

# Developing food justice policy solutions and educational resources to address food apartheid in Grand Rapids, MI

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## **Executive Summary**

Contemporary racial divisions that characterize many urban food systems in the U.S are the products of longstanding, intersecting and structural inequalities. Despite this, many efforts at addressing food injustice fail to incorporate a critical, historicized approach to their work, resulting in many ineffectual policies and initiatives from city governments aimed solely at addressing short-term food inequities. This project has collaborated with South East Market to develop food justice policy solutions and educational materials that aim to address the structural injustices of food apartheid in the city of Grand Rapids, MI with a specific focus on the historically African-American neighborhoods of the city. Through centering a food justice approach and applying the critical lens of food apartheid to Grand Rapids, our project sought to address the multiple historical, and intersectional systems that produce contemporary food insecurity and injustice within the BIPOC communities of Grand Rapids. This report will review existing literature related to food injustice and food apartheid before exploring the conceptual application of food apartheid to Grand Rapids, linking our project's historical research to contemporary inequalities and the two deliverables we produced in order to address these issues.

## **Introduction**

Racial inequity and exploitation are embedded into U.S food systems, resulting in high levels of food insecurity being concentrated in low-income, BIPOC (Black, Indigenous and People of Color) neighborhoods. Food insecurity is when a person or family does not have reliable, consistent access to nutritious or affordable food. Food insecurity impacts over 34 million people in the U.S today, including over 9 million children (USDA, 2021). Racially defined food injustice has emerged in many American cities due to historical and ongoing socio-economic injustices, making BIPOC neighborhoods especially vulnerable to suffering from food insecurity. Food justice, according to Just Food (2014) is “communities exercising their right to grow, sell, and eat [food that is] fresh, nutritious, culturally appropriate, and grown locally with care for the well-being of the land, workers and animals.” As in this definition, food justice is often framed as a right. Although spanning intersectional identities, in the case of highly segregated American cities, the right of marginalized BIPOC communities to food access, food security and food production is often centered. BIPOC communities have often catalyzed justice-centered food movements across U.S cities, as long as U.S urban food systems have been racist and discriminatory (Reese, 2019). Food justice has remained centrally important in the U.S. as economic inequality continues to rise in the country and the disparities between who can and cannot access nutritious, affordable, and culturally appropriate food continue to widen. Different types of urban food justice movements have emerged across the U.S. in response to particular challenges that marginalized communities in these cities face.

Grand Rapids is a mid-sized city located in Kent County, Western Michigan. With a city population of 198,917 and a metropolitan population of 1,087,592 in 2020, it is ranked as the second most-populated city in the state of Michigan. The land that became known as Grand Rapids was inhabited and continues to be inhabited by various Indigenous peoples over many millennia. The last tribe to inhabit the land before European settlement were the Odawa peoples, whom after the Treaty of Chicago were steadily dispossessed and violently driven off the land in the region that would become renamed Grand Rapids by settler colonists (Cleland, 1992). Historically the city was a leader in the timber and then the furniture industries, before diversifying its economy in recent years into IT, healthcare and manufacturing (Jelks, 2006). Its relatively diverse industries, when compared to other Rust Belt cities that were heavily reliant on manufacturing, have enabled Grand Rapids to be one of the few major urban centers in the area with a fastly growing population and economy.

Grand Rapids, like all cities in the United States, has racism deeply embedded into its geography, culture and urban design (Robinson, 2012). Grand Rapids remains a highly segregated city wherein levels of food insecurity are disproportionately concentrated in non-White / BIPOC neighborhoods. Existing food systems literature and policy documents often employ food desert logic in how they conceptualize food injustice, even if the term itself is not explicitly mentioned (Widener, 2018). Reports in Grand Rapids largely describe food-insecure African-American neighborhoods as suffering issues of food *access*, placing the blame for the lack of access and availability of fresh, healthy food for food injustice within the city. Likewise, the Kent County Needs Assessment (Brummel, 2020) conceptualizes food injustice in the

metropolitan Grand Rapids food system as being 'barriers to healthy eating' (p.72). Such barriers include high cost and limited availability and access to healthy foods. When the Grand Rapids Climate Resiliency Report (WMEAC, 2013) proposes solutions to food insecurity, it is again, largely a reference to access alone. They suggest increasing points of food access to achieve resilience in the food system: expanding urban agriculture, food preservation, farmers markets and urban aquaculture in the city. 'Food justice' is mentioned only once in the entire report. These limited conceptualizations of food injustice reveal little about the intersectional injustices which produce and perpetuate racism in food systems. Consequently, the solutions proposed by these reports are largely focused on addressing *immediate* and *recent* trends rather than *structural, systemic and institutionalized inequalities*.

Building off these reports and collected data, Kotval-K et al. (2021) share food desert statistics and demographic characteristics in Grand Rapids, highlighting that minority groups experienced higher barriers to accessing healthy foods than white residents, even when living in the same tract designated a food desert. These findings reaffirm how current concepts used to analyze food injustice in Grand Rapids fail to fully conceptualize the broad intersectional injustices produced by food apartheid (Reese, 2019; Penniman, 2018). The Kotval-K et al. (2021) report ends its analysis by proposing that the 'food desert' designation is inadequate for analyzing inequities within the Grand Rapids food system, suggesting in the future ***there should be an alternative concept*** that can take into account the "*longstanding and persistent economic and structural actions that have led to poor access to fresh and healthy produce for many underrepresented residents.*" (Kotval et al., 2021 p.156). Thus, within the limited existing

analysis of Grand Rapid's food system, there is an acknowledgment of the need for more structural, cross-temporal analysis, which can better conceptualize food injustice. Drawing on this discourse, and with the direction and guidance of our client, South East Market, we centered a structural, critical analysis of racism in food systems as the basis for our work.

South East Market is a grocery store founded by two BIPOC women in the predominantly Hispanic and African-American 49507 zip code in South-East Grand Rapids. South East Market has sought to address the city's food injustice by improving access to affordable, culturally appropriate foods and providing educational resources for residents to better understand racism in the Grand Rapids food system. Newly founded in 2021, South East Market is one of many initiatives aimed at addressing food injustice in the city. They have established pay-it-forward and subscription based programmes to increase food affordability and free summer schools to empower the BIPOC youth in Grand Rapids. Policy changes and the development of public educational resources were identified by South East Market as two deliverables through which food justice could be better addressed in the city. Per conversations with our client, the conceptual framework of 'food apartheid' was used when developing the project's deliverables. To paraphrase Joyner et al. (2022), a food apartheid framework provides a critical approach to food systems analysis, highlighting that the occurrence of food inequities are not 'natural' occurrences, rather, explicit outcomes of structural racism and racially defined geographies of food access.

Applying the conceptual approach of ‘food apartheid’, our project developed two deliverables in order to provide food justice educational resources and policy solutions in Grand Rapids. These were;

1. Policy proposals aimed at addressing food injustice and promoting BIPOC-led urban agriculture that were made to the Grand Rapids Urban Agriculture Committee in September 2022.
2. The StoryMap, a visual, educational tool that utilizes multimedia elements, geospatial data visualizations, and historical analysis in order to narrate the historical development and current persistence of food apartheid in Grand Rapids.

A literature review and historical research, food policy comparisons, spatial data analysis and interviews were incorporated into analysis project deliverables.



## **Methods of Literature and Media Research**

The following section will describe existing food systems literature, with a particular focus on the fields of food justice and food sovereignty, which are the theoretical foundations upon which South East Market's work and this project are grounded. By highlighting shortcomings and gaps in some key concepts used in current food justice work, the conceptual framework of apartheid will be introduced and contextualized as it has been applied to U.S food systems.

In order to support our client's goals of creating a public understanding of food insecurity in Grand Rapids, through developing educational programmes and policy changes, we focused on understanding the causal factors of racial inequity and food insecurity in the Grand Rapids food system. To do this, we examined and analyzed relevant food systems, food justice and political ecology literature. The preliminary research process relied on conducting a literature review of existing food systems, food justice and political ecology literature centered on food deserts alongside a comparison of these papers with case study analysis of current food inequity and the historical development of racism in Grand Rapids. A review of existing academic literature, media sources and historical materials were investigated in order to gain an understanding of the history of racism in Grand Rapids, particularly as it pertained to current inequities. In-depth narratives on race in Grand Rapids were few, however Randall Jelk's (2006) *'African Americans in the Furniture City'* and Todd Robinson's *'A City Within a City'* (2012) provided a rich contextual and historical overview of this topic. Policy documents and

city-issued reports were analyzed in order to understand how historical and current racial inequities emerged and how these inequities are understood by Grand Rapids lawmakers, policymakers and public officials.

## **Literature Review**

### **Introduction**

The need for more structural and critical analysis of food systems has been highlighted and explored from a variety of research perspectives. At a broad level, a food system encompasses a complex web of activities that involve the production, processing, transport and consumption of food. Issues within food systems relating to governance, sustainability and nutrition are numerous, all of which beg for analyses of the uneven outcomes produced within food systems. Inequality within the food system has been explored through literature on food insecurity (Mbow et al., 2019; Myers and Painter, 2017) food deserts (Walker, Keane and Burke, 2010; Kurtz, 2013), food access (Leroy et al., 2015; Fleischhacker et al. 2011) health effects of food inaccessibility (White, 2007; Cummins et al., 2014), racism in the food system (Slocum, 2011; Reese, 2019; Raja, Ma and Yadav, 2008), food security and gender inequality (Agarwal and Herring, 2013; Broussard, 2019) and the unequal globalization of food systems (Philips, 2006). The two main fields of study linking social justice, equity and food are food justice (Gottlieb and Joshi, 2010); Alkon and Agyeman, 2011; Wekerle, 2004; Penniman, 2018; Sbicca, 2018) and food sovereignty (Via Campesina, 2003; Cote, 2016; Patel, 2009; Wittman, 2011).

