

# Racism and Food Insecurity: A Public Health Crisis



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## 1. Executive Summary

Within Homewood and the Hill District, two of Pittsburgh's predominately African American communities, residents suffer from significant health disparities; namely, an increased risk of obesity, chronic cardiovascular diseases, cancer, and mental illnesses. This is at least in part due to past governmental policies such as redlining that has historically marginalized these citizens from properly accessing quality food in the region.

These health problems that unjustly impact Black and impoverished communities in Pittsburgh stem from a lack of reliable access to nutritious food. This phenomenon known as food insecurity disproportionately impacts Black communities in Pittsburgh as a result of the racially based practice of redlining. Food insecurity is morally problematic in the sense that it significantly impacts core individual capabilities on which others are based. People who are food insecure are deprived of various social opportunities and access to various resources. When their primary concern is to put food on the table, entertainment and meaningful life projects are curtailed, postponed, and rendered into obscurity. Since, food insecurity affects some communities more than others, therefore it is also morally problematic based on egalitarian conceptions of justice.

While food security is a nationwide problem, food insecurity disproportionately affects communities of color. Historically Black neighborhoods in Pittsburgh suffer from a higher percentage of food insecurity, leading the Hill District and Homewood to be considered food deserts. Food deserts are geographic regions in which residents have significantly limited access to healthful food, usually due to distance, low-income, or quality of food available.

The Food Justice movement is a grass-roots movement which seeks to improve access to nutritious and culturally appropriate foods in these communities, especially through empowering

Black Indigenous People of Color (BIPOC) food acquisition systems. Food Justice activists have done extensive research into the background and future of these communities and policy makers have an obligation to support their efforts to improve food security. These activists are the ones who understand their communities the best and are doing the grass-roots work on educating community members about how to produce and prepare healthy foods and help residents gain access to nutritious options through various means. Apathetic policy making that doesn't involve the support of these communities might alienate residents or not have the intended consequences such as providing healthy options to residents who don't know how to use them.

One major facet of the historic marginalization of Black neighborhoods that has increased the level of food insecurity is redlining. Redlining has been a part of American legislature dating back to the creation of the Home Owners Loan Corporation's residential security map in 1933. This map laid out guidelines for banks, mortgage lenders, and investors that designated the degree to which neighborhoods across the country would be beneficial to invest in. As a result, neighborhoods that were predominantly African American, Eastern European, and Jewish were designated as "hazardous" investments so they did not receive the same monetary resources that predominantly White neighborhoods used to develop their communities. This systematic lack of economic investment led to these predominantly minority neighborhoods to be put at a disadvantage. For example, companies such as grocery stores have not seen the benefit to opening locations in these areas that have a lower socioeconomic status than more affluent neighborhoods. Where redlined neighborhoods struggled to garner economic investment into their communities from banks, realtors, and mortgage lenders predominantly White neighborhoods were given the tools to build up generational wealth early on. The result now in Pittsburgh and especially neighborhoods such as the Hill District and Homewood are in

food deserts where their residents do not have consistent access to affordable produce and nutrient rich food in order to support their families.

Due to limited access to healthy options, and the abundant access of fast food restaurants and unhealthy foods, residents in food deserts take in larger amounts of saturated and trans fatty acids, added sugars, sodium and calories, which all increase the possibility of adverse health effects, including obesity and cardiovascular diseases for both adults and children. Moreover, mothers and children living in food deserts are negatively impacted in their mental health and children are negatively impacted in their education. The African American and Hispanic-American communities that have been harmed by redlining are the ones suffering the most from these negative health effects, and in Pittsburgh, over 90% of the residents who live in neighborhood food deserts such as Homewood and the Hill District are African American.

When considering possible policy solutions to address the racial inequities exacerbated by the food insecurity crisis in Homewood and the Hill District, affordability and accessibility of food are the factors of greatest consideration. An ideal solution must, for one, lessen the distance residents must travel to acquire the food. However, merely increasing access to a grocery store in the Hill District did not improve the health of consumers in a study performed by the RAND corporation--low-income residents continue to struggle to afford fresh produce. Therefore, an ideal solution must also alleviate the burden of cost of high-quality, nutritious food. Three potential solutions are put forth and analyzed within this proposal: investments through Community Development Block Grant Funding, an expansion of SNAP incentives, and increasing the reach of mobile farmers markets.

In thinking about these three choices, there must be emphasis on both the short term need to provide healthy foods in subsidized and affordable ways while also ensuring that the long term

goal of creating a thriving economy able to provide for such choices is aided rather than harmed through momentary efforts. Based on this, an expansion of SNAP Incentive Programs such as the expansion Food Bucks and Summer EBT are the best policy prescription here presented, as they better deal with the capability based concerns about food deserts. The other options fall short when confronting issues, not only with capabilities, but also hermeneutical concerns and egalitarian considerations.



## 2. Introduction

This proposal presents several recommendations focused on alleviating race-based health disparities in Pittsburgh as a result of food insecurity. Our initial focus was creating policies that would seek to address such disparities between the city's minority and White communities. We found that Black citizens of Pittsburgh suffer from higher rates of cardiovascular disease, obesity, hypertension, and diabetes than White ones. Much of this disparity in health can be attributed to the lack of sufficient nutritious food resources available to minority communities.

To address these health disparities, we then began to tailor our proposal toward bringing reliable access to nutritious food in areas that struggle with food insecurity. Our collected data demonstrates that in minority neighborhoods, it is much more difficult to secure nutritious food options than in White neighborhoods. As such, primarily Black neighborhoods in Pittsburgh such as Homewood and the Hill District have come to be classified as food deserts; areas where there is a void in reliable access to nutritious food. Our policy proposal provides recommendations for minority communities that struggle to afford or even obtain nutritious food options that would help alleviate the health disparities between White and Black citizens of Pittsburgh.

As of 2017, 21.4% of City of Pittsburgh residents faced food insecurity.<sup>1</sup> Areas of food insecurity and food deserts overlap much. In fact, in food desert neighborhoods like Homeowood and the Hill District, food insecurity rates are extremely high impacting between one third to one half of all residents. Just Harvest has served Allegheny County for 30 years and is a “nonprofit organization that reduces hunger through sustainable, long-term approaches [...] by using public

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<sup>1</sup> Culgan, Rossilyne, and Colin Deppen. "Fresh Divide: Inside Pittsburgh's Food Deserts, Where Buying Milk or Veggies Is Impossible." The Incline. November 29, 2019. Accessed November 28, 2020. <https://archive.theincline.com/2018/10/15/fresh-divide-inside-pittsburghs-food-deserts-where-buying-milk-or-veggies-is-impossible/>.

policy and programs to reduce poverty and improve food access”<sup>2</sup>. A 2013 report from Just Harvest showed that among similarly sized cities, Pittsburgh has the highest percentage of people residing in food deserts.<sup>3</sup>

Due to the prejudiced practice of Redlining dating back to the 1930s, we chose to focus our recommendation towards neighborhoods that were most adversely affected by these past policies: Black communities. Redlining is a practice where neighborhoods are given a designation of investment value towards mortgage lenders, realtors, and banks. Historically, White neighborhoods tended to be given green or blue designations, which meant that they were considered ideal for investments--this led to monetary resources to invest back into their communities. Black, Jewish, and other minority communities were designated as red or yellow; they were seen as poor investments. As a result, these areas were not given resources to help build up their communities or develop generational wealth in the same way green neighborhoods did. These red and yellow areas are commonly referred to as redlined neighborhoods.

The impact of redlining is still seen today. Historically minority areas that were designated as red or yellow suffer from higher rates of poverty, white flight, and adverse health effects. Since these redlined areas do not have the same resources as other areas, they also lack easy access to grocery stores and other healthy resources--resources that struggled to get loans in these impoverished neighborhoods. Our policy recommendation seeks to aid these areas that have been historically held down on the basis of race and give its members a chance to have the same quality of nutritious food as areas that have been granted these financial resources.

Our policy recommendations come in three forms that all seek to bring affordable and reliable access to nutritious food for these redlined neighborhoods. Pittsburgh’s current policies

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<sup>2</sup> "Just Harvest's Approach to Ending Hunger." Just Harvest. July 20, 2018. Accessed December 18, 2020. <https://www.justharvest.org/about/>.

