, M., Barnidge, E., Kelly, C., & for CDC, M. (2006). *The Role of Race and Poverty in Access to Foods That Enable Individuals to Adhere to Dietary Guidelines*.
- Bell, J., Mora, G., Hagan, E., Rubin, V., & Karypn, A. (2013). *Access to Healthy Food and Why It Matters: A Review of the Research*.
- Block, D. R., Chávez, N., Allen, E., & Ramirez, D. (2012). Food sovereignty, urban food access, and food activism: Contemplating the connections through examples from Chicago. *Agriculture and Human Values*, 29(2), 203–215. <https://doi.org/10.1007/s10460-011-9336-8>
- Block, J. P., Scribner, R. A., & Desalvo, K. B. (2004). Fast food, race/ethnicity, and income: A geographic analysis. *American Journal of Preventive Medicine*, 27(3), 211–217. <https://doi.org/10.1016/j.amepre.2004.06.007>
- Bower, K. M., Thorpe, R. J., Rohde, C., & Gaskin, D. J. (2014). The intersection of neighborhood racial segregation, poverty, and urbanicity and its impact on food store availability in the United States. *Preventive Medicine*, 58(1), 33–39. <https://doi.org/10.1016/j.ypmed.2013.10.010>
- Bradley, K., & Galt, R. E. (2013). Local Environment The International Journal of Justice and Sustainability Practicing food justice at Dig Deep Farms & Produce, East Bay Area, California: self-determination as a guiding value and intersections with foodie logics. *Local Environment*, 19(2), 172–186. <https://doi.org/10.1080/13549839.2013.790350>
- Byrne, C. (2019, July 4). *It's Great That We Talk About "Food Deserts" — But It Might Be Time To Stop* | *HuffPost*. *Huffpost*. https://www.huffpost.com/entry/food-desert-problem-access-healthy-options_n_5d1b910ee4b082e55370dee5
- Census - Geography Profile. (n.d.). Retrieved May 27, 2021, from <https://data.census.gov/cedsci/profile?g=16000000US2622000>
- Cheadle, A., Curry, S., Wagner, E., Diehr, P., Koepsell, I. T., & Kristal, A. (1991). Community-Level Comparisons Between the Grocery Store Environment and Individual Dietary Practices. *Preventative Medicine*, 2, 250–261.
- Clancy, K. (2004). Potential contributions of planning to community food systems. *Journal of Planning Education and Research*, 23(4), 435–438. <https://doi.org/10.1177/0739456X04264893>
- Clifton, K. J. (2004). Mobility Strategies and Food Shopping Mobility Strategies and Food Shopping for Low-Income Families A Case Study. *Journal of Planning Education and Research*, 23, 402–413. <https://doi.org/10.1177/0739456X04264919>
- Coffey, J. (n.d.). Agricultural Overlay Zoning – Sustainable Development Code. In *Sustainable Development Code*. Retrieved May 21, 2021, from <https://sustainablecitycode.org/brief/agricultural-overlay-zoning/>
- Cook, C. (n.d.). *Covering Food Deserts* | *Center for Health Journalism*. Retrieved May 21, 2021,

from <https://centerforhealthjournalism.org/resources/lessons/covering-food-deserts#:~:text=Controversy over %22food deserts%22 term&text=It is not accidental.%22,exclude healthy from those communities>

- Cummins, S., Flint, E., & Matthews, S. A. (2014). New neighborhood grocery store increased awareness of food access but did not alter dietary habits or obesity. *Health Affairs*, 33(2), 283–291. <https://doi.org/10.1377/hlthaff.2013.0512>
- DECLARATION OF NYÉLÉNI - Nyeleni - Via Campesina - Newsletter, Bulletin, Boletín. (n.d.). Retrieved April 27, 2020, from <https://nyeleni.org/spip.php?article290>
- Duchemin, E., Wegmuller, F., & Legault, A.-M. (2009). Urban agriculture: multi-dimensional tools for social development in poor neighbourhoods. *Field Actions Science Reports*, 2(1), 1–8. <https://doi.org/10.5194/facts-2-1-2009>
- Eckert, J., & Shetty, S. (2011). Food systems, planning and quantifying access: Using GIS to plan for food retail. *Applied Geography*, 31(4), 1216–1223. <https://doi.org/10.1016/j.apgeog.2011.01.011>
- Ellis, G. (1996). How culturally appropriate is the communicative approach? *ELT Journal*, 50(3), 213.