Both strands of literature stress the need to embed equality within current food systems. However, food justice and food sovereignty movements and literature have different understandings of how equality can be achieved. Food sovereignty, originating from the La Via Campesina movement in the Global South, emphasizes the right to land and resources and the

need for structural, systemic transformation of corporate food systems (Penniman, 2018). Food justice, on the other hand, which is a movement that has emerged more recently in the Global North, and particularly the U.S, is a more urban-based movement that focuses on reformative change to food systems, emphasizing empowerment and investment in communities rather than systemic overhaul (Holt-Giménez, 2010). Nevertheless, many contemporary food justice movements in the U.S. are heavily influenced by food sovereignty movements and literature and often food justice movements identify food sovereignty as a key requirement for achieving true food justice (White (2018), Clendenning, Dressler and Richards (2016)).

i Implementing effective food justice policy to date has been complicated by the ways in which food justice is conceptualized and measured by policymakers and data analysts. Cadieux and Slocum (2015, p.2) note that since food justice has been popularized as a term, it has often been used “*liberally*” and in a “*fast and loose*” manner to encompass all alternative food movements in the U.S. Although many food justice movements in the U.S have their roots in radical, transformative politics, critics have noted how contemporary movements are restricted in their potential to effect transformative change amidst the entrenched market neoliberalism of the U.S (Clendenning, Dressler and Richards, 2016). In the U.S, food justice literature has typically been measured by calculating the racial disparities in food access and security, especially within urban areas. These racial disparities are calculated as a measure of food security and food access, predominantly using data on income level data, data on the proximity of households to grocery stores and sometimes including factors such as access to transportation and level of mobility (Leroy et al., 2015). Lower-income neighborhoods that lack

points of healthy food access such as grocery stores, which are consequently often food insecure, are usually described in the literature as ‘food deserts’ (Walker, Keane and Burke, 2010; Cummins and Macintyre, 2002), while fast-food saturated neighborhoods have also been referred to as food swamps (Cooksey-Stowers, Schwartz and Brownell, 2017). Food safety-related terms like food brownfields have also made their way into the conversation (Osorio, Corradini and Williams, 2013). In the U.S, food swamps, deserts and brownfields disproportionately occur where there are significant populations of racial minorities (Kurtz, 2013). These concepts have been widely employed to conceptualize and identify food injustice in the U.S and elsewhere.

‘Food desert’ emerged as a term in the UK during the 1990s to describe neighborhoods whose residents lacked access to fresh, healthy and affordable food (Taylor and Ard, 2015). Over time the term has been adopted by governmental agencies. The U.S Department of Agriculture (USDA) operationalized the concept in its Food Desert Locator map (now the Food Access Research Atlas) through analyses of food access points and income levels in census tracts to determine whether a neighborhood qualifies as a food desert or not (USDA, 2022). Building on these assumptions, food justice solutions have often been focused on opening farmers markets, corner stores, community gardens and / or food hubs in neighborhoods defined as food deserts. However, despite the utility of the concept in measuring some of the ways in which food injustice manifests spatially, it is often accompanied by a lack of structural analysis that moves *“beyond the geospatial or statistical inventory of food deserts to unearth [the] historical*

*processes*” (McClintock 2011, p.91) that create and perpetuate food deserts and food injustice more widely.

Accordingly, in recent years there has been increasing disagreement about the efficacy of terms such as food desert. It has been critiqued as naturalizing food injustice and racialized food systems (Brones, 2018). This language has been critiqued for implying that the occurrence of a food desert is as natural and normal an occurrence as a real desert. Such language says nothing about the systemic causes of the ‘absence’ of accessible, affordable and culturally appropriate food from these ‘deserts’. It has also been criticized for adopting an approach that overemphasizes unnuanced spatial dimensions of food access (Widener, 2018). Therefore, even reports and policy documents that do not employ the ‘desert’ terminology lean on it heavily for how food injustice is conceptualized as a largely spatial, rather than structural issue (ibid., 2018). Penniman (2018) notes how using the term ‘desert’ implies that the residents of these neighborhoods are empty of people who lack and/or are unable to use their agency to successfully devise solutions to their own food-related problems. Developing strategies of self-reliance, whether it be through farming land, owning corner stores or managing gardens, creating spaces of Black sovereignty has always been a crucial means by which African-Americans have navigated and survived white supremacist food systems (Reese, 2019). Food desert terminology suggests a lack of capability or investment within African-American communities in generating their own strategies toward food self-sufficiency.

Such critiques came to wider attention when prominent African-American, woman farmer and activist Karen Washington described food desert as an ‘outsider term’, whose usage has attempted to normalize and naturalize the absence of affordable, healthy food sources (Brones, 2018). She called for more politicized terminology to describe neighborhoods suffering from food-related health issues and food injustice within racist food systems. *“Food desert doesn't open up the conversation that we need to have when it comes to race, when it comes to income inequality, when it comes to so much.”* - Karen Washington (Forsyth Farmers Market, 2020) To that end, Washington and others have begun using the term food apartheid instead of ‘desert’ terminology to highlight the structural racism that characterizes many U.S urban food systems (Corcoran (2021), Gripper et al. (2021), Joyner et al. (2022)). The racial inequalities that exist in U.S food systems are only one component of the wider structural racism that proliferates across the country, and the language developed to contextually describe evolving forms of structural racism has evolved over time. Some emerging literature has sought to disrupt dominant ‘food desert’ narratives in current food systems literature by broadening the term ‘apartheid’ beyond its typical usage, applying it to describe the racist and segregated development of urban food systems in the United States. Despite being a term originally specific to the South African context, apartheid has been used in recent years to conceptualize the structural nature of racial inequities in the U.S, including the food system.

Apartheid was a white supremacist socio-political, moral and legal system grounded in the racial segregation of public and private life in South Africa that formally existed between 1948 and the formation of the country’s first democratic government in 1994 (Seidman, 1999).

The word itself is derived from the Afrikaans term meaning 'separate development' or 'apartness', literally 'apart-hood'. Apartheid's original justification was grounded in a white supremacist system driven by the economic interests of white, settler elites. However, despite being an elite-driven project "its logic gradually permeated reality" (Biko 2015, p.88) to encompass all political, legal and moral spheres of the country. It was a system built on the pre-existing de-facto pattern of segregation that had existed before formal apartheid began in 1948 and was reinforced through the maintenance of the dominant white-supremacist ideology of the time (Truth and Reconciliation Commission, 1995). Apartheid as a system was achieved and maintained through explicitly racist policy, law, language and state-sanctioned violence against non-white (typically indigenous, Black) South Africans. Its legacy continues to define South African politics, race relations and economic inequality today (Coombes, 2003).

The processes and structures of apartheid exist beyond the South African context. Goldberg (1993) notes that the dynamics of apartheid and the creation of racially segregated space are ingrained in the urban fabric of cities across the Global North and South. The forces behind the emergence of the apartheid state in South Africa, namely structural racism and white supremacy, mirrored the structures and justifying narratives that drove spatial-racial segregation in many cities across the U.S.A. These parallels led to the coining of the term '*American apartheid*' in 1990 (Massey, 1990), which began a lengthy debate in sociological literature and urban studies about the term's relevance and applicability in a U.S context (Farley, 2011). In the U.S, American apartheid came to describe the segregation of race and space across the country. This was illustrated most often by the case of African-Americans who found



themselves on the '*wrong side of the tracks*' (Bullard 1993, p.445) when it came to their quality of life, education, health, environment and access to food. For African-American communities, narratives about ending up on the wrong side of the tracks failed to highlight that the segregation and disinvestment of their neighborhoods was the result of intentional acts by powerful, white elites, business interests and mortgage lending associations (Rothstein, 2017). These narratives parallel contemporary usage of terms like 'food desert' which describe a condition but reveal very little about the structural causes that produced it. These laws and policies implemented in the early and mid-20<sup>th</sup> century continue to define the uneven racial composition and spatial inequalities that define food apartheid within many U.S Cities today.

### **The Great Migration to White Flight**

Many contemporary racial inequalities in the U.S are rooted in the period of slavery that formally existed between the 16th and mid-19th centuries. However, inequalities have been continuously reproduced and reshaped over time in the post-slavery era. Violent racism and persistent socioeconomic discrimination in the American South contributed to millions of African-Americans migrating to the Northern industrial centers in search of employment, opportunity and equality (Boyd, 2017). The influx of African-Americans into Northern cities like Chicago and Detroit, as well as towns like Grand Rapids, correlated with higher rates of segregation in these urban centers after the Great Migration than before (Derenoncourt, 2022).

The end of the second Great Migration in the early 1970s correlated with the economic recession and deindustrialization acutely experienced by Midwestern cities during that period

(Markusen and Carlson, 2017). Although these economic changes impacted Midwestern cities in different ways, all of these urban hubs experienced dramatic demographic changes that reinforced quasi-apartheid systems of segregation and racist governance. The majority of African-American migrants from the South relocated to downtown areas of major cities and towns, which in turn partially triggered the white flight of White residents to suburban neighborhoods (Boustan, 2007). These demographic changes marked how, increasingly, *“the center of gravity in American urban areas shifted from the inner city to the suburban ring.”* (ibid., 2007, p.484). The divestment of the economic power and political influence of white residents from downtown urban areas to the suburbs contributed to the severe urban decline and disinvestment experienced by majority-African American neighborhoods in these cities and towns (Carruthers, 2003). The re-directing of urban finances to the suburbs resulted in the movement of many downtown services, such as schools, grocery stores and businesses, evacuating downtown neighborhoods to those same suburbs, leaving many African-Americans with little access to basic services such as quality education, nutrition or employment.

### **Discrimination in housing and education**

The overt white prejudice which informed policies of residential and educational segregation in the U.S. was a driving force behind racial division until the civil rights organizing of the 1960s and early 1970s, at which time black-white segregation levels in some parts of the U.S began to gradually decrease (Massey, Rothwell and Domina, 2009). Counteracting this progress, however, was the steady rise of neoliberalism and consequent cutting to spending on public services such as education during the late 1970s and early 1980s. This was especially true

in Midwestern and Rust belt cities who experienced severe deindustrialization. Whilst the number of racially mixed neighborhoods increased in some parts of the U.S after the 1970s, there was a corresponding dramatic rise in the level of class segregation between higher and lower-income neighborhoods (Robinson, 2012). As Florida and Mellander (2015, p.19) notes *“The geographic segregation of the wealthy overlaps long standing racial cleavages. The wealthy are less segregated in metros where white people make up a greater share of the total population”*. Cities became fractionalized along lines of wealth and race across the U.S, however, particularly in the American South and Midwest

Many Midwestern cities with high African-American populations, like Detroit, Chicago and Milwaukee, experienced a reinforcement of their segregated landscapes along both racial and economic lines after the 1970s (Boyd, 2017). As Cutler, Glaeser and Vigdor (1999, p.496) described in their analysis of American cities, *“there are more completely black areas in our cities than there have ever been in the past, and large amounts of segregation linger.”* Nevertheless, as Massey, Rothwell and Domina (2009) note, although segregation along income lines has become more prevalent than racial residential segregation, urban segregation continues to be largely defined by institutionalized land policies that were racially codified in earlier periods. For instance, even as some middle-class African-American families attempted to relocate to suburbs in the post-civil rights era, they typically ended up in neighborhoods with initially high African-American populations that were closer to downtown areas (Boyd, 2017). These neighborhoods had a weak property tax base and high overall tax rates, increasing the financial burden on African-American residents living there (Logan and Schneider, 1984).