<sup>3</sup> Culgan, Rossilynne, and Colin Deppen. "Fresh Divide: Inside Pittsburgh's Food Deserts..."

include a number of initiatives to alleviate the food desert crisis; however, residents of Homewood and the Hill District continue to struggle to access adequate food. Currently, funding streams, grants, and resources directed towards community gardens, urban farms, and early farm entrepreneurs remain uncoordinated and allocated in small increments. Moreover, implementing food growth strategies has been stagnant, and efforts to establish grocery stores have failed to solve health disparities. The achievements and shortfalls of these initiatives have worked to formulate our understanding of the current health crisis and the potential policy solutions needed to alleviate such pressing issues in the city of Pittsburgh. The stakeholders involved include those individuals who do not have access to nutritious food currently, local government, and even the rest of the population of Pittsburgh, have a share in alleviating this issue.

Our first proposal is pursuing Community Development Block Grant funding, by which federal money can be strategically allocated to state or local urban development projects. These projects can take forms such as Human Service initiatives that address hunger and nutrition or business development that invests money in grocery retail. Our second policy recommendation explores the expansion of the Green Grocer Farmers Market Truck program to provide affordable produce to communities all across Pittsburgh. Unfortunately, there were several logistic and longevity issues with the two proposals above as we looked into implementation, which leads to our final recommendation.

Ultimately we are suggesting an expansion of SNAP benefits in the forms of investment into a food insecurity nutrition initiative, summer programs, Food Bucks coupons, and educational opportunities. The food insecurity nutrition initiative and Food Bucks would “market match” making every dollar of SNAP benefits spent on health groceries be matched by the government, effectively giving SNAP members more buying power for nutritious food. An

expansion of summer programs and education helps address multiple limitations of our earlier two proposals, including issues of food awareness. The solutions put forth take into consideration the moral injustices inherent in racial health disparities, as we advocate for a final recommendation that best addresses such ethical implications that would be involved in its implementation in the City of Pittsburgh.

### 3. Terminology

#### 3.1 Disputed Terminology

In order to understand the severity of food insecurity in Pittsburgh, it is important to clarify the various terminology options and assert why we have chosen the specific language in this proposal. While food insecurity has been a long established problem, modern Food Justice is a relatively new field of study. According to the NYC-based non-profit Just Food, which combats food insecurity through an expansive set of education programs, farmers markets, and CSAs, “Food Justice is communities exercising their right to grow, sell, and eat healthy food”<sup>4</sup>. Since food is a part of every person’s life, the Food Justice movement seeks to provide paths for action and advocacy to increase access to the food that communities want and need, as well as providing justice for communities who have historically been denied sufficient food access. As the movement evolves and more research is conducted, activists and policy makers have adjusted their language to reflect new understandings and developments.

First and foremost, food security is by and large defined as “the state of having reliable access to a sufficient quantity of affordable, nutritious food”<sup>5</sup>. Within Pennsylvania, the state government defines food security as the lack of food insecurity, with food insecurity meaning “not having access to reliable and nutritious meals”<sup>6</sup>. While we will review the detrimental effects of food insecurity in a later section, this definition makes it clear that even residents with consistent access to some sort of food are food insecure if they do not have reliable access to healthful foods. Residents of the city of Pittsburgh need to be able to reasonably obtain fresh

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<sup>4</sup> Joe. "What Is Food Justice and Why Does It Matter?" Food Forward. June 04, 2020. Accessed December 8, 2020. <https://foodforward.org/2016/04/what-is-food-justice/>.

<sup>5</sup> Oxford English Dictionary, "art, n.1." *OED Online*, Oxford University Press, September 2020, [www.oed.com/viewdictionaryentry/Entry/11125](http://www.oed.com/viewdictionaryentry/Entry/11125).

<sup>6</sup> "About Food Insecurity." Pennsylvania Department of Agriculture. Accessed November 18, 2020. [https://www.agriculture.pa.gov/Food\\_Security/Pages/About-Food-Insecurity.aspx](https://www.agriculture.pa.gov/Food_Security/Pages/About-Food-Insecurity.aspx).

fruits and vegetables in order to be considered food secure, because otherwise they are still beholden to the consequences of food insecurity. Our goal is to advocate for all Pittsburgh community members to attain food security.

How food insecurity should be defined is contested, as many studies contain incomparable metrics. Some studies or non-profit organizations, in attempts to popularize the concept of food insecurity, perceive it as an on-and-off binary state. Others, to reflect a certain level of analytical rigor, perceive food insecurity as more resembling a gradient in the sense that someone may be severely or mildly food insecure. For instance, The U.S. Department of Agricultural *Current Population Survey* (CPS) employs a 10-item scale (18-item if the household has any children).<sup>7</sup> Each item seeks to capture aspects of food insecurity within a household. The items in the survey vary widely from whether the person had cut down food expenses to skipping meals themselves involuntarily, and the household is labeled as food insecure if a threshold number of metrics is met. Even when non-profit organizations conceptualize food insecurity as a gradient, additional nuances need to be taken into consideration for the gradient conception to accurately reflect. According to a study done by J.P. Habicht et al. (2004), if we were to conceptualize food insecurity as a gradient ('an accretional scale' in his term), then the cut-off line for that gradient should at least adequately reflect the cultural and individual differences.<sup>8</sup> Because of the "heterogeneity of determinants and consequences" endemic to different levels of food insecurity, the use of scale as a way of conceptualizing food insecurity, though straightforward, may not be sufficient.<sup>9</sup>

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<sup>7</sup> National Research Council 2006. *Food Insecurity and Hunger in the United States: An Assessment of the Measure*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11578>.

<sup>8</sup> Habicht, J. (2004). *Conceptualization and Instrumentation of Food Insecurity*. *National Academy of Science Workshop -- Working Paper*. p.7.

<sup>9</sup> *Ibid.*, 9.

In contrast, the phrase “food sovereignty” provides a more contemporary and empowering alternative to the phrase “food security”. First proposed at the World Food Summit in 1996, the movement for food sovereignty advocates for a reclamation of the food acquisition system by the people. In the first global forum on the subject in 2007, “food sovereignty” was defined as

“the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations”<sup>10</sup>.

In other words, food sovereignty advocates for putting power and control back into the hands of citizens and upholds their rights to not just survive, but thrive. Large corporations and the powerful food industry, often referred to as Big Food, control food distribution to grocery stores and therefore hold much influence over food acquisition for Pittsburgh residents. Companies should not have the ability to control access to such a fundamental necessity as food, especially since they profit off of having low supplies and high demand. Communities know themselves and their own needs best and should be supported by the government in having culturally appropriate food options and food acquisition systems.

However, we have made a conscious choice within this policy analysis and proposal to utilize the term “food security” as opposed to “food sovereignty.” Achieving complete food sovereignty will require a more complex and drawn-out dismantling of established food systems that have been encouraged by Big Food, so at the present moment it is more reasonable and vital to take faster policy actions towards increasing food security. After all, food sovereignty is about

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<sup>10</sup> "Food Sovereignty." USFSA. Accessed November 18, 2020. <http://usfoodsovereigntyalliance.org/what-is-food-sovereignty/>.

having choice, and without having sufficient access to food to begin with, choice is not an option at all.

There is a similar relationship between the terms “food desert” and “food apartheid”. Food Deserts are defined as “regions where people have limited access to healthful and affordable food”<sup>11</sup>. Notably, this term refers to the geographic region in which there is a lack of food, not the historical background or explanations as to why there is low food accessibility or who lives there. The term food desert has roots in the term “desert” used in the 1970s to describe regions, usually suburban areas, lacking in community functions and development. It began to shift in meaning in the 1990s to specifically imply a lack of food in the community and was first used in the modern sense in a Scottish report from 1995<sup>12</sup>. The United States has been using the term food desert in official documentation since around 2010 and it continues to be prominently used in government language despite citizen pushback.