- Fleischhacker, S. E., Evenson, K. R., Rodriguez, D. A., & Ammerman, A. S. (2011). A systematic review of fast food access studies. *Obesity Reviews*, 12(5), e460–e471. <https://doi.org/10.1111/j.1467-789X.2010.00715.x>
- Food Access. (n.d.). Retrieved May 21, 2021, from <https://minneapolis2040.com/policies/food-access/>
- Golston, H. (2021). Detroit man crowdfunding to open city's only Black-owned grocery store. *FOX 2 Detroit*. <https://www.fox2detroit.com/news/detroit-man-crowdfunding-to-open-citys-only-black-owned-grocery-store>
- Goss-Foster, A. (2017). 139 Square Miles. *Detroit Future City*, 1–41. https://detroitfuturecity.com/wp-content/uploads/2017/11/DFC_139-SQ-Mile_Report.pdf
- Grigsby-toussaint, D. S., Zenk, S. N., Odoms-young, A., Ruggiero, L., & Moise, I. (2010). Availability of Commonly Consumed and Culturally Specific Fruits and Vegetables in African-American and Latino Neighborhoods. *YJADA*, 110, 746–752. <https://doi.org/10.1016/j.jada.2010.02.008>
- Hammelmann, C., & Hayes-Conroy, A. (2015). Understanding Cultural Acceptability for Urban Food Policy. *Journal of Planning Literature*, 30(1), 37–48. <https://doi.org/10.1177/0885412214555433>
- Kaufman, P. R., Macdonald, J. M., Lutz, S. M., & Smallwood, D. M. (n.d.). *Do the Poor Pay More for Food? Item Selection and Price Differences Affect Low-Income Household Food Costs*.
- Kelly, C. M., Schootman, M., Baker, E. A., Barnidge, E. K., & Lemes, A. (2007). The association of sidewalk walkability and physical disorder with area-level race and poverty. *Journal of Epidemiology and Community Health*, 61(11), 978–983.

<https://doi.org/10.1136/jech.2006.054775>

- Ledoux, T. F., Vojnovic, I., Manning Thomas, J., & Pothukuchi, K. (2017). Standing in the Shadows of Obesity: The Local Food Environment and Obesity in Detroit. *Tijdschrift Voor Economische En Sociale Geografie*, 108(5), 605–624. <https://doi.org/10.1111/tesg.12227>
- Leventon, J., & Laudan, J. (2017). *Local food sovereignty for global food security? Highlighting interplay challenges*. <https://doi.org/10.1016/j.geoforum.2017.07.002>
- Lowery, B., Sloane, D., Payán, D., Illum, J., & Lewis, L. (2016). Do Farmers' Markets Increase Access to Healthy Foods for All Communities? Comparing Markets in 24 Neighborhoods in Los Angeles. *Journal of the American Planning Association*, 82(3), 252–266. <https://doi.org/10.1080/01944363.2016.1181000>
- Lyons, K. (2014). Urban Food Advocates' tactics to rebuild food systems: Convergence and divergence in food security and food sovereignty discourses. *Dialogues in Human Geography*, 4(2), 212–217. <https://doi.org/10.1177/2043820614537163>
- Marin, G. (1993). Defining Culturally Appropriate Community Interventions: Hispanics as a Case Study. *Journal of Community Psychology*, 21, 149–161. [https://doi.org/10.1002/\(ISSN\)1520-6629](https://doi.org/10.1002/(ISSN)1520-6629)
- Martin, M. S., Maddocks, E., Chen, Y., Gilman, S. E., & Colman, I. (2016). Food insecurity and mental illness: Disproportionate impacts in the context of perceived stress and social isolation. *Public Health*, 132, 86–91. <https://doi.org/10.1016/j.puhe.2015.11.014>
- Maye, D. (2019). 'smart food city': Conceptual relations between smart city planning, urban food systems and innovation theory. *City, Culture and Society*, 16(January 2018), 18–24. <https://doi.org/10.1016/j.ccs.2017.12.001>
- Mission & Purpose | Detroit People's Food Co-op*. (n.d.). Retrieved May 21, 2021, from <https://detroitpeoplesfoodcoop.com/about-us/>
- Padilla, A. M. (2001). Handbook of multicultural assessment: Issues in culturally appropriate assessment. In L. A. In & P. J. M. Suzuki, J. G. Ponterotto (Ed.), *Handbook of multicultural assessment: Clinical, psychological, and educational applications*. Jossey-Bass/Wiley.