The urban decline and environmental justice issues experienced by these communities were not a geographic coincidence, they were the intended results of racist urban planning and public policy. After the widespread foreclosures caused by the Great Depression, the federal government established agencies which could improve access to affordable home mortgages (Swope, Hernandez and Cushing, 2022). The most notable of these agencies, the Home Owners' Loan Corporation (HOLC) and the Federal Housing Administration (FHA) determined investment risk in neighborhoods along racial lines, categorizing majority African-American neighborhoods as 'D' rate or 'high risk' investments (Rothstein, 2017). Consequently, it became increasingly difficult for African-Americans to acquire affordable mortgages, leading to a high concentration of Black families being stuck in the rental market and unable to accumulate wealth or assets (Faber, 2020). This legacy persists today, where 44% of Black families own their homes versus 74% of White families in the U.S (Anderson, 2021). In addition, mortgage discrimination made it very difficult for African-Americans to move to 'low risk' neighborhoods, accelerating the patterns of racial residential segregation that had existed before World War II. Redlining and related patterns of racist residential segregation have been shown to have a direct relationship with contemporary environmental and health outcomes in many neighborhoods (Swope, Hernandez and Cushing, 2022). Historical practices of 'redlining' African-American neighborhoods contributed to their steady disinvestment and urban decline in the latter half of the 20th century (Boyd, 2017). This led to declining housing stocks, lowered incomes and disinvested public education in many of these neighborhoods, reinforcing and reproducing high levels of poverty.

Educational and residential segregation are deeply intertwined. In the U.S, as Owens (2020, p. 29) notes; *“Schools reflect segregated neighborhoods, and school considerations reinforce neighborhood segregation.”* Therefore, the restrictions placed on where African-Americans could live greatly limited their choice of where they could learn, allowing the marginalization and underfunding of schools with increasingly concentrated populations of non-white students (Walker and Archung, 2003). Increased levels of segregation in schooling in turn lowered social mobility and possibilities of wealth accumulation for African-Americans, particularly after the economic restructuring of the 1970 (St.John, Paulsen and Carter, 2005). During this period of neoliberal urban governance, many U.S cities rolled back public spending, however this was particularly in Black neighborhoods, where there was rising job insecurity, economic inequality and crime (Fairbanks and Lloyd, 2011). This neoliberal economic and political restructuring was justified by racist stereotypes such as Reagan’s ‘welfare queen’, which in turn empowered carceral narratives that empowered police violence, such as the War on Drugs (Kohler-Hausmann, 2015). It is in this context of racial and economic segregation that the urban blueprint upon which racially-defined food apartheid would emerge in many American cities.

### **Apartheid in the U.S food system**

Given the limited scope of current concepts like ‘food desert’, ‘food access’ and ‘food insecurity’ to fully account for the intersectional causes of structural racism in food systems, there is a need for alternative concepts which account for the structural, historical and political causes of contemporary food injustice. This would replace naturalizing and apolitical

terminology (like food desert and food swamp) with the overtly political and critical concept of food apartheid. The term ‘food apartheid’ is not widespread in current food justice or political ecology literature, however since Karen Washington coined the term in a 2018 interview with *Guernica Magazine*, it has been increasingly applied in food systems literature (Brones, 2018; Corcoran, 2021; Gripper et al. , 2022). In summary:

**“A food apartheid framework accounts for the idea that food inequity is not a natural occurrence based in ecological limits, but rather an explicit outcome of political economy based in structural racism and unequal geographies of access.”**

(Joyner et al. 2022, p.68).

Emerging literature using food apartheid or adjacent ‘supermarket redlining’ terminology is demonstrating how uneven food access and security within U.S food systems strongly overlap with historical patterns of racial segregation and redlining within cities (Ekenga and Tian (2021), O’Hara and Toussaint (2021), Joyner et al. (2022)). In racially segregated cities, framing areas devoid of proximate access to affordable and nutritious food as suffering from ‘food apartheid’ brings to the fore that food access issues cannot simply be solved through opening grocery stores, farmers markets or improving school-served food. Furthermore, employing the politically evocative term apartheid encourages explicit investigation into the racial inequality and exploitation embedded in the food system, moving past the

consumer-centric perspective of the food desert / swamp paradigm (Global Center for Climate Justice, 2022). These actions are important, however in isolation, they are insufficient to cultivate real food justice and address the structural racism pervading food systems (Reese 2019, Brones 2018).

The employment of 'food apartheid' terminology also brings attention to the structural and slow violence which is enacted through racially segregated food systems. Nixon (2011) defines slow violence as a gradual, attritional and dispersed form of "“delayed destruction”" (p.2), which largely occurs out of sight of those suffering from it. As Davies (2022) notes, however, slow violence is often very noticeable, being regularly observed and responded to by marginalized communities inhabiting geographies of environmental harm. Racially segregated food systems illustrate slow violence in operation. Here n marginalized communities suffer 'slow deaths' from cardiovascular disease, diabetes and other ailments at much higher rates due to the limited accessibility of healthy food and the overabundance of unhealthy but affordable and time-convenient fast food (Heynen, Kurtz and Trauger, 2012). Nik Heynen (2006), in his analysis of urban hunger in Milwaukee, highlights how the physical, metabolic violence of hunger and the multiple scalar forces that produce it cannot be divorced from each other if the structural causes of this hunger are to be properly understood and addressed. In his analysis of urban hunger, food apartheid as a concept centers on the slow, structural violence that materializes through unjust food systems. By explicitly tying in other intersectional injustices, food apartheid can help link the slow violence of limited nutritional food options with other forms of more visible violence affecting African-Americans like police brutality or gang violence (Reese, 2019).

## Food Apartheid in Grand Rapids

Grand Rapids is a clear example of how structural racism has created multiple intersectional injustices which today result in a landscape of food apartheid, whereby Black communities are far more vulnerable to food insecurity than White neighborhoods of the city (Smith, 2023). Taking food apartheid to be an *“explicit outcome of political economy based in structural racism and unequal geographies of access”* (Joyner et al. 2022, p.68), understanding its emergence requires a historical analysis of this political economy in Grand Rapids.

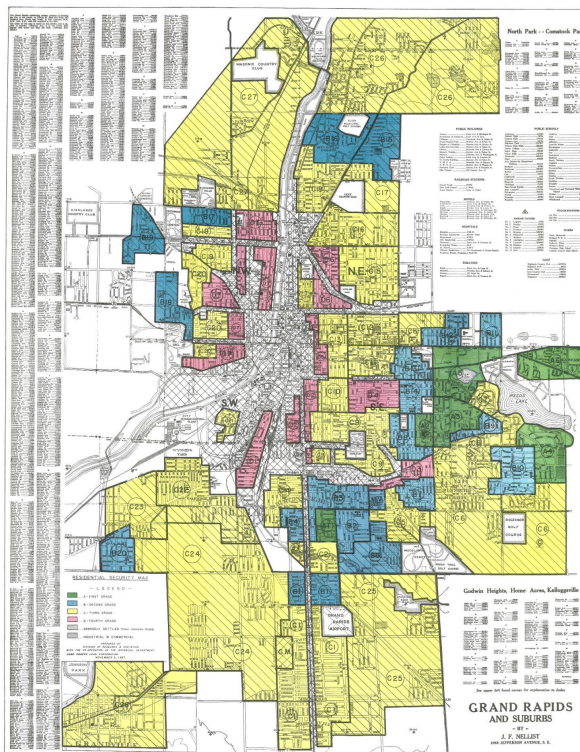
## Historical Analysis: Discrimination in Housing

Racial discrimination in housing has a powerful legacy in producing contemporary food apartheid in Grand Rapids (Kotvkal et al. 2021, Brummell 2020, Smith 2023). As the African-American population in Grand Rapids continued to grow through the 1930s and 1940s, the racist practices of the Federal Housing Administration (FHA) limited opportunities for many blacks to move to growing suburban districts such as Alger Heights and Burton Heights (Jelks, 2006). As mentioned in the literature review, many northern American cities developed sophisticated strategies of restraining African-American families to rental markets in downtown, underfunded neighborhoods (Rothstein, 2017; Boyd, 2017; Faber and Friedline, 2020). In Grand Rapids, as across cities in the U.S., African-American families seeking a mortgage on their home found it very difficult to acquire a loan (Robinson, 2012). Their neighborhoods were typically classified as ‘high-risk’ investment zones according to the grading system that the HOLC institutionalized during the Great Depression (Rothstein, 2017).

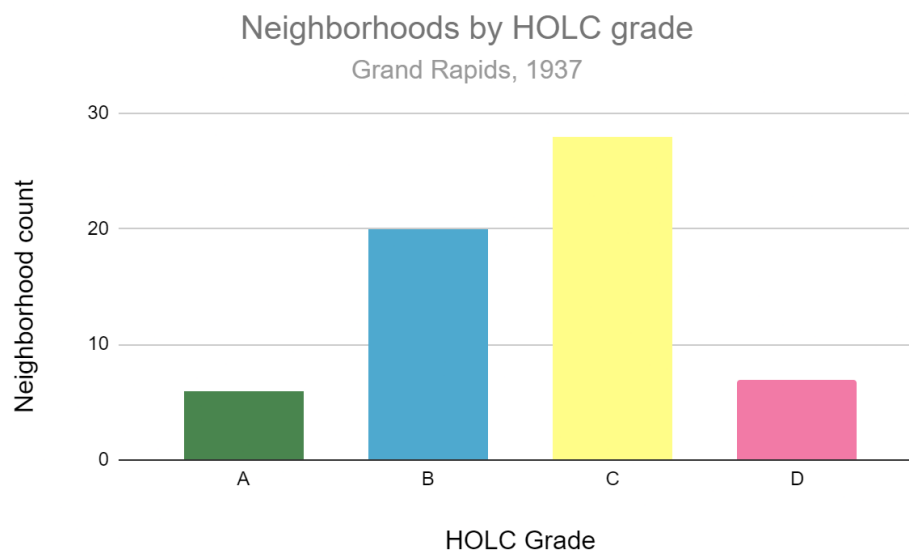


Redlining in Grand Rapids pre-dated the Second Great Migration which occurred after World War II. Of the 61 Grand Rapids neighborhoods surveyed by the HOLC in 1937, 6 were graded "A, *Best*", 20 were graded "B, *Still Desirable*", 28 were graded "C, *Definitely Declining*" and 7 were graded "D, *Hazardous*." According to the HOLC survey documents, obtained via the Mapping Inequality project (Nelson, n.d.) and quoted in italics, Black occupancy at the time was limited to 5 neighborhoods, all of which were designated "D, *Hazardous*". In language typical of the period, "*Detrimental Influences*" reported for the D-graded Sherman-Union neighborhood included "*Type of dwellings and inhabitants*." At the end of the report, the "*Clarifying Remarks*" conclude: "*Negroes in area are of better type. They are concentrated on Sherman, Bates and Thomas between Union and Eastern Streets*." On the next page, **Figure 1** shows the 1937 HOLC Map of Grand Rapids, while **Figure 2** is a chart of the number of Grand Rapids neighborhoods by grade.