Food apartheid is the most current food justice description for this phenomenon. It was coined around 2017 by Food Justice activist and BIPOC farms advocate Leah Penniman. Penniman was inspired to change the vocabulary because using food apartheid “makes clear that we have a human-created system of segregation that relegates certain groups to food opulence and prevents others from accessing life-giving nourishment...This trend is not race-neutral”<sup>13</sup>. Food apartheid recognizes the effects of redlining, segregation, race based economic stratification, and lack of healthcare that have shaped communities of color. Current Food Justice initiatives have taken up using this term since 2018, and there is a large push in communities of color for the government to adopt this terminology in order to recognize the way racism has

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<sup>11</sup> Caporuscio, Jessica. "Food Deserts: Definition, Effects, and Solutions." Medical News Today. June 22, 2020. Accessed November 16, 2020. <http://www.medicalnewstoday.com/articles/what-are-food-deserts>.

<sup>12</sup> Ibid.

<sup>13</sup> "How to End a Food Apartheid." Chelsea Green Publishing. March 15, 2019. Accessed November 18, 2020. <https://www.chelseagreen.com/2018/how-to-end-a-food-apartheid/>.



shaped food access. The term pushes back against the implication that food deserts, like desert biomes, are a natural phenomenon. Pittsburgh Food Policy Council food access coordinator Sarah Buranskas states that “food desert does not take into account that food desert communities align really closely with communities of color...Food apartheid is an attempt to acknowledge the disparity of communities that are and are not affected by [food insecurity]”<sup>14</sup>. Communities who suffer from a lack of food tend to be population centers with vibrant communities who deserve attention. Nevertheless, in order to address the food insecurity issue in Pittsburgh’s worst-off neighborhoods, we have chosen to continue to use the term food desert to align with current government efforts and municipal language.

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<sup>14</sup> Culgan, Rossilyne, and Colin Deppen. "Fresh Divide: Inside Pittsburgh's Food Deserts, Where Buying Milk or Veggies Is Impossible." *The Incline*. November 29, 2019. Accessed November 28, 2020. <https://archive.theincline.com/2018/10/15/fresh-divide-inside-pittsburghs-food-deserts-where-buying-milk-or-veggies-is-impossible/>.

## 3.2 Relevant Terminology

*Food Apartheid*: “makes clear that we have a human-created system of segregation that relegates certain groups to food opulence and prevents others from accessing life-giving nourishment... This trend is not race-neutral”<sup>15</sup>.

*Food Desert*: “Regions where people have limited access to healthful and affordable food”<sup>16</sup>. Notably, this term refers to the geographic region in which there is a lack of food.

*Food Security*: “The state of having reliable access to a sufficient quantity of affordable, nutritious food”<sup>17</sup>.

*Food Sovereignty*: “The right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations”<sup>18</sup>.

*Low Access Area*: According to the United States Department of Agriculture, a low access area can be measured as places where at least 100 households that do not have a car are more than ½ mile from the nearest supermarket, super center, or large grocery store.

*Low Income Areas*: Places with poverty rates at least 20% or places where the median income is at or below 80% of the metropolitan area’s median income.

*Redlined Neighborhood*: Red and yellow areas on maps made by the Home Owners Loan Corporation’s (HOLC) Residential Security Map.

*SNAP*: Supplemental Nutrition Assistance Program (SNAP) is the largest federal food assistance program. Provides benefits to eligible low-income individuals and families via a debit-like card. Requires bank balance limits

*WIC*: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). State assistance through federal grant. Provides healthcare access and education.

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<sup>15</sup> "How to End a Food Apartheid." Chelsea Green Publishing. March 15, 2019. Accessed November 18, 2020. <https://www.chelseagreen.com/2018/how-to-end-a-food-apartheid/>.

<sup>16</sup> Caporuscio, Jessica. "Food Deserts: Definition, Effects, and Solutions." Medical News Today. June 22, 2020. Accessed November 16, 2020. <http://www.medicalnewstoday.com/articles/what-are-food-deserts>.

<sup>17</sup> Oxford English Dictionary, "art, n.1." *OED Online*, Oxford University Press, September 2020, [www.oed.com/viewdictionaryentry/Entry/11125](http://www.oed.com/viewdictionaryentry/Entry/11125).

<sup>18</sup> "Food Sovereignty." USFSA. Accessed November 18, 2020. <http://usfoodsovereigntyalliance.org/what-is-food-sovereignty/>.

## 4. Food Insecurity

### 4.1 Health Effects of Food Insecurity

The stakeholders for the health crisis of food insecurity are numerous, but can be simplified into three main groups. Firstly, there are the victims of food deserts. These are the inhabitants of redlined areas who have limited access to food for all the varied reasons outlined in this paper. These individuals would be better off with access to healthy, affordable food. Secondly there is the city, and other governmental entities, which in theory have a vested interest in the health of its citizenry. Finally, there are the food secure denizens of Pittsburgh, who, thanks to the epidemic nature of obesity and strain on medical support in Pittsburgh, have an interest in the health of their fellow citizens. Following the COVID19 pandemic, minority communities all around the country have been affected more heavily than White ones, and in food deserts the situation has become even more grave.

When residents live in food deserts, they have extremely limited access to healthy options for consumption. Major grocery store companies that might have healthy options are not incentivized to build businesses in these areas because of the lack of profits in impoverished neighborhoods. Therefore, residents who live in these food deserts are forced to settle for quick snacks at corner stores or fast food restaurants that are quick, local and cheap. For residents in these areas, convenience stores and other small grocery or corner stores may be more common than supermarkets. These stores generally stock little or no produce because of limited space or equipment, and they may charge more for the healthier foods that are available than major supermarket chains. Moreover, fast food restaurants also tend to be much more plentiful in these minority, low income communities, increasing access to unhealthy options. In fact, a study

published in the American Journal of Preventive Medicine showed that residents of the lowest-income neighborhoods had 2.5x more access to fast food restaurants than higher income communities.<sup>19</sup> This reflects itself in the reality that counties with high rates of food deserts also tend to have higher per capita expenditure at fast food restaurants. Sometimes, in urban neighborhoods, the nearest grocery store can often be twice as far as the nearest fast food restaurant.<sup>20</sup> African American children are more likely to be susceptible to the targeting of fast food restaurants, as fast food restaurants are 60% more likely to advertise to children in Black neighborhoods than White neighborhoods. Fast food restaurants therefore increase residents' consumption of saturated and trans fatty acids, added sugars, sodium, and calories, all of which consequently increase the negative health disparities.

The health effects of lack of access to healthy food options can be quite stark for adults, mothers, and children. In fact, in 2008, counties with the highest percentage of households in food deserts (10% or more) had adult obesity rates 9% higher than counties with the lowest percentage of households in food deserts (1% or less).<sup>21</sup> Obesity can be very detrimental to people's health as it contributes to issues like high cholesterol and blood pressure. Both of which contribute to cardiovascular disease, breathing problems like asthma and sleep apnea, joint problems and musculoskeletal discomfort, fatty liver disease, gallstones, and gastroesophageal

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<sup>19</sup>Block, Jason P., MD, MPH, Richard A. Scribner, MD, and Karen B. DeSalvo, MD. "Fast Food, Race/ethnicity, and Income: A Geographic Analysis." American Journal of Preventive Medicine. October 1, 2004. Accessed December 4, 2020.

<sup>20</sup>"Urban Food Deserts Threaten Children's Health." Institute for Policy Studies. May 01, 2014. Accessed October 20, 2020. [https://ips-dc.org/urban\\_food\\_deserts\\_threaten\\_childrens\\_health/](https://ips-dc.org/urban_food_deserts_threaten_childrens_health/).