- Passidomo, C. (2013). Going “Beyond Food”: Confronting Structures of Injustice in Food Systems Research and Praxis. *Journal of Agriculture, Food Systems, and Community Development*, 3(4), 1–5. <https://doi.org/10.5304/jafscd.2013.034.009>
- Pitter, J., Bailey, O., Butler, T., Ogundele, A., & Prosper, W. (2019, June 10). *How do we respond to anti-Black racism in urbanist practices and conversations? – Canadian Urban Institute*. <https://canurb.org/citytalk-news/how-do-we-respond-to-anti-black-racism-in-urbanist-practices-and-conversations/>
- Poor Nutrition | CDC*. (n.d.). Retrieved May 21, 2021, from <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/nutrition.htm>
- Porter, L., Matunga, H., Viswanathan, L., Patrick, L., Walker, R., Sandercock, L., Moraes, D., Frantz, J., Thompson-Fawcett, M., Riddle, C., & Jojola, T. (Ted). (2017a). Indigenous Planning: from Principles to Practice/A Revolutionary Pedagogy of/for Indigenous

- Planning/Settler-Indigenous Relationships as Liminal Spaces in Planning Education and Practice/Indigenist Planning/What is the Work of Non-Indigenous People in the. *Planning Theory and Practice*, 18(4), 639–666. <https://doi.org/10.1080/14649357.2017.1380961>
- Porter, L., Matunga, H., Viswanathan, L., Patrick, L., Walker, R., Sandercock, L., Moraes, D., Frantz, J., Thompson-Fawcett, M., Riddle, C., & Jojola, T. (Eds.). (2017b). Indigenous Planning: from Principles to Practice/A Revolutionary Pedagogy of/for Indigenous Planning/Settler-Indigenous Relationships as Liminal Spaces in Planning Education and Practice/Indigenist Planning/What is the Work of Non-Indigenous People in the. *Planning Theory and Practice*, 18(4), 639–666. <https://doi.org/10.1080/14649357.2017.1380961>
- Pothukuchi, K. (2004). Community food assessment: A first step in planning for community food security. *Journal of Planning Education and Research*, 23(4), 356–377. <https://doi.org/10.1177/0739456X04264908>
- Pothukuchi, K. (2015). Five Decades of Community Food Planning in Detroit: City and Grassroots, Growth and Equity. *Journal of Planning Education and Research*, 35(4), 419–434. <https://doi.org/10.1177/0739456X15586630>
- Pothukuchi, K. (2016). Bringing Fresh Produce to Corner Stores in Declining Neighborhoods: Reflections from Detroit FRESH. *Journal of Agriculture, Food Systems, and Community Development*, 7(1), 1–22. <https://doi.org/10.5304/jafscd.2016.071.013>
- Pothukuchi, K. (2017). “To allow farming is to give up on the city”: Political anxieties related to the disposition of vacant land for urban agriculture in Detroit. *Journal of Urban Affairs*, 39(8), 1169–1189. <https://doi.org/10.1080/07352166.2017.1319239>
- Pothukuchi, K., & Kaufman, J. L. (1999). Placing the food system on the urban agenda: The role of municipal institutions in food systems planning. *Agriculture and Human Values*, 16(2), 213–224. <https://doi.org/10.1023/A:1007558805953>
- Pothukuchi, K., & Kaufman, J. L. (2000a). The food system: A stranger to the planning field. *Journal of the American Planning Association*, 66(2), 113–124. <https://doi.org/10.1080/01944360008976093>
- Pothukuchi, K., & Kaufman, J. L. (2000b). The Food System. *Journal of the American Planning Association*, 66(2), 113–124. <https://doi.org/10.1080/01944360008976093>
- Raja, S., Born, B., & Russell, J. K. (2008). *A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating*. https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/PAS-Report-554.pdf
- Raja, S., Morgan, K. J., & Hall, E. (2017). *Planning for Equitable Urban and Regional Food Systems (Editorial) Authoritarian Modernisation in Russia View project Agents of Change in Old-industrial Regions in Europe View project*. <https://doi.org/10.2148/benv.43.3.309>
- Raja, S., Raj, S., & Roberts, B. (2017). The US Experience in Planning for Community Food Systems: An Era of Advocacy, Awareness, and (Some) Learning. In N. E. Knezevic I., Blay-Palmer A., Levkoe C., Mount P. (Ed.), *Nourishing Communities* (pp. 59–74). Springer, Cham. https://doi.org/https://doi.org/10.1007/978-3-319-57000-6_4
- Sandercock, L. (2010). Planning Theory & Practice When Strangers Become Neighbours:

- Managing Cities of Difference. *Planning Theory & Practice*, 1(1), 13–30.