Although this redlining was carried out by the Federal Housing Authority in the late 1930s in Grand Rapids, its impacts continued to be felt, especially during the post-war period, up until the 1960s as the Second Great Migration North continued (Jelks, 2006).



**Figure 1.** Black residents of Grand Rapids were restricted to 5 of the 7 neighborhoods graded “D, Hazardous” by the HOLC, represented by the red areas of the map.



**Figure 2.** A bar chart displaying the number of neighborhoods in Grand Rapids by HOLC grade. The colors here correspond to the colors on the map in **Figure 1**.

After World War 2, as redlining became increasingly institutionalized, white residents of Grand Rapids began to move en masse to the growing perimeter of suburbs around the city (Jelks, 2006). The process of residential segregation in Grand Rapids, wherein redlining restricted Black residents to a few neighborhoods whilst white residents evacuated to the peripheral suburbs, was recognized by African-Americans in Grand Rapids as a threat to the wellbeing and prosperity of their communities. There were efforts by community leaders and politicians alike to even the development between the growing, nearly all-white suburbs and the neglected, disinvested, predominantly Black urban core (Smith, 2023). In 1959, the 'New City Plan' was proposed to the city to highlight the dangers that the suburban evacuation of the White tax base posed to the financial stability of more downtown, African-American neighborhoods of Grand Rapids (Robinson, 2012). The proposal was overwhelmingly rejected by suburban voters, representing the desire of many white, suburban communities to "*wash their hands*" (ibid. 2012, p.54) of the responsibility for the poorer, black inner city. This desire was, in part, fueled by fear of a Black takeover of White neighborhoods. This is exemplified in a letter to Grand Rapids Press from White Grand Rapids residents Robert and Ruth Krueger from 1963,

*"We don't want our neighborhood to be a slum area in a few years...How many neighborhoods in this city can you name which have been taken over by colored which have not become slum areas?... In these United States we are all supposed to have civil rights - where are ours?"* (ibid., 2012, p.58 - 59)

The sentiment expressed in this letter was something that local, racist politicians in Grand Rapids played into when integrated suburbs were proposed. The opposition to Black suburbanization and organized white efforts to prevent neighborhood integration resulted in a *“city within a city, with a black core and white periphery”* (ibid., 2012, p.52) This black core contained much higher rates of poverty, urban decay and unemployment than White neighborhoods that encircled them. Gradually, in tandem with residential redlining, ‘supermarket redlining’ emerged, wherein grocery stores did not invest in the lower-income customer bases of African-American neighborhoods, gradually resulting in healthy food options disappearing from these areas (Smith, 2023). Thus, food deserts did not just appear ‘naturally’ in Grand Rapids. The slow violence of spatially and economically restricted food access was the outcome of decades of segregation, marginalization and cycles of enforced poverty in non-white neighborhoods.

Disinvestment and redlining in Grand Rapids were not the only methods through which housing discrimination was linked to food apartheid, however. Following the white flight of the 1950s, 60s, and 70s to the Grand Rapids suburbs was the phenomenon of young, white, middle-class professionals and families moving back into the city. In the 1990s as the wealth gap in the city increased, white investors were encouraging the development of downtown, rundown neighborhoods (Smith, 2023). Cheaper housing in these areas, proximity to employment and a more vibrant culture than the suburbs all contributed to the movement of younger White people to historically African-American, lower-income neighborhoods (ibid., 2023). The result of this demographic shift has been gentrification and displacement of

African-American residents. As taxes and the cost of living rose after the development of downtown neighborhoods like Heartside and in the Wealthy Street Corridor of the Southeast side, this process of displacement accelerated (Huyser and Meerman, 2014). For instance, Yvonne Johnson, African-American resident of the Wealthy Street corridor, shared, *“There’s been a lot of families who have moved off the block in the 18 years I’ve been here, mostly African American. Most of it has been [because of the development] and most people are being forced out.”* (Smith, 2016). This quote, from 2016, exemplifies how the ongoing displacement of African-American Neighborhoods by gentrification has been going on for at least twenty years.

Since 2010, the increased demand for housing in these neighborhoods has led to a dramatic rise in the price of houses in predominantly-Black neighborhoods and a concurrent 40% rise in rents across the city. This is one of the highest increases in rent nationwide during the decade 2010-2019 (Self Financial, 2020). African-American residents in Grand Rapids, who make up a disproportionately high percentage of the city’s rental population, are especially vulnerable to these rent increases (PBS, 2016). The high concentration of African-American residents in the rental sector in Grand Rapids is mirrored across the United States. This is a direct legacy from when redlining prevented many African-American families from acquiring a mortgage for their homes and forced many into the rental market (Rothstein, 2017). In Grand Rapids today, 35% of African-American residents own their home versus 63.7% of White residents (Jones, 2023). Consequently, many African-American residents have been forced to move further out of the city in order to afford housing in the greater Grand Rapids area (PBS (2016), Swope, Hernandez and Cushing (2022), Smith (2023)). In recent years, many Black

residents who remained in more centrally located neighborhoods during this period of rent-inflation have also suffered or are suffering from food insecurity (PBS, 2016). Together, redlining, suburbanization, and gentrification, all a part of the systemic racism in housing, have contributed to persistent food insecurity and in-access in the African-American neighborhoods of Grand Rapids.

Despite these challenges, it is important to highlight the acts of resistance that African-Americans displayed (and continue to display) as they fight against the policies and structures grounded in structural racism in Grand Rapids (Smith, 2023). As Robinson (2012, p.??) notes, suburbanization was not just a White ideal or aspiration, indeed it was the desire of many African-Americans who *“routinely challenged the racial barriers of segregated neighborhoods.”* Many African-Americans fought for middle-class livelihoods, whether it be the right to a suburban home or the right to simply rest and recreate. In Western Michigan, this was represented by the African-American holiday town of Idlewild, which served as a vacation destination for African-American families, who could escape the pervasive racism that heavily dictated and restricted urban life at the time (Jelks (2006), Walker and Wilson (2002)). African-Americans who owned their homes in Grand Rapids actively resisted the disinvestment and urban decay their neighborhoods were subject to after white flight (Smith, 2023). This was accomplished by residents and community groups through ongoing repairs and beautification projects to fix up the old housing stock (Robinson, 2012). These acts of resistance were crucial to retaining strong community ties amidst the implementation of Grand Rapids’ racist housing

policies and laws. Residential segregation would be the foundation upon which racial segregation in education in Grand Rapids developed.

### **Historical Analysis: Discrimination in education**

In Grand Rapids today, there are significant gaps in the level of educational attainment between African-American and White communities (City of Grand Rapids, 2021). These gaps serve to reinforce existing socioeconomic inequalities across the city and make it difficult to find well-paying jobs that enable families to escape poverty and food insecurity. The history of discrimination in housing and in education access are deeply entwined, however, schools in Grand Rapids, like residential neighborhoods, were not always segregated. Just before the Second Great Migration, there were relatively high levels of racial integration in many Grand Rapids schools, reflecting the more integrated neighborhoods that existed before redlining, white flight and disinvestment (Owens, 2020). This trend abruptly changed after World War II.

When residents of newly segregated White suburbs argued for the establishment and protection of White-only schools in their neighborhoods during the late 1960s and 70s, Whites justified their argument for racial purity in the schools on the grounds that the school's students should be local to their geographic areas (Smith, 2023). The 'local' argument, however, was symptomatic of the coded language employed by racist policymakers and concerned white citizen groups in Grand Rapids at the time (Robinson, 2012). These efforts disguised parental fears of racially integrated education, which would require bussing their children into the largely non-white inner city, whilst accepting African-American children into their suburban schools

(ibid., 2012). The racism held by many White parents translated into an anti-busing movement that explicitly sought to stop the racial integration of schools.

In the aftermath of walk-out protests led by African-American students at South High School and the eruption of the 1967 race rebellions, Grand Rapids white suburbs further recoiled in avoidance of the problems facing African-American communities in the inner city (Smith, 2023). Many residents of the newly created suburbs posited that the downtown area and its population was not the responsibility of suburban residents (Shellow, 2018). Racist city officials collaborated with influential parent-run anti-busing movements to oppose efforts by some politicians and community leaders to slow down the racial fragmentation of the city's school districts. Thus, Citywide plans to desegregate education failed to result in the gradual defunding and decline of inner-city schools, and in turn higher dropout rates and lower educational attainment within segregated Black neighborhoods (Robinson, 2012).

Today, the low rates of educational attainment in Grand Rapids that have resulted from historically segregated and poorly funded schools and neighborhoods mean it is much harder for Black graduates to find well-paying employment and many end up employed in low-wage, low-skill labor. In Kent County in 2020, Black residents were three times more likely to be unemployed than white residents and earned approximately half the average income of white residents, which increases their risk of food insecurity (Brummel, 2020). The educational disparity that persists to this day serves to reduce the chances of social mobility and



employment for African-Americans in Grand Rapids, leading to the entrenchment and reinforcement of wage gaps, wealth gaps and ultimately to a vulnerability to food insecurity.

Applying the food apartheid framework draws attention to the need for broader, intersectional solutions that consider the numerous systems of oppression which produce food injustice. The legacies of racial segregation and discrimination within Grand Rapids housing and educational systems continue to perpetuate racial inequities on housing, education and income. Together these fuel the slow violence of food insecurity in the city. The resulting landscape of food apartheid centers food injustice as emergent from the multiple intersecting issues (housing insecurity, lack of intergenerational wealth, educational disinvestment, high unemployment) that creates and perpetuates food insecurity and racial inequality.