<sup>21</sup>"The Socio-Economic Significance of Food Deserts." PBS. June 29, 2011. Accessed October 18, 2020. <https://www.pbs.org/newshour/arts/the-socio-economic-significance-of-food-deserts>.

reflux (heartburn).<sup>22</sup> Moreover, residents living with coronary artery disease, have higher risks of adverse cardiovascular events when living in food deserts.<sup>23</sup>

Of course, some researchers have counter-argued that these negative health effects of food deserts are actually related to high rates of poverty and unemployment, and not simply living far from grocery stores with access to healthy options. However, even after controlling for median household income, poverty rates, and the racial and ethnic makeup of the population, the relationship between food deserts and these health outcomes remains.<sup>24</sup> The effects on children of lack of access to healthy options and increased prevalence of unhealthy foods can also be very severe. Children growing up in neighborhoods with lack of access to healthy foods are also experiencing higher risks of obesity and early hypertension, not to mention full-blown high blood pressure that can lead to Type 2 Diabetes and heart disease.<sup>25</sup> Children who have obesity at a young age are also much more likely to become adults with obesity. Therefore, both children and adults are suffering many negative health effects due to living in food deserts.

It isn't just their physical health that is being negatively affected however, mental health is also an issue of concern. A 2006 study showed that food insecurity greatly negatively impacted the mental health of mothers and children. In addition to many of the physical health effects of food deserts, mental health issues arise as the study showed that the percentage of mothers with either a major depressive episode or generalized anxiety disorder increased with

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<sup>22</sup> "Childhood Obesity Causes & Consequences." Centers for Disease Control and Prevention. September 02, 2020. Accessed October 26, 2020. <https://www.cdc.gov/obesity/childhood/causes.html>.

<sup>23</sup>Kelli, Heval M., Heval M. Kelli Division of Cardiology, et al. "Living in Food Deserts and Adverse Cardiovascular Outcomes in Patients With Cardiovascular Disease." *Journal of the American Heart Association*. February 11, 2019. Accessed November 13, 2020. <https://www.ahajournals.org/doi/10.1161/JAHA.118.010694>.

<sup>24</sup>"The Socio-Economic Significance of Food Deserts." PBS. June 29, 2011.

<sup>25</sup>Marian Wright Edelman Founder and President Emerita. "'URBAN FOOD DESERTS THREATEN CHILDREN'S HEALTH'." Children's Defense Fund. May 22, 2018. Accessed December 1, 2020. <https://www.childrensdefense.org/child-watch-columns/health/2010/urban-food-deserts-threaten-childrens-health/>.

food insecurity.<sup>26</sup> The Centers for Disease Control also confirms this negative effect on mental health, citing that childhood obesity contributes to psychological problems such as anxiety and depression, low self-esteem and lower self-reported quality of life, and social problems such as bullying and stigma.<sup>27</sup> Thus Food Deserts reduce the quality of life for adults, mothers, and children through negatively impacting both their physical and mental health.

## 4.2 Public and Societal Consequences

Despite the fact that only a minority of the overall population lives in food deserts, the consequences of lack of access to fresh and healthy foods will be something that affects not just the lower-income neighborhoods residing in these deserts, but the nation and society as a whole.

In order for society to operate and continue efficiently, our children must be educated thoroughly in schools in order to move onto the next grade. However, previous research in New York State schools has shown that 4th graders were negatively impacted by food deserts in their Science, English, and Math scores. This was true for both urban and suburban regions.<sup>28</sup> This shows that students' education attainment is being severely affected and reducing how successful students are in lower income communities that reside in food deserts. Moreover, children who are hungry might show more behavioral and attention problems that manifest in hyperactivity, absence, and tardiness. This can reduce teenage students' ability to work with other students and increase their chances of being suspended from school. Students who live in these food deserts,

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<sup>26</sup>SM, Whitaker RC; Phillips SM; Orzol. "Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavior Problems in Their Preschool-aged Children." *Pediatrics*. Accessed December 18, 2020. <https://pubmed.ncbi.nlm.nih.gov/16950971/>.

<sup>27</sup>"Childhood Obesity Causes & Consequences." Centers for Disease Control and Prevention. September 02, 2020. Accessed December 5, 2020. <https://www.cdc.gov/obesity/childhood/causes.html>.

<sup>28</sup>Frndak, Seth E. "An Ecological Study of Food Desert Prevalence and 4th Grade Academic Achievement in New York State School Districts." *Journal of Public Health Research*. December 09, 2014. Accessed November 15, 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4274497/>.

are thus forced to go to school and keep up with other students and the class material while overcoming the consequences of their environment.

Despite many lower-income students already facing numerous challenges to completing their education such as lack of school resources and classroom tools, food deserts makes it harder for those same students to develop into healthy and intelligent individuals who will become the future leaders of technology, education, government, and more. Negative health effects can lead to or exacerbate chronic illnesses, which when they incapacitate a breadwinner, and raise hospital bills, makes the struggle for poor families even worse. This makes it harder for lower-income, Black families in food deserts to overcome and escape the cycles of poverty that historical redlining has placed them into.

## 5. Ethical Consideration

The following section seeks to articulate in detail the reasons why aspects of food insecurity and health disparities are morally problematic. It does so primarily through two normative theories – epistemic justice as articulated by Miranda Fricker, and relational egalitarianism as articulated by Elizabeth Anderson – and one normative approach, the capability approach developed by Martha Nussbaum.

### 5.1 Capability Analysis

#### 5.1.1 Capabilities and functionings

The capability approach conceptualizes well-being in terms of two distinct metrics, *functionings* and *capabilities*. *Functionings* refer to “various states of human beings and activities that a person can undertake.”<sup>29</sup> In other words, they are a person’s realized freedom.<sup>30</sup> For example, a person may be eligible to vote, but until that person actually votes, he or she cannot be said to have exercised that *functioning*. *Capabilities*, on the other hand, are the potential state of beings that an individual could be. For instance, a person is capable of being a doctor if they have the economic resources and social opportunity to become a doctor. This realistic potential of becoming a doctor is a *capability*.

The various *functionings* and *capabilities* are tied to one another. Some *functionings* and *capabilities* are more foundational, meaning they are “necessary for developing the more advanced capabilities.”<sup>31</sup> Martha Nussbaum has articulated many possible *basic capabilities*, such as life, bodily health, bodily integrity, sense, emotions, play, affiliation, and control over

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<sup>29</sup> Robeyns, Ingrid, "The Capability Approach", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/win2016/entries/capability-approach/>>.

<sup>30</sup> Robeyns, Ingrid, "The Capability Approach"

<sup>31</sup> Ibid



one's environment.<sup>32</sup> More specifically, health is a type of *basic functioning* because it is inextricably tied to individuals' ability to exercise other freedoms. If a person is severely physically impaired due to poor health conditions, that person will likely not be able to realize the various life projects and goals with which they identify so strongly.

### 5.1.2 Conversion factors

Another relevant concept crucial in capability analysis is the *conversion factor*.

*Conversion factors* refer to various kinds of resources, whether they are innate or provided by the environment or the society, that can be converted into *functionings*.<sup>33</sup> For instance, a food desert is an example of an environmental conversion factor, for individuals' various welfare-related *functionings* are highly contingent upon whether they live in a food desert. Government food aid programs such as the Supplement Nutrition Assistance Program (SNAP) is an example of social conversion factor in the sense that people receiving SNAP benefits can convert the benefits they receive into various *functionings* such as being comfortable, well-fed, having increased leisure time, et cetera.

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<sup>32</sup> Ibid.

<sup>33</sup> Ibid.