<https://doi.org/10.1080/14649350050135176>
- Shaw, S. J., & Armin, J. (2011). The Ethical Self-Fashioning of Physicians and Health Care Systems in Culturally Appropriate Health Care. *Culture, Medicine, and Psychiatry* 2011 35:2, 35(2), 236–261. <https://doi.org/10.1007/S11013-011-9215-1>
- Soma, T., & Wakefield, S. (2011). The emerging role of a food system planner: Integrating food considerations into planning. *Journal of Agriculture, Food Systems, and Community Development*, 2(1), 53–64. <https://doi.org/10.5304/jafscd.2011.021.006>
- Stowers, S. L. (1992). Development of a culturally appropriate food guide for pregnant Caribbean immigrants in the United States. *Journal of the American Dietetic Association*, 92(3), 331–336.
- U.S. Census Bureau. (n.d.). *American FactFinder - Community Facts*. Retrieved October 31, 2018, from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- U.S. Census. (2019). American Community Survey 5-Year Estimates. In *United States Census Bureau*. <https://data.census.gov/cedsci/profile?g=1600000US2622000>
- Vitiello, D., & Brinkley, C. (2014). The Hidden History of Food System Planning. *Journal of Planning History*, 13(2), 91–112. <https://doi.org/10.1177/1538513213507541>
- Weibgen, A. (2019, April 11). Racist planning shaped our city; conscientious planning can help undo its mistakes - New York Daily News. *New York Daily News*.
<https://www.nydailynews.com/opinion/ny-oped-racist-planning-shaped-our-city-20190411-pkobnblgejhbdjtitqpdhflxj6u-story.html>
- White, M. M. (2011). Sisters of the Soil: Urban Gardening as Resistance in Detroit. *Race/Ethnicity: Multidisciplinary Global Contexts*, 5(1), 13–28.
<https://doi.org/10.2979/racethmulglocon.5.1.13>
- Williams, C., Ferretti, C., & Ramirez, C. E. (2018, January 18). *Why Amazon didn't pick Detroit*. The Detroit News. <https://www.detroitnews.com/story/news/local/detroit-city/2018/01/18/amazon-passes-over-detroit-2nd-hq/1043515001/>
- Zemke, J. (2011). *New Meijer store set to replace Old Redford High School*. Model D.
<https://www.modeldmedia.com/devnews/oldredfordmeijerdetroit121311.aspx>
- Zhang, M., & Ghosh, D. (2016a). Spatial Supermarket Redlining and Neighborhood Vulnerability: A Case Study of Hartford, Connecticut. *Transactions in GIS*, 20(1), 79–100.
<https://doi.org/10.1111/tgis.12142>
- Zhang, M., & Ghosh, D. (2016b). Spatial Supermarket Redlining and Neighborhood Vulnerability: A Case Study of Hartford, Connecticut. *Transactions in GIS*, 20(1), 79–100.
<https://doi.org/10.1111/tgis.12142>