In order to conceptualize and deliver our project for South East Market, our work drew on a framework of food justice that centered a food apartheid lens. This framework allowed us to address the multiple and intersecting systems of oppression that lead to contemporary food injustice in Grand Rapids. The two objectives of this project were;

1. To develop policies that challenged the structural causes of current food injustice and food apartheid in Grand Rapids.
2. To create a publicly accessible Storymap which provided a critical, historical narrative of food apartheid in Grand Rapids.

This analysis aided in contextualizing and understanding food injustice. To adequately address our deliverables, we needed to research existing models combatting food injustice in

other cities in order to develop solutions and action pathways that we could incorporate into the StoryMap and policy recommendations.

## **Policy Section**

### **Introduction**

Our research focused on how historical structures have perpetuated the inequitable systems that currently prevent BIPOC residents living in low income areas, like the Grand Rapids 49507 zip code, from accessing affordable, healthy, and appropriate foods in the city. In collaboration with our clients South East Market founders, Alita Kelly and Khara DeWitt, we analyzed existing policies in Grand Rapids and other municipal food governance models to propose three amendments to Grand Rapids municipal policy that address lasting structural change to benefit the health and food security of all the residents in the city. The final policy proposals are divided into three topics: Food & Health, Land & Zoning Ordinances, and Edible Landscaping which are contextualized later in this section.

Our policy recommendations were drafted and reviewed by the members present at the 9/14/22 Urban Agriculture Committee of Grand Rapids (UACGR) meeting and South East Market founders before being submitted and accepted by the City of Grand Rapids in April 2023.

### **Methods of Developing Policy Recommendations**

The Urban Agriculture Committee of Grand Rapids proposes urban agriculture to address both food apartheid and sustainable urban development to better achieve Grand Rapids' Climate Resiliency goals and plans. In order to draft effective and feasible policies for Grand Rapids' current policy landscape, we worked closely with the Urban Agriculture Committee of Grand Rapids (UACGR) to identify urban agriculture as a critical nexus between food security and urban climate resilience. Urban agriculture is defined by the UACGR as any

growing or producing food or raising animals in the city and can take many forms (e.g. gardens, hydroponics, bees, etc.). Our research into existing policies in Grand Rapids included municipal policy documents and plans, notes and agendas from UACGR, and resident's survey data on urban agriculture access in the city.

In analyzing city documents and Grand Rapids ordinances, potential policy changes were identified that addressed food justice and the city's climate resiliency goals. Alternative municipal food governance models in Atlanta, GA Cleveland, OH and Oakland CA were also analyzed to better understand effective and sustainable strategies for urban agriculture policy.

### **Review of Existing Grand Rapids Food Policy**

A collection of relevant policy documents pertaining to food insecurity and urban sustainability in Grand Rapids were reviewed to understand the current political landscape of food policy in Grand Rapids. City zoning ordinances were reviewed for language toward urban agriculture activities. *The Climate Resiliency Report, Grand Rapids Strategic Plan 2020-2023* and the *Community Master Plan and Key Concepts of 2002* were reviewed for current policy gaps and acted as models for our draft policy proposals.

In addition to identifying gaps and analyzing existing Grand Rapids policy regarding food, health, and the environment, we worked closely with the Grand Rapids Urban Agriculture Committee to prioritize policies that create structural pathways for food justice in Grand Rapids.

### **Urban Agriculture Committee of Grand Rapids**

First convened in 2015, the Urban Agriculture Committee of Grand Rapids (UACGR) is made up of twelve Grand Rapids members, including farmers, business owners, interested

residents, city officials, and activists. At the time of our study, the UACGR director was our partner Alita Kelly who provided a communication pathway between our work and the committee members. The committee's goal is to "support their residents to grow and enhance the local food system for their health and wellbeing" (Urban Agriculture Committee Vision and Goals, 2019). The committee published documents utilized to develop policy changes including the *Urban Agriculture Committee Vision and Goals, 2017 - 22 Committee Meeting Minutes*, the *2018 Policy Feedback Form Summary*, and the *2015 Grand Rapids Urban Agriculture Policy Report*. The resources from the UACGR were used to develop policies to specifically meet the needs of the city's ongoing climate plans and of the residents living in food apartheid.

The *Urban Agriculture Committee Vision and Goals* was written and published by the UACGR to help guide their work, and contains existing and future goals of the committee to ensure a healthy community through urban agriculture. This resource helped align our policy recommendations with the ongoing work of the committee, in order to ensure we were building off existing policy work in the urban agriculture sector.

The *Committee Meeting Minutes 2017 - 2021* provided insight on meeting attendees, speakers, and community announcements pertaining to food and agriculture. These notes informed our understanding of the cares and challenges faced by urban agriculture practitioners in Grand Rapids on a day to day basis. Using these meeting minutes, our team composed a list of notable key actors to interview so that we could learn from their experienced, diverse perspectives on the Grand Rapids food system.

The *2018 Policy Feedback Survey* contains the summarized results of the 86 residents' responses to five questions regarding urban agriculture activities and policy barriers. The survey

was disseminated online and distributed to several local organizations and neighborhood groups. The results of this study were divided into seven themes ('Composting', 'Education', 'Bees Chicken and Livestock', 'Efficient land use', 'Structures', 'Tax Incentives' and 'General comments') and counted the frequency of a response falling into that theme. Using the *The 2018 Policy Feedback Survey* allowed us to identify which issues had common agreement compared to less common issues that may not garner equal support for implementation. The survey results also listed a section of policies referenced and/or suggested by respondents; many of these responses were useful in identifying alternative food governance models to research. The results of the survey also provided a direct perspective on where policy improvements were most needed, and which policy suggestions were most likely to empower the residents' current work in urban agricultural and food justice in Grand Rapids.

The *2015 Grand Rapids Urban Agriculture Policy Report* was authored by Urban Roots, and published by the City of Grand Rapids, and the research in the report was funded by the YMCA, and the W.K. Kellogg Foundation. The report assessed current urban agriculture best practices and offered suggestions within the City of Grand Rapids, taking into account the needs of the most marginalized neighborhoods in the city. The findings report that government support and funding are best placed in coordination with grassroots initiatives as this method is more likely to provide sustainable infrastructure for urban food security in Grand Rapids. This report exemplified the importance of developing policies that build on the existing work of grassroots food justice and BIPOC-led urban agriculture movements in Grand Rapids.

## **Grand Rapids Residents Discussions and Interviews**

Our team spoke with some of the 10 committee members who attended the Grand Rapids Urban Agriculture meeting on September 14th, 2022. The attendees with whom we spoke worked across multiple kinds of organizations and at different scales of food justice implementation. Participants' backgrounds in urban agriculture and Grand Rapids food systems were diverse and included YMCA Fresh Produce Program coordinator, former Grand Rapids policy aid, the Director of Food Policy Council of Grand Rapids, Director of Kent County Essential Needs Task Force, Urban Agriculture Committee member experienced in edible landscaping, the city forester, and representatives from the State Land Bank of Grand Rapids, Friends of Grand Rapids Parks, Brownfield Redevelopment Authority, Growing Pontiac, Seeding Reclamation, and Greencorps Terra Firma.

Our team aimed to conduct interviews with a variety of residents and community leaders involved in food justice work in Grand Rapids. However, we did not receive a very high response rate from those folks we reached out to and therefore adapted our project so as not to rely on interview data as heavily as we had initially anticipated. Two formal interviews were held, with representatives from a YMCA Fresh Produce Corner Store Program and from the Michigan State Land Bank. These interviews, in tandem with the informal conversations with members of the Urban Agriculture Committee, provided valuable context and direction for our policy development process. Interviews were chosen as a means to critically understand the debates around urban agriculture, and the barriers to food justice in order to directly outline policy change that should occur to address food apartheid in Grand Rapids.

Interviews and informal discussions were reviewed in weekly project meetings, and with our South East Market clients. Responses were organized by policy theme present in the discussion (e.g. edible landscaping policy, community garden policy, land policy, and more) and then we decided to focus on three themes of policy to address the most pressing challenges expressed by Grand Rapids residents:

1. Food metrics for Grand Rapids
2. Improved zoning ordinances to promote BIPOC-led urban agriculture and
3. Edible landscaping for BIPOC neighborhoods with low canopy cover and food insecurity.

These themes were chosen because they each have synergistic relationships with the city's policy rhetoric, and address important aspects of resident's concerns mentioned in the interviews.

### **Municipal Food Policy Modeling**

Based on the results and feedback received related to Grand Rapids' existing food policy landscape, we explored city models where communities are successful in promoting urban agriculture initiatives through education, organizing, and networking with their city government. Over the summer of 2022, we compared three cities with strong urban agriculture movements and food justice policymaking. Three models were chosen for their (1) the availability of urban agriculture data in the form of documents, policies, survey data, published media, and more, (2) the presence of grassroots urban agricultural initiatives, particularly those led by BIPOC residents, and (3) existing transferable food policy frameworks applicable to Grand



Rapids municipal policy goals. A framework was considered transferable if the goal of the model location municipality overlapped with a goal of the Grand Rapids municipality mentioned in the *Grand Rapids Climate Resiliency Plan*, *Grand Rapids Master Plan*, or *Grand Rapids Strategic Plan*. The three models analyzed were Atlanta GA, Cleveland OH, and Oakland CA.

By comparing municipal food policies across three other municipalities that promote BIPOC-led urban agriculture, we identified policies that could affect structural food systems change alongside gaps and failed policies in these cities, all of which guided our policy proposal development process for Grand Rapids. All city models were analyzed by (1) reviewing municipal food policy history to understand the current food policy landscape, (2) identifying cases of success in supporting food security and urban agriculture, and (3) evaluating transferability to Grand Rapids' current policy goals. Next we summarized the findings from our analysis of food policy in Atlanta, GA, Cleveland, OH, and Oakland, CA.

### Atlanta, GA Food Policy Model

In recent years, Atlanta has emerged as a hub for powerful food justice advocacy (Gaither et al., 2020). From the grassroots to the municipal level, there has been growing engagement in urban agriculture activities and initiatives, particularly within BIPOC communities of the city. Atlanta and Grand Rapids share histories of systematic racism that became codified into exclusionary laws such as redlining, which continue to underlie food apartheid in the city today (Holloway and Wylie, 2001). In response to these historic inequities, Atlanta's government has responded by enacting new food justice policy pathways to address food apartheid by (1) creating a governance role for local urban agriculture, (2) clearly linking urban agriculture and food security, and (3) redefining urban development.