### 5.1.3 Capability Analysis of Food Insecurity

BASIC FUNCTIONINGS & CAPABILITIES (As defined by Martha Nussbaum)	HOW FOOD INSECURITY DIMINISHES BASIC FUNCTIONINGS
LIFE: “being able to live to the end of a human life of normal length; not dying prematurely, or before one’s life is so reduced as to be not worth living.” <sup>34</sup>	<ul style="list-style-type: none"> <li>Those who are food insecure are more likely to die prematurely.<sup>35</sup></li> </ul>
BODILY HEALTH: “being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.” <sup>36</sup>	<ul style="list-style-type: none"> <li>Adults who are food insecure are more prone to obesity and chronic disease, according to the Office of Disease Prevention and Health Promotion.<sup>37</sup></li> <li>Food insecurity is also linked to increased medical expense<sup>38</sup></li> </ul>
BODILY INTEGRITY: “being able to move freely from place to place; to be secure against violent assault...” <sup>39</sup>	<ul style="list-style-type: none"> <li>Food insecure households are unlikely to be able to move freely from one place to another, meaning that they are less likely to take vacations and travel.</li> </ul>
SENSE, PRACTICAL REASONING ABILITY & EMOTION: “being able to use the sense; being able to imagine, to think, to reason...being able to have attachments to things and people outside ourselves.” <sup>40</sup>	<ul style="list-style-type: none"> <li>For children younger than three years, the effects of food insecurity are more severe. Adequate food access is linked to their normal cognitive, social, and emotional development.<sup>41</sup> These developments are the very prerequisites for literacy, sociability, and critical thinking.</li> <li>Food insecurity is linked to lowered productivity in school<sup>42</sup></li> </ul>
PLAY: “being able to laugh, to play, and to enjoy recreational activities.” <sup>43</sup>	<ul style="list-style-type: none"> <li>Presumably, food insecure households cannot afford to engage in recreational activities compared to economically well-off households. They are already experiencing difficulty gathering enough food to eat given all the tough choices they have to make between other major financial commitments such as rents. In this regard, they cannot afford to just go enjoy recreational activities (e.g., partying, clubbing, watching a sports game in a stadium) in the same way as others do.</li> </ul>
AFFILIATION: “...to engage in various forms of social interactions...” <sup>44</sup> Nussbaum has broken down this concept into two forms, friendship, and respect.	<ul style="list-style-type: none"> <li>Many cannot afford to go to social events and to participate in communal activities (say, church services, protests, forums, friendly gathering at a friend’s place, etc.).</li> </ul>

<sup>34</sup> Martha C. Nussbaum, *Capabilities and Human Rights*, 66 *Fordham L. Rev.* 273 (1997). Available at: <https://ir.lawnet.fordham.edu/flr/vol66/iss2/2> p.287

<sup>35</sup> Lee, J., Gundersen, C., Cook, J., Laraia, B., & Johnson, M. (2012, September 1). Food insecurity and health across the lifespan. Retrieved November 24, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3648765/>

<sup>36</sup> Martha C. Nussbaum, *Capabilities and Human Rights* p.287

<sup>37</sup> Rey, T. (n.d.). *Shame, Stigma, Misinformation Compound Food Inse*

<sup>38</sup> Chilton, M., & Rose, D. (2009, July). A rights-based approach to food insecurity in the United States. Retrieved November 22, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2696644/>

<sup>39</sup> Martha C. Nussbaum, p.287

<sup>40</sup> Martha C. Nussbaum, p.287

<sup>41</sup> Chilton, M., & Rose, D. (2009, July). A rights-based approach to food insecurity in the United States

<sup>42</sup> Chilton, M., & Rose, D.

<sup>43</sup> Martha C. Nussbaum, p.287

<sup>44</sup> Martha C. Nussbaum, p.287

## 5.2 Moral Argument

### 5.2.1 Argument from autonomy

Racially correlated health disparity is normatively undesirable because it significantly affects basic capabilities (e.g., life chances of individuals) for no good reason. Being part of a racial community, for instance, is no morally valid grounds to accord people with health differences because it is not something of which people can have control. The society cannot be said to be just if there is food insecurity and racialized health disparity deprives people of basic functioning for arbitrary factors of which they have no control.

### 5.2.2 Argument from Relational Egalitarianism

The existence of food security and racialized health disparity diametrically opposed the fundamental relational egalitarian premise that everyone has equal moral worth, and, qua that moral worth, deserves to be treated as such. Food insecurity signifies an abject socio-economic state in which differences in material wealth end up producing differential basic *functionings* and *capabilities* across segments of the population. The differences in basic *functionings* and *capabilities* amount to differences in relational status. If society is relationally unequal to the extent that some people struggle with basic sustenance and are systematically put to this abject state, then it does not adhere to the basic egalitarian moral premise and cannot be just.

The analytical framework in this section stems primarily from Elizabeth Anderson's relational conception of equality. The relational conception of equality, as the name suggests, seeks to establish the equality of status between individuals. That is, the idea is that a man can be richer, more educated, luckier, or morally more respectable, etc., those differences in attributes

do not suffice to serve as a basis to treat people differently. Therefore, relational egalitarianism sees oppression as a root harm.<sup>45 46</sup>

Food insecurity disproportionately impacts certain demographics more than others. So does health disparity impact certain demographics more than others. For one thing, food insecurity is fundamentally an experience for poor households. In fact, in many circumstances, food insecurity exists because the head of the household has to make a tough choice between paying for rents (therefore cutting down the quantity and quality of their food) and being well-fed (therefore taking the risk of possible eviction).<sup>47</sup> Apart from that, gender and racial identities are also strong indicators of food insecurity. Food insecurity rates for non-Hispanic Black is more than twice the rates for non-Hispanic White households.<sup>48</sup> In a 2009 report, the food insecurity prevalence rate in female-headed households is about three times the national average.<sup>49</sup> From these examples, we can see that vulnerable minorities are disproportionately impacted by food insecurity.

Both food insecurity and public health disparity result in a loss of basic capabilities upon which other more advanced capabilities are based. Food insecurity describes a collection of environmental conversion factors that significantly impede *basic human capabilities* and *functionings*. *Basic capabilities*, in this context, refer to intellectual and entertainment activities, which are predicated upon having adequate access to daily sustenance. If people are food

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<sup>45</sup> Anderson, Elizabeth S. "What Is the Point of Equality?" *Ethics* 109, no. 2 (1999): 287-337. Accessed May 1, 2020. doi:10.1086/233897. p.

<sup>46</sup> Schemmel, C. (2011). Distributive and relational equality. *Politics, Philosophy & Economics*, 11(2), 123–148. <https://doi.org/10.1177/1470594x11416774> p.

<sup>47</sup> How do you measure hunger? (n.d.). Retrieved November 25, 2020, from <https://www.feedingamerica.org/hunger-in-america/food-insecurity>

<sup>48</sup> Odoms-Young, A., & Bruce, M. (2018). Examining the Impact of Structural Racism on Food Insecurity: Implications for Addressing Racial/Ethnic Disparities. Retrieved November 25, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5823283/>

<sup>49</sup> Chilton, M., & Rose, D. (2009, July). A rights-based approach to food insecurity in the United States. Retrieved November 22, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2696644/>

insecure, their *capabilities* and *functionings* are diminished in many ways. For one thing, food insecure households have to simply give up many other *functionings* and *capabilities* to survive. A food insecure household is in constant worry that their food supply will run out before they can replenish their fridge with new food.<sup>50</sup> They take time, resources, stamina, and by extension, a sense of control away from people experiencing food insecurity. If the households' primary concern is whether they can eat the next meal and they spend a good amount of time each time struggling to gather enough food to eat, then necessarily they are deprived of the chance to do things that are otherwise meaningful and valuable to them. For instance, a food insecure household may not be able to afford to go to social events and to participate in communal activities, such as watching a football game in the stadium, church services, protests, et cetera.

The loss of basic capabilities results in people having different relational status. The reason why historical racial segregation and institutional racism are morally reprehensible has to do with the fact that they deny the racial minority the rights to be integrated into the social institutions, e.g., using the same water faucets, going to the same school. Such institutional arrangements allow core material and social resources to be given to some people (and to be converted to various *functionings* and *capabilities*) while denying the same resources to others. The differences in terms of *functionings* and *capabilities* eventually channel different people to different socio-economic classes, engendering some kind of relational inequality as a result. Likewise, many material and social resources are available to food secure households while the same resources are denied to food insecure households.

Given so many *functionings* are lacking for food insecure families to the point that they struggle to put bread on their table, arguing that they are relationally equal with food secure

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<sup>50</sup> Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2020. Household Food Security in the United States in 2019, ERR-275, U.S. Department of Agriculture, Economic Research Service.

households will not be compelling. It would be far-fetched to say a household struggling to put food on the table necessarily relates to a millionaire household owning big mansions and yachts as equal members of the society, for freedom entails differently to them given the material constraints the poor household faces. If society permits some of its members to lose basic capabilities while letting others to realize their advanced capabilities, the society is not relationally equal and people are unable to relate to each other as equal members.