In terms of governance, the city created a position for an Urban Agriculture Director for the city of Atlanta in 2015, setting a precedent as the first major city in the U.S. to do so (Hughes, 2015). The current Director of Urban Agriculture, J. Olu Baiyewu, has spoken at length on the issue of food security and the importance of addressing its historical roots (Capelouto, 2021); their approach and rhetoric were used for developing policies for Grand Rapids. For example, Baiyewu's frequent use of the term 'food redlining' recognized the key role redlining played in reinforcing that form of segregation and grounded our work in the food apartheid narrative, *"We look at it more as food redlining. A desert is a natural ecosystem. Food deserts are human-made through public policies and corporate policies. We don't want people to think this [food apartheid] is natural."* J. Olu Baiyewu, Urban Agriculture Director for the City of Atlanta (Thigpen, 2021). As a city official, Baiyewu has set an example in municipal administration for utilizing urban agriculture in the form of food forests in nature-based city-planning. The explicit linking between urban agriculture, edible landscaping and efforts to dismantle food apartheid was a crucial blueprint when developing our policy proposals.

The Atlanta Mayor's Office of Sustainability published the city's *Climate Action Plan 2015* which utilizes an equity-lens approach emphasizing collaboration across neighborhoods in Atlanta and identifies best practices for reducing the city's greenhouse gas emissions (City of Atlanta, 2015). Atlanta's climate action plan is an excellent example of a legitimate policy tool used to justify urban agriculture in municipal policy. For example, Grows-A-Lot, wherein the city repurposes vacant land for urban agriculture demonstrating the positive role urban agriculture policy can play in ensuring sustained food security for BIPOC residents in historically

marginalized neighborhoods. This illustrates how Atlanta implemented food justice programs to realize their climate goals (AgLanta, 2022).

In comparing the City of *Grand Rapids Climate Resiliency Plan 2013* to that of Atlanta's, it is clear that the Grand Rapids government has not yet taken action to connect the goals of climate resiliency with that of food justice despite their clear synergies (Thornbush, 2015). Atlanta's new policies redefined urban agriculture as a legitimate form of urban development that mitigates expected climate effects. This missing connection in Grand Rapids policy helps explain the minimal resources invested in food security despite the amount of resources invested in climate resiliency. When developing our policy proposal on edible landscaping in Grand Rapids, we borrowed lessons from Atlanta's food forests cooperatively sponsored by the city and residents (Ryan, 2021). Food forests are "diverse plantings of edible plants that attempt to mimic the ecosystems and patterns found in nature" (Project Food Forest, n.d.). The municipal government and local non-profits collaborated to create the city's food forest. Furthermore, young people were employed in this project in order to increase local job opportunities and environmental education. The Urban Food Forest at Browns Mill in Atlanta served as a key example for how to integrate urban forestry across municipalities (The Conversation Fund, 2019), an approach utilized in our policy recommendations related to promoting edible landscaping in BIPOC neighborhoods of Grand Rapids. In particular, the approach highlighted how policy synergies could be effectively made to address both climate resiliency and food security. Atlanta's city role in food policy helped provide effective, evidence-based policy solutions to build pathways between climate resilience and urban agriculture, in particular edible landscaping, in Grand Rapids policy. By increasing the quality of

existing green spaces and increasing food accessibility, edible landscaping projects have the potential to create powerful policy synergies that simultaneously address climate resiliency and food injustice.

### Cleveland, OH Food Policy Model

Cleveland was another key case study used to develop Grand Rapids policy proposals. Considering that it is another Rust Belt city, Cleveland had some regional similarities with Grand Rapids that are different from that of the histories of Atlanta and Oakland. However, there are notable differences between the two. Cleveland has a 48.8% African-American population and is one of the country's most impoverished cities which was reinforced by the recession of 2008 (Rosenman and Walker, 2016). Racial segregation and inequality in Cleveland led to a stark food apartheid (Flachs, 2010). However, despite the high levels of poverty, unemployment and food apartheid there is much grassroots organizing, especially regarding vacant land usage. Therefore our review of Cleveland's strategies for addressing food apartheid focused on (1) how to address in-access to vacant land for urban agriculture, and (2) how land tenure is critical for the sustainable development of urban agriculture projects.

In the context of widespread vacancy, the City of Cleveland envisioned urban agriculture as a tool through which blighted neighborhoods could be 'stabilized' (Pothukuchi, 2018). This is key to the UACGR mission to promote and legitimize urban agriculture for their residents. The sustainability strategy that the city of Cleveland adopted in 2008, *'Re-imagining Cleveland'*, embraced agriculture as crucial for community development and a key urban sustainability strategy (Neighborhood Progress, Inc., 2009). This formal support of urban agriculture in the early 2010s was matched with logistical and financial support from the city, leading to a

proliferation of urban farms and gardens across Cleveland during a time of austerity (Rethink Cleveland, 2014). However, as the financial and property markets in the city recovered from the mid-2010s, there emerged discrepancies between the sustainability rhetoric and the persistent reality that most urban agriculture sites were unable to acquire/purchase land for long-term uses (Pothukuchi, 2018). As Kameshwari Pothukuchi (ibid.) notes, urban agriculture was not viewed as a long-term part of Cleveland's 'redevelopment' program and thus, many urban farms and gardens lost their land as soon as more profitable development opportunities emerged.

A key lesson from this model is that long-term urban agriculture projects are unlikely to succeed or exist as long as there is little political or legal support for the security of tenure of urban agriculture as a long-term use of land. For our project, this translated into the need to propose policies that address a root cause of food insecurity—a lack of access to and security of tenure for land. Unlike other Rust Belt cities like Detroit, Toledo, or Cleveland, Grand Rapids has a more competitive property market and less vacant land (Smith, 2023). Given this economic context, acquiring land for urban agriculture in Grand Rapids requires extensive capital and is out of reach for many BIPOC residents in the city. Our policy recommendations aim to legitimize urban agriculture as a form of development and include a land tenure clause in order to ensure that BIPOC-owned urban agriculture initiatives are protected from being displaced by housing development.

### Oakland, CA Food Policy Model

Oakland, CA had been utilizing strict zoning ordinances until 2014, when they restructured all zoning ordinances to better accommodate urban agricultural needs. Oakland

and Grand Rapids both utilize land-use zoning ordinances to ensure safe urban development; neither includes ordinances that allow for urban agriculture. Oakland, CA, and Grand Rapids also shared zoning ordinances that prevent their residents from engaging in urban agriculture by making it difficult and expensive to get permission to farm from the city. Oakland's ordinance restructuring robustly improved the city's food policy to better support food security as a means to minimize worsening climate conditions such as the urban heat dome effect.

In 2014 Oakland city council approved the expanded list of approved activities to include a wide range of urban agriculture activities including beekeeping and crop cultivation (Zigas 2014), it lessened the barriers to entry for many residents wanting to use their own land to cultivate crops. Grand Rapids has limited vacant land, and restrictive zoning ordinances for land use, resulting in high barriers to BIPOC-led urban agriculture. Since Oakland has expanded their zoning ordinances to default allow urban agriculture activities, new policy pathways were established to promote food justice. Following the new zoning ordinances, the city's Planning and Building office has published robust information on the importance of urban agriculture in battling food apartheid and urban climate resilience. In addition, the Public Works Office of Oakland, CA began plans to expand canopy coverage and its equitable distribution across lower-income neighborhoods (*Oakland Equitable Climate Action Plan, 2020*). This is one example of the incremental policy changes that can occur if the right policy pathways are established. We followed Oakland's approach to propose expanding Grand Rapids's urban development zoning ordinances to better support, rather than prevent, residents interested in urban agriculture.

Oakland's *Equitable Climate Action Plan of 2020* (ECAP) goes further than the other city models in its attention to equity by recognizing the historical and systematic discrimination that led to food insecurity across lower income, often non-white Hispanic neighborhoods. The report positions public health and the climate crises on the same agenda, creating policy pathways for urban agriculture to address food apartheid in the city by prioritizing the most at-risk neighborhoods (ECAP 2020). This report exemplified how Oakland's city government addresses historical inequities in its policy by citing climate science and noting its inequitable threat to different neighborhoods in the city. In order to address the inequitable distribution of greenspace in Grand Rapids perpetuating food apartheid, our edible landscaping policy recommendations borrow language from Oakland's equitable distribution goals in connection to reducing urban climate impacts.

## **Grand Rapids Municipality Policy Recommendations**

These policy recommendations were developed using our historical research into Grand Rapids, analysis of existing food policy in Grand Rapids, and results from the review of Atlanta, Cleveland and Oakland's food policy pathway models. Our policies aim to address gaps in Grand Rapids' food policy and create pathways that link food, nutrition, health and urban sustainability goals. The sets of policy recommendations were grouped together in three topic areas: Food & Health, Land & Zoning Ordinances, and Edible Landscaping.

### **1. Food and Health**

Grand Rapids' current food policy has yet to be linked to the city's urban resilience goals, resulting in ineffective climate food and climate policy. Atlanta, GA, Cleveland, OH, and Oakland,

CA have all demonstrated the success of using policy pathways between urban climate resilience and food security in order to implement policy support for urban agriculture to address both issues. Oakland, CA especially stood out in their *Equity Climate Action Plan 2020* which outlines the cause and effect relationship between equity and food security. Our first policy recommends updates to the *Grand Rapids Strategic Plan 2020-2023* which contains the plans to achieve the *2013 Grand Rapids Climate Resiliency Report*.

The strategic plan is organized into themes, each theme containing multiple objectives, strategies to achieve each objective, and metrics to track the progress of the objective over time. This policy is attached to the “Health and Environment” section of the Strategic Plan, under objective 5 which is to “*Collaborate with and support partners working to reduce health disparities and the resulting undesirable outcomes*”. Despite the numerous linkages between nutrition and health, information on food access is entirely absent from this theme and objective. Our proposed recommendation is to (1) include food justice and urban agriculture strategies under objective 5 of the strategic plan, and (2) include metrics to measure them. We recommended specific metrics to measure the health disparities of the residents living in food apartheid, sourced from the Michigan State University Center for Regional Food Systems index under “Food Access” and “Food & Farm Business”. These metrics included measuring: ‘percentage of agricultural land ownership, value, acres by race’, ‘farm ownership by race’, ‘rate of food insecurity by race’, and ‘percentage of households with children that are food insecure, by race’. These metrics were suggested to account for the aforementioned codification of racial discrimination into Grand Rapids housing policy.

## **2. Land & Zoning Ordinances**



Barriers to access land are high in Grand Rapids due to the competitive housing market, especially for urban agriculture practitioners with low access to funding (Wiegand, 2016). This compounds with the minimal access to undeveloped green spaces for urban agriculture. In this policy recommendation, we borrowed from Oakland, CA, Cleveland, OH and Atlanta, GA models for zoning ordinances proposing that (1) urban agriculture be a legitimate form of green redevelopment on vacant land, (2) land cultivators of green redevelopment spaces be given tenure, and (3) that the City of Grand Rapids, State Land Bank and the Brownfield Redevelopment Program act as the overseeing collaborators of this policy change, and commit a percentage of vacant land to green redevelopment projects.

Part one of the policy proposal ensures that urban agriculture is defined in Grand Rapids zoning ordinances as a form of legitimized development, thereby creating a new policy pathway in the city's ordinances to address food security through urban agriculture. The second part of the policy ensures that green redevelopment projects on vacant land in the city do not face the risk of losing their tenure and related investments. Recall that both Cleveland's and Grand Rapids' residents struggled with losing their land to competing stakeholders or for political reasons, resulting in a significant loss for the residents and practitioners relying on the land's food. Part three of the policy, most critically, ensures that each of the essential land-governing bodies in Grand Rapids works in tandem to set aside land for urban agriculture projects and ensure they are protected from losing access to that land. By creating policy workflows across these three government entities, urban agriculture becomes a conduit within the Grand Rapids policy landscape that connects the city's climate goals to food security and now land tenure and access.

This policy is designed to help the city in achieving the goals outlined in the *Grand Rapids Climate Resiliency Report 2013*, *Community Master Plan and Key Concepts 2002*, and *Strategic Plan 2020-2023*. Restructuring Grand Rapids' restrictive zoning ordinances to include urban agriculture should help make access to fresh urban produce and green space more equitable across Grand Rapids neighborhoods.

### **3. Edible Landscaping**

In analyzing the program's successes, supporting edible landscaping stood out as a potential policy recommendation and has been cited multiple times by UACGR, is prevalent in other city food policies, highlighted in resident survey responses and in our interviews. Edible landscaping includes the cultivation of species primarily for public consumption (food forests, and community gardens). Edible landscaping brings healthy foods to neighborhoods with less canopy cover, which typically experience more severe urban heat dome effects (McLain et al. 2012). Based on our analysis of canopy cover in Grand Rapids, we found that the historically redlined neighborhoods that were graded D by the HOLC in 1933 are the same neighborhoods that have less than 10% canopy cover in 2016, and are home to the majority of Grand Rapids BIPOC residents living in those areas. To address the compounding effects of climate change and food apartheid, our team proposes policy that will (1) include edible landscaping as a type of 'development' and 'green space' in the city's *Climate Resiliency Plan 2013*, and (2) to expand the current canopy cover standards to include a quota of food-bearing trees and perennials distributed equitably across Grand Rapids.

Lessons from Atlanta, GA's and Oakland, CA's expanded zoning categories were applied to these edible landscaping policy recommendations. Designating edible landscaping as a form

of development in the city's climate report effectively links the city's canopy cover goals to their climate resiliency and food security goals. Currently, the Grand Rapids city government has a minimum 40% canopy cover standard with a biodiversity ratio rule to ensure tree species diversity across trees in the city. However, this policy lacks distribution quotas for different neighborhoods and their respective green spaces and canopy cover in neighborhoods previously rated A through D by the HOLC in 1933. As a reminder, those neighborhoods previously graded D tend to suffer from worse urban heat dome effects and food insecurity than those historically graded with an A rating (See GIS Section). By instituting edible landscaping quotas, not only will the city easily meet its canopy coverage goals, but also decrease overheating in neighborhoods, promote access to fresh produce, increase biodiversity of trees, and help regulate air and soil quality.

## **GIS and StoryMap**

### **StoryMap Introduction**

In order for our research to be useful to South East Market, we believed it was important that the final product should be more accessible to the public than an academic paper, both logistically and linguistically. In order for potential users to be able to find our research then engage with it using digestible language, we chose to utilize an ArcGIS StoryMap. StoryMaps are interactive websites produced via an application within ESRI's ArcGIS Online (AGOL) tool suite that combines text, multimedia components, and geospatial data into a scrolling webpage. The goal of our food justice StoryMap was a narrative-driven tool that South East Market could show to collaborators, donors, policymakers, and others to provide an introduction to food justice issues in Grand Rapids. In centering our historical narrative, our StoryMap seeks to convey the necessity of South East Market's work, and concludes by providing users resources to get involved in local food justice work. By providing access to the StoryMap via a shareable link, this project seeks to make it accessible to anyone with a smartphone, tablet, or computer.

### **GIS Integration**

Crucially, using a StoryMap as the platform for hosting our project also allowed us to incorporate GIS analysis and visualizations to support our narrative. As discussed in earlier sections, racist historical policies in housing were one of the key drivers of present inequities in food access in Grand Rapids. Due to the spatial nature of inequitable housing policies, GIS is

theoretically well suited for investigating and visualizing the connection between housing inequality and food justice. However, one barrier to utilizing GIS maps to effectively visualize food access is lack of sufficient suitable data. Established metrics for measuring food access are limited, and any available information often lacks the detail to make meaningful conclusions. For example, health data is collected via the Census Bureau, but census tracts are so large that they typically contain several neighborhoods, and each neighborhood contained within a single census tract may have significantly different levels of food access. In aggregating these neighborhoods within a census tract, the patterns of food access are often oversimplified and obscured. While they do collect more detailed data, the Census Bureau intentionally adds noise to protect individual privacy through a process called disclosure avoidance, making it unsuitable for analysis (U.S. Census Bureau, 2021). The variance introduced by this process means that census blocks, the smallest geographic areas collected by the census, cannot be relied upon for analysis without aggregation. Given our limited access to food justice data via the Census, we turned to other GIS data sources to investigate linkages between historical racial discrimination and present conditions in Grand Rapids.

In contrast to Census data, modern satellites are capable of producing very fine scale digital imagery which can then be used to assess environmental conditions within neighborhoods. Numerous studies have linked environmental conditions within neighborhoods to health outcomes of residents. For instance, one recent study found a significant association between canopy cover (presence of trees) and life expectancy (Connolly, 2023). Furthermore, many of these neighborhood scale environmental factors also influence climate resilience and appear in Grand Rapids' own *Climate Resiliency Report*, discussed in the policy section of this

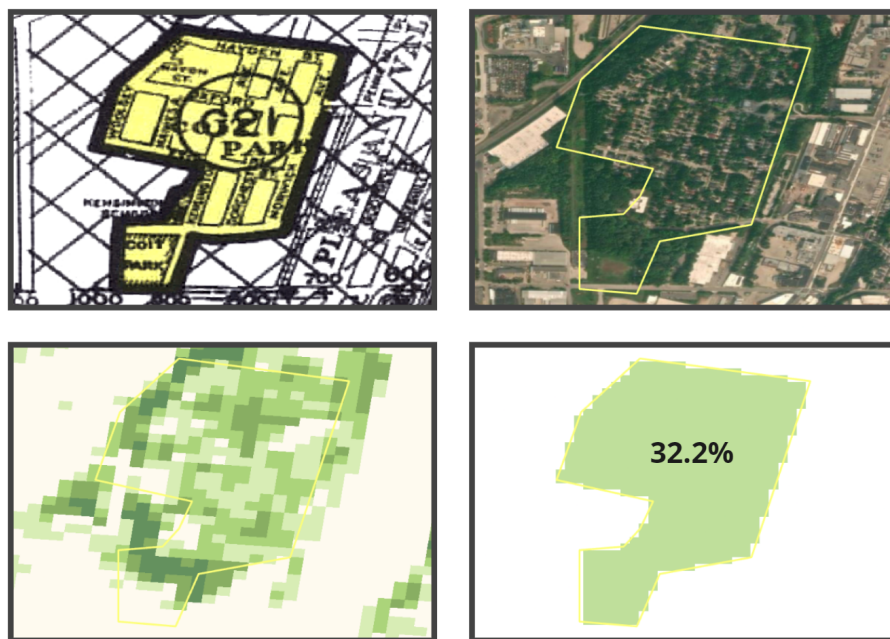
paper. Therefore, examining these environmental conditions with GIS allowed us to provide supporting material for our policy recommendations and build the story of food insecurity in Grand Rapids.

Our GIS analysis examined the relationship between tree canopy cover, impervious surface (presence of pavement, buildings, etc.), and the discriminatory housing policies of the Home Owners' Loan Corporation (HOLC). For this purpose, we used three data sets: National Land Cover Database (NLCD) 2016 US Forest Service Tree Canopy Cover, NLCD Imperviousness 2016, and HOLC Residential Security Map for Grand Rapids, 1937. We accessed HOLC maps through the Mapping Inequality project, which provides georectified versions of these maps online, as well neighborhood shapefiles extracted from the maps (Nelson, n.d.). Mapping Inequality's digitization work means that the historical maps have been standardized so that they can be compared with the two satellite imagery data sets.