An indispensable element of a just society is an egalitarian social order, and an egalitarian social order is founded upon the notion that everyone can relate to each other as equal members of society. A society cannot be said to honor basic principles of relational equality if its members cannot relate to each other as equals. A society cannot be said to be just if it fails to honor the basic egalitarian moral premise.

### 5.2.3 Argument from Epistemic Injustice

Another concept relevant to ethical considerations is epistemic injustice. Epistemic injustice describes unjust treatment due to the existence of certain perceptions or the lack thereof. This framework sheds light on the structural aspects of food insecurity; the unjust treatment resulting from collective understanding, or misunderstanding, as opposed to individual malice, is a clear indication of its structural nature.

One type of epistemic injustice is hermeneutical injustice. Hermeneutical injustice refers to “the injustice of having some significant area of one’s social experience obscured from collective understanding owing to hermeneutical marginalization”<sup>51</sup>, which applies to the perpetuation of food insecurity. One classic example of epistemic injustice resulting from

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<sup>51</sup> Fricker, M. (2011). *Epistemic injustice: Power and the ethics of knowing*. Oxford: Oxford University Press. P. 168

hermeneutical injustice is stalking. Before the concept of stalking was articulated and accepted into mainstream culture as criminal activity, reports of uncanny stalking were often dismissed by the police because stalkers at the time were not in violation of any existing moral or legal framework.<sup>52</sup> Stalking victims suffered from hermeneutical injustice because their experience was dismissed and rendered into obscurity due to the police officer's perceptual and interpretive frameworks. Put simply, hermeneutical injustice is harm-producing and resulting from collective perceptual frameworks. Victims of hermeneutical injustice are "unfairly disadvantaged by some collective" perceptual gap.<sup>53</sup> The stalking example is a perfect illustration of the harm caused by such a collective knowledge gap. People can also be harmed because they are not being perceived as who they are.<sup>54</sup> The wrongness lies in the inaccurate perception itself, not necessarily in the disadvantages caused by the inaccurate perception.

In this regard, food insecurity is epistemically unjust because people who are food insecure have a significant area of their life experience obscured from the collective understanding. For one thing, food insecurity is, fundamentally, a minority experience to which the mainstream has difficulty relating. It was estimated that in Allegheny County 10.6% of the population is food insecure.<sup>55</sup> Among the population that is food insecure, 46% are above the 160% poverty line and thus are not eligible for SNAP benefits to help alleviate their food insecurity<sup>56</sup>. Therefore, 5% of the total population in Allegheny County suffer from food insecurity with little or no assistance. Though this means that a significant number of people are food insecure, in terms of proportion to the rest of the community, they are still a small minority of the total population. The overwhelming majority of the population does not have any

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<sup>52</sup> Fricker, M. (2011). *Epistemic injustice: Power and the ethics of knowing*. Oxford: Oxford University Press. P. 168

<sup>53</sup> Fricker, M. (2011). *Epistemic injustice*, P. 168

<sup>54</sup> Fricker, M. (2011).. P. 168

<sup>55</sup> Map the Meal Gap. (n.d.). Retrieved November 22, 2020, from <http://map.feedingamerica.org/county/2018/overall/pennsylvania/county/allegheny>

<sup>56</sup> Map the Meal Gap. (n.d.).

experience of food insecurity, and will therefore have a more difficult time relating to poignant experiences such as cutting grocery bills out of absolute necessity or involuntarily spending a day without eating.

Though most people have a general idea of what food insecurity means, the collective understanding of food insecurity is largely inadequate and vague. Even at the professional level, there is no clear consensus on what the definition of food insecurity should be, and experts disagree on how it should be conceptualized in the first place. In fact, the situation was once so controversial that there was a public outcry over the U.S. government's definition of the most severe form of food insecurity, which does not include the word 'hunger.'<sup>57</sup> Some studies have determined food insecurity to be a household-level concept, in contrast to an individual-level concept like hunger<sup>58</sup>, while others think food insecurity is not so much a distinct concept from individual hunger as it is a term that is framed differently. For example, studies dedicated to food insecurity on college campuses tend to regard individual students as their subject matter since the house-hold level definition is inapplicable.

Additionally, the collective understanding of food injustice is further obscured by the existence of detractors and antagonistic narratives. Some people and organizations not only dismiss food insecurity, but actively push for victim-blaming narratives and shaming culture, creating untrue and disparaging myths such as the 'welfare queen'<sup>59</sup>. The media's attitude towards the issue of food insecurity is often problematic and characterized by indifference. At times, portrayals reflect mischaracterization and outright hostility towards individuals'

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<sup>57</sup> Chilton, M., & Rose, D. (2009, July). A rights-based approach to food insecurity in the United States. Retrieved November 22, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2696644/>

<sup>58</sup> National Research Council 2006. Food Insecurity and Hunger in the United States: An Assessment of the Measure. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11578>.

<sup>59</sup> Sanford Schram Joe Soss, Schram, S., Soss, J., Sunkara, B., Karp, M., Featherstone, L., . . . Lomnitz, C. (2015, March 09). Demonizing the Poor. Retrieved November 24, 2020, from <https://www.jacobinmag.com/2015/09/welfare-republicans-sam-brownback-race-corporations/>



reasonable reaction in response to adversities in life, casting them as ‘lazy takers.’<sup>60</sup> Detractors often seek to cast basic welfare programs as being for ‘the undeserving poor,’ and as a drain on taxpayer dollars<sup>61</sup>, and the public discourse tends to assign blame towards victims of social injustice.<sup>62</sup>

This public’s assignment of blame to the victims of social injustice, including food injustice, results from a common perceptual framework that assigns blame to victims for the injustice they suffer. Recall that according to the theory of hermeneutical injustice, the injustice lies in the inaccurate perception itself, not necessarily in the disadvantages caused by the inaccurate perception. Since this perceptual framework is born from public misunderstanding of the conditions and circumstances of food-insecure people, it clearly qualifies as hermeneutical injustice.

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<sup>60</sup> Riches, G. (2018). *Food bank nations: Poverty, corporate charity and the right to food*. Abingdon, Oxon: Routledge. p.62

<sup>61</sup> Riches, G. (2018). *Food bank nations*

<sup>62</sup> “State Initiatives Supporting Healthier Food Retail: An Overview of the National Landscape.” *CDC*, 2011, [www.cdc.gov/obesity/downloads/healthier\\_food\\_retail.pdf](http://www.cdc.gov/obesity/downloads/healthier_food_retail.pdf).

## 6. History of Redlining

The formal history of Redlining in the United States dates back to the founding of the Home Owners Loan Corporation (HOLC) in 1933. Created as a response to the Great Depression under Franklin Roosevelt's New Deal, the HOLC was designed to help refinance homes in foreclosure and designate areas around the country that would be desirable for mortgage lenders to invest in. The HOLC developed Residential Security maps all over the country which designated neighborhoods as green, blue, yellow, or red. Each color represented the quality of the investment for lenders in a certain area. Under this system green represented the best investment areas, blue for still desirable, yellow for definitely declining, and red for hazardous. However, the criteria used to designate these red and green areas rapidly led to the HOLC being seen as the official segregator of towns and neighborhoods that was actively supported by the government. Criteria used to determine the rating for neighborhoods "related to the age and condition of housing, transportation access, closeness to amenities such as parks or disamenities like polluting industries, the economic class and employment status of residents, and their ethnic and racial composition."<sup>63</sup> All across the country, areas that were majority Black, Immigrant, or Jewish were designated as either yellow or red, signaling that it would be unwise to invest resources in these purportedly declining communities. Lenders, appraisers and real estate agents, in the creation of the HOLC map, viewed it as dangerous to lend to Black neighborhoods or those with eastern European neighbors which subjected these heavily minority communities to poor investment ratings.

The term *redlining* was created in the 1960's by sociologist John McKnight to describe the practice where the federal government and lenders would literally draw a red line around

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<sup>63</sup> Bruce Mitchell PhD., "HOLC 'Redlining' Maps: The Persistent Structure of Segregation and Economic Inequality " NCRC," December 18, 2018, <https://ncrc.org/holc/>.

neighborhoods based primarily on demographics. Investigations found that lenders would mark lower-income White areas as green or blue while marking middle- to upper-income Black areas as red or yellow.<sup>64</sup> This disparity throughout the middle of the 20th century prompted the federal government to pass the Community Reinvestment Act in 1977 to attempt to mitigate some of the negative impacts of redlining that have disproportionately impacted minorities. The Community Reinvestment Act encouraged lenders to lower their standards in order to meet the credit of low to moderate income neighborhoods with the intent of having banks fulfill the needs of the communities they were located in. Under the CRA federal regulators were required to assess the lending activity of these banks in terms of how well they fulfilled their obligations to the community. However, issues arose in the execution of this plan as the banks never had specific benchmarks to meet for these federal evaluations so their interpretation of community impact had no standard to reach.<sup>65</sup> Furthermore, the only repercussions for receiving a low CRA rating are that the public can see the rating. At best this impacts public opinion but only if the potential customer researches the standard when choosing their bank. There are no actual systems in place to ensure that these banks are working towards investing in their community. A 2018 op-ed by banker Joseph Otting highlighted a downside of CRA when combined with redlining to create “investment deserts” where lending is not encouraged to areas that lacked nearby bank branches. These areas that were already struggling to garner resources due to the racist impacts of redlining since the 1930s now had to deal with banks having further justification to not invest due to their own decision to not put banks in these areas that were marked as hazardous.<sup>66</sup>

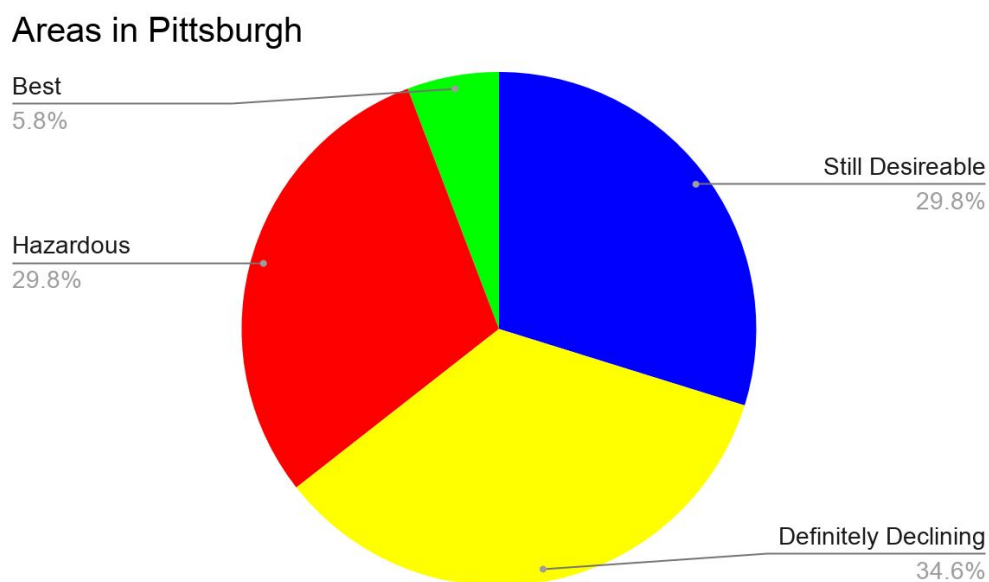
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<sup>64</sup> Coyne, Joseph, et al. “Federal Reserve Bulletin.” *Federal Reserve Bank of St. Louis*, 1991, [fraser.stlouisfed.org/files/docs/publications/FRB/1990s/frb\\_111991.pdf](https://fraser.stlouisfed.org/files/docs/publications/FRB/1990s/frb_111991.pdf).

<sup>65</sup> Kenton, Will. “Community Reinvestment Act (CRA).” *Investopedia*, Investopedia, 14 Dec. 2020, [www.investopedia.com/terms/c/community\\_reinvestment\\_act.asp](https://www.investopedia.com/terms/c/community_reinvestment_act.asp).

<sup>66</sup> Otting, Joseph. “We Have a Once-in-a-Generation Chance to Revamp CRA. Let's Use It.” *American Banker*, American Banker, 30 Aug. 2018, [www.americanbanker.com/opinion/we-have-a-once-in-a-generation-chance-to-revamp-cra-lets-use-it](https://www.americanbanker.com/opinion/we-have-a-once-in-a-generation-chance-to-revamp-cra-lets-use-it).

Redlining was prevalent in many different regions of the United States, and Pittsburgh was no exception. When looking at the impact of redlining in Pittsburgh we first examine the distribution of the redlined zones. Pittsburgh’s historic breakdown of the Residential Security Map is depicting below according to a study by the University of Richmond:



*Mapping Inequality: Redlining in the New Deal America*<sup>67</sup>

Green and blue areas tended to be predominantly White areas whereas their red and yellow counterparts were more diverse. The racial makeup of these neighborhoods in the red and yellow areas correlates heavily with the systematic disinvestment from the government into its minority communities and further pushing said communities into poverty. While these red and yellow areas struggled, the green and blue communities flourished over the past century as they have the highest average incomes, home ownership rates, and unfettered access to the mortgage market. This disparity of investment exists even today in Pittsburgh as “according to PCRG, 7 neighborhoods received 50% of all mortgage dollars in 2015—**6 of the 7 were historically**

<sup>67</sup> “Mapping Inequality.” *Digital Scholarship Lab*, [dsl.richmond.edu/panorama/redlining/](http://dsl.richmond.edu/panorama/redlining/).

**rated either green or blue.”**<sup>68</sup> In 1996, homes in redlined neighborhoods were found to be worth approximately half of those that extend in these green and blue areas that the government declared best for mortgage lending.<sup>69</sup> This residential security map produced by the HOLC was examined in a University of Pittsburgh study in 2016 where census data from 1970 to 2000 found a strong correlation between the demographic variables and security grades of the neighborhoods. It was found that red and yellow areas were more likely to have persistent poverty, Black populations, and population loss, whereas green and blue areas were most likely to have the highest average incomes.<sup>70</sup> This lack of investment concerned landlords in Pittsburgh that were not keen on renting to minority groups. For example, a case study from WESA found that on Penn Avenue, landlords renting would frequently be asked if the house was on the White or Black side of Penn Ave. as the White side was in the blue area whereas the Black side was in the red.<sup>71</sup> This continuous disinvestment from the government, mortgage lenders, and realtors into historically minority neighborhoods led to many Black people being trapped in a cycle of poverty with no resources to help them escape or develop their communities.

The impact of redlining continues to be experienced to this day. Even as the law has become more accepting of Black ownership and investment on paper, the generational wealth built up in green and blue neighborhoods remains out of reach for those who grew up unable to access those privileges. The effects of this are far reaching, both in terms of economic prosperity but also in terms of accessibility to the broader city. With less money invested throughout the

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<sup>68</sup> SUDS CMU, “The Legacies of Redlining in Pittsburgh,” February 21, 2017, <https://suds-cmu.org/2017/02/21/the-legacies-of-redlining-in-pittsburgh/>.

<sup>69</sup> Kenton, Will. “Redlining.” *Investopedia*, Investopedia, 9 Dec. 2020, [www.investopedia.com/terms/r/redlining.asp](http://www.investopedia.com/terms/r/redlining.asp).

<sup>70</sup> Rutan, David Quinn. “Legacies of the Residential Security Maps: Measuring the Persistent Effects of Redlining in Pittsburgh, Pennsylvania.” *University of Pittsburgh*, 2016, [core.ac.uk/download/pdf/78483233.pdf](http://core.ac.uk/download/pdf/78483233.pdf).