## **GIS Methods**

The NLCD 2016 Tree Canopy Cover dataset is an image layer with 30 meter spatial resolution, meaning each pixel covers a 30 x 30 meter area. Each cell is assigned a percentage value between 0 and 100, representing the proportion of that area covered by tree canopy (U.S. Forest Service, 2016). Similarly, the NLCD Imperviousness 2016 layer is a grid with 30 meter spatial resolution and percentage values associated with each cell, but for impervious surfaces rather than tree canopy (U.S. Geological Survey, 2016). The primary method of analysis for the GIS portion of the project was using zonal statistics to calculate the distribution of pixel values for each given HOLC neighborhood. This analysis works by using the HOLC neighborhood

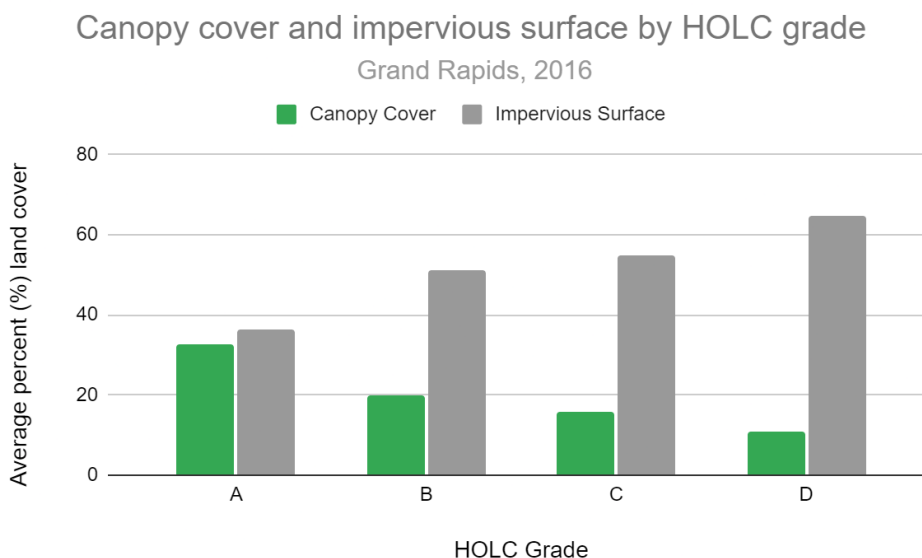
polygons as bounding boxes for the imagery layers, then aggregating and averaging the values of cells from the canopy cover and imperviousness layers present in each neighborhood. These statistical measures were then used to create visualizations and plots to compare distributions by neighborhood. **Figure 3** below shows the steps for calculating the canopy cover percentage for the Coit Park neighborhood in Grand Rapids. “C21” inscribed in a circle over the HOLC map designates the grade (C) and neighborhood number (21). The statistical values calculated for each neighborhood were then visualized with a color ramp to qualitatively convey citywide spatial patterns in the StoryMap. For the quantitative analysis, the values for each neighborhood were aggregated by grade to compare overall differences by category.



**Figure 3.** The steps for calculating canopy cover in Coit Park: original neighborhood boundary (top left), extracting a boundary (top right), overlaying the canopy cover layer (bottom left), and using zonal statistics to get an average canopy cover value for each neighborhood (bottom right).

## GIS Results

Once the values were averaged for each HOLC neighborhood grade, clear and opposite trends emerged, as indicated by **Figure 4** below. The mean canopy cover value for areas graded “A” in Grand Rapids is 34%, declining to just 10% neighborhoods graded “D”. Mean impervious surface values increase from 37% in regions graded “A” to 64% in redlined (“D”) neighborhoods. As discussed earlier, these factors have health implications for the residents of those neighborhoods, and represent one manifestation of the persistent legacies of racial discrimination in housing.



**Figure 4.** A bar graph visualizing the results of the quantitative GIS analysis.



## **Considerations and Limitations**

### **Decolonizing research, positionality and proximity to local context**

In approaching the research portion of the project, our team made a deliberate effort to decolonize the research methodologies that were employed. In equity-focused fields like food justice, as Sbicca (2015) highlights, there are many ‘allies’ who ‘*unintentionally work against food justice*’ (p.63) due to parachute-style, extractive research that fails to address structural inequalities underlying the food system. Conscious of our positionality as a team of white, University of Michigan students who were not residents of Grand Rapids, intentionally listening to and prioritizing the goals of Alita and Khara were necessary actions in order to avoid causing further structural harm through our work and research. We employed various decolonial methodologies in our work so as to critically decenter colonial ideologies (like white supremacy) in our research. Likewise we drew on a wide variety of information sources aside from academic articles to help contextualize Grand Rapids’ history (Tuhiwai-Smith, 2021; Elliot et al. 2022). One of the main limitations on how far our decolonial praxis could be implemented included our distance from the Grand Rapids community and residents. We tried to counteract this by talking to local residents and our clients as well as reading non-academic media sources, thereby ensuring we did not use any ‘outsider terms’ or narratives in our StoryMap to the best of our ability.

### **Limitations: Declining Black land ownership and reparations**

Whilst the predominant focus of the project was on the immediate urban context of South East Grand Rapids, a key part of South East Market's mission was centered around empowering BIPOC and women farmers. This was particularly in response to the long-declining share that African-American farmers have in agricultural markets across the U.S. As Penniman (2018) highlights, where in 1910 approximately 14% of farmland was owned by Black farmers, this figure has dropped to less than 1% since. Our team researched potential policy synergies between land reparations and food justice in the Grand Rapids and wider West Michigan context. Urban agriculture and urban land trusts have been highlighted in some literature as a potential avenue through which some land can be redistributed to Black communities (Penniman (2018), Taylor (2018)). A solution to food injustice and food apartheid in American cities that South East Market and other food vendors propose has been encouraging the development of what Long-Bey (1999) describes as '*vertical enterprises controlled by Blacks from bottom to top*' (A1). Thus, food sovereignty for urban Black communities can be understood as something that is predicated on the existence of Black farmers who can produce food and control the supply chains serving these urban communities; something that has been increasingly diminished by the expansion of largely white-owned agro-industry in the U.S. In Michigan specifically, the steady decline of black land ownership in Michigan has resulted in Black farmers only owning 0.5% of agricultural land in the state (Taylor, 2018). Although our project did not develop policy proposals directly addressing land reparations, due to time constraints and one of the project team members leaving, the research underpinned the direction and content of the StoryMap. Namely, explicitly tying in the decline of Black land

ownership in West Michigan with the steady dissolution of Black food sovereignty in the Storymap was heavily informed by Dorceta Taylor's (2018) paper on Black farmers in Michigan. Future work applying the food apartheid framework to Grand Rapids could more explicitly tie in the decline of Black land ownership with reduced Black food sovereignty in urban centers like Grand Rapids.

## **Conclusion**

This project has collaborated with South East Market to develop food justice policy solutions and educational materials that aim to address and remediate food apartheid in the city of Grand Rapids, MI, with a specific focus on the historically African-American neighborhoods of the city. We first investigated the historical roots of food injustice in Grand Rapids through a food apartheid lens. Then, we researched the policy landscape, and how Grand Rapids might implement urban agriculture policies to address current inequities. Finally, we distilled our findings into a narrative supported by media and geovisualizations, which was made publicly accessible via a StoryMap.

Centering a food justice approach and applying the critical lens of food apartheid to Grand Rapids, our project sought to address the multiple, historical, and intersectional systems which produce contemporary food insecurity within the BIPOC communities of Grand Rapids. Our final deliverables, the policy proposals to the Grand Rapids Urban Agriculture Committee and the StoryMap, aim to address aspects of this food injustice and food apartheid through the mediums of political and educational change. We hope that in applying the food apartheid conceptual framework to food injustice Grand Rapids can help contextualize and inform current efforts at dismantling structural racism in the city's food system. Future food policy work should continue to recognize the intersectionality of inequalities that produces food insecurity, necessitating more fundamental structural changes to the food system than are currently being envisioned in Grand Rapids.

[Our project website with a link to our StoryMap can be found here](#)

## **Glossary**

**BIPOC:** Black, Indigenous, People of Color

**Food Access:** “Limited access to supermarkets, supercenters, grocery stores, or other sources of healthy and affordable food” (USDA, 2022)

**Food Apartheid:** “A term that describes how racism and political power affect the food system” (Forsyth, 2022), and, quoting activist Karen Washington, “looks at the whole food system, along with race, geography, faith, and economics” (Brones, 2018).

**Food Desert:** “A tract in which at least 100 households are located more than one-half mile from the nearest supermarket and have no vehicle access; or at least 500 people, or 33 percent of the population, live more than 20 miles from the nearest supermarket, regardless of vehicle availability” (USDA, 2022).

**Food Forest:** a “diverse planting of edible plants that attempts to mimic the ecosystems and patterns found in nature” (Project Food Forest, n.d.)

**Food Insecurity:** “Food insecurity—the condition assessed in the food security survey and represented in USDA food security reports—is a household-level economic and social condition of limited or uncertain access to adequate food.” (USDA, 2022)

**Food Justice:** Food Justice is communities exercising their right to grow, sell, and eat healthy food. Healthy food is fresh, nutritious, affordable, culturally-appropriate, and grown locally with care for the well-being of the land, workers, and animals (JustFood.org, 2014).

**Food Sovereignty:** A social movement that emerged in the wake of La Via Campesina’s work in organizing rural communities in Central America. Food sovereignty is “the right of peoples and governments to choose the way food is produced and consumed in order to respect our livelihoods, as well as the policies that support this choice” (LaVia Campesina 2009: 57).

**Food Swamp:** A neighborhood that has much wider access to, and availability of, unhealthy sources of nutrition, such as fast food restaurants, as opposed to access points for healthy foods, such as grocery stores.

**Food System:** A food system is the collaboration of all steps involved in food creation including, production, processing, distribution, consumption, and waste management. (Virginia Tech, 2023)

**Managerial Racism:** A coordinated, adaptive and systemic response by cities during the 1950s and 1960s to progressive racial equality movements. Managerial racism replaced previous policies and practices of overt racial discrimination with a series of bureaucratic and institutionalized forms of racism. This encompassed both active discrimination against non-white residents as well as the active ordering and slowing of racial progress and civil rights movements (Robinson, 2012).

**Racialized Space:** Spaces (physical, intellectual, etc) in which race serves as a determining factor in who may access and utilize them. For instance “race serves as a key variable in determining who has the ability to own homes that appreciate in value and can be passed down to subsequent generations; in deciding which children have access to education by experienced and credentialed teachers in safe buildings with adequate equipment; and in shaping differential exposure to polluted air, water, food, and land” (Lipsitz 2007, p.12)

**Redlining:** A discriminatory practice that consists of the systematic denial of services such as mortgages, insurance loans, and other financial services to residents of certain areas, based on their race or ethnicity. (Legal Information Institute, 2022).

**Segregation:** “Segregation involves the separation of socially defined groups in space, such that members of one group are disproportionately concentrated in a particular set of geographic units compared with other groups in the population.” (Massey, Rothwell and Domina (2009), p. 74)

**Structural Racism:** “Structural racism refers to the totality of ways in which societies foster racial discrimination through mutually reinforcing systems of housing, education, employment, earnings, benefits, credit, media, health care and criminal justice. These patterns and practices in turn reinforce discriminatory beliefs, values and distribution of resources” (Bailey et al., 2017)

**Supermarket redlining:** A term used to describe a phenomenon of when major chain supermarkets are disinclined to locate their stores in inner cities or low-income neighborhoods and usually pull their existing stores out and relocate them to suburbs (Eisenhauer 2001).

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