<sup>71</sup> Krauss, Margaret J. “Pittsburgh Neighborhoods And Schools Remain Segregated, But How Did It Start?” 90.5 *WESA*, [www.wesa.fm/post/pittsburgh-neighborhoods-and-schools-remain-segregated-how-did-it-start](http://www.wesa.fm/post/pittsburgh-neighborhoods-and-schools-remain-segregated-how-did-it-start).

time of systematized racial law, the result is a community without the basic infrastructure necessary to yield prosperity. For example, Homewood's sidewalks had less money invested into them, and to the degree they ever were up to the standard met across the White areas of the city, they have fallen even deeper into disrepair. Without the ability to easily and accessibly move between Homewood and the broader Pittsburgh economy, even without the explicitly racialized laws that held back the community in the past, its access to food will remain crippled. Food security, and broader food sovereignty, is limited not simply by the geography and private infrastructure points at which food is made available, but upon the public infrastructure connecting those points with the broader population. Furthermore, the lack of utilizable sidewalks and street lamps result both directly in subdued land value, but more than this, they result in criminality and create an environment by which many, particularly women, feel uncomfortable traversing their own neighborhood at night. For half the population therefore, this makes access to food a potentially dangerous process for nearly half the hours in the day.

Ultimately, these effects impact the totality of the local experience, for both historically Black and White neighborhoods across the city; but more so, these problems are compounded with respect to food security. The result of infrastructure built both with the direct intention of keeping Black people from availing of public services and from being in certain historically White areas is unequal access to food, unequal public funding and a more physically constricted world for Black residents than their White counterparts elsewhere in the city. This remains true for car travel, with a road system less well maintained than elsewhere in the city; for bus travel, with far fewer and less frequent buses across historically Black neighborhoods than White ones even to this day; and perhaps most of all for pedestrian travel, as sidewalks have been allowed to fall into disrepair. Food access is not only about where food is made available, but also about

how easily people are able to access those places. To truly understand present day food insecurity therefore, requires first that we recognize the racist history of the city, state and nation and the manner by which a racialized vision continues to plague our infrastructure.

## 7. Methodology

### 7.1 Food Insecurity Data Collection

In order to examine the impact of redlining on food insecurity and the health effects that result, we collated data from several Allegheny County databases to reach a more holistic view of the demographic makeup of certain areas as well as the geography of their food resources. Due to the lack of readily available resources of data pertinent to the available food options in Allegheny County we found it necessary to collate this data ourselves. Data pertaining to the demographic makeup of the various neighborhoods in Allegheny County derive primarily from the Allegheny County/Western PA Regional Data Center that features datasets updated as of March 28, 2018. The data was cleaned up and visualized using RStudio. From this data bank the data was collected included: the locations and number of Supermarkets, Fast Food restaurants, WIC Vendors, and Gardens for Allegheny County.

The data were collected in multiple .csv files, so the data from each file was organized to standardize the information across all data collected. Standardization entailed ensuring the data was formatted properly in order to successfully use it in the computer programs we created. The data contained information pertaining to Supermarkets, Fast Food restaurants, WIC Vendors, and Gardens .For each of these four datasets the information in each contains the following variables: name of the location, start date of operation, street number, street name, zip code, latitude, longitude, and category. The category variable is used to classify what type of location each data point being one of the following classifications: Convenience Store, Supermarket, Breakfast, Take-out, Farm, Garden, WIC Vendor. After the data was cleaned up and organized, we further organized the data points by zip code to narrow down the data to the Hill District and Homewood locations of interest.



Once the data was collected and cleaned up to analyze the variables we began to narrow in on the neighborhoods that have been negatively impacted by redlining. For our control group we chose to examine all of Allegheny County's food options. In terms of the negative impact on redlining we chose the Hill and Homewood neighborhoods, which were designated as red areas by the HOLC in 1933. Due to this lack of economic investment there is a void of fresh produce available in these neighborhoods. For the sake of this data set we divided the food locations into the zipcodes that comprise the neighborhoods in question. This comes with the caveat that not all food locations in the following datasets will necessarily be located within the neighborhoods of interest. The Hill District will consist of the zip codes 15213 and 15219, Homewood will use the zip codes 15208 and 15221. Our analysis section will detail our findings in the context of food insecurity and the impacts redlining has had on available food resources for these communities.

The results of the data collection and analysis are detailed in the following analysis section. The data visualizations are presented as figures 1, 2 and 3 in the following analysis section. There exist clear limitations in the data we used, one of the most obvious being the fact that the data set was last updated in March 2018, and much may have changed in the Hill and Homewood food landscapes since then. COVID-19 and its effect on the global and local economy may have significantly altered the collection of businesses within the communities, particularly of small businesses. Recent radical economic shifts make it highly likely the food landscape is different from that reported in 2018. Another limitation is that because we used the zipcodes for these regions there will be some extra locations that will not necessarily be located within the Hill district or Homewood. Though this has a likely trivial effect on the measurement of food sources in Hill and Homewood, it is still worth noting.

## 8. Research and Analysis

### 8.1 Pittsburgh

According to the United States Census, the overall population of Pittsburgh is approximately 300,000 as of 2019. The demographic makeup of the city as a whole are 66.9% White, 23.2% African American, 5.7% Asian, 0.2% American Indian, 3.1% Hispanic, and 0.9% other.<sup>72</sup> Pittsburgh is a predominantly White city with various neighborhoods throughout that house significant portions of their minority populations. Historically these neighborhoods have been the ones that have been marked as yellow or red areas by the HOLC as such have not been given satisfactory resources as they were not seen as ideal locations for investment. The median and per capita household income from 2014-2018 for Pittsburgh are \$45,831 and \$31,972 respectively across the entire city.<sup>73</sup> This places Pittsburgh roughly \$15,000 below the national median income of 60,293 in that time frame but the per capita income is approximately the same as the national average.

From *Pittsburgh's Inequality Across Gender and Race* (2019) report that annually examines the health, income, and safety across various racial groups in Pittsburgh the disparity between health and income between White and Black citizens is massive. Even though the city has a per capita income of 31,972 on average the income for White men is \$37,504, White woman is \$29,393, Black men is \$21,636, and Black women is \$20,082.<sup>74</sup> This leaves Black men and women at roughly \$10,000 short of the per capita income for the city which is already

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<sup>72</sup> "U.S. Census Bureau QuickFacts: Pittsburgh City, Pennsylvania." Census Bureau QuickFacts, 2019, [www.census.gov/quickfacts/pittsburghcitypennsylvania](http://www.census.gov/quickfacts/pittsburghcitypennsylvania).

<sup>73</sup> Ibid.

<sup>74</sup> Howell, Junia, et al. "Pittsburgh's Inequality Across Gender and Race." City of Pittsburgh, City of Pittsburgh Gender Equity Commission, 2019, [apps.pittsburghpa.gov/redtail/images/7109\\_Pittsburgh's\\_Inequality\\_Across\\_Gender\\_and\\_Race\\_09\\_18\\_19.pdf](https://apps.pittsburghpa.gov/redtail/images/7109_Pittsburgh's_Inequality_Across_Gender_and_Race_09_18_19.pdf).

equivalent to roughly half of what they make in a year. When these citizens have to focus on working jobs that pay them a per capita income equivalent to 63% of their White counterparts then it is easy to see how necessary it is for the limited income of these Black citizens to make as much impact in their lives as possible. Some of this inequality can be explained by women working part-time jobs at a higher rate or disproportionately working unpaid jobs such as caring for family members. When adjusting for only full time workers the median annual income for White men is \$52,176, White women is 44,797, Black men is 36,359, and Black women is 32,805. For every dollar a full-time White man earns Black men and women earn 70 and 63 cents for working the same duration.<sup>75</sup>

Of the entire population in Pittsburgh it is reported that roughly 11% of White men, 15% White women, 34% Black men, and 37% Black women are living below the poverty line for their respective demographics. From this study it is reported that Black women in Pittsburgh have a higher poverty rate than 85% of other cities across all of America. Furthermore, “more Black children grow up in poverty [in Pittsburgh] than 95% of similar cities”.<sup>76</sup> Evidently, Black Men and Women in Pittsburgh continue to struggle to earn enough money to support their families--this has been further exacerbated by the lack of affordable and accessible food options to feed their families.

On top of African Americans earning less than Whites in Pittsburgh they are also employed at lower rates and tend to work jobs that give them less opportunity to earn a livable wage. Less than 50% of Black men and women in Pitt are employed compared to roughly 65% of White men and 60% of women. 7% of Black men 25-64 are looking for work compared to 2% White men of the same age group. Of that 25 to 64 age group 15% of White men are out of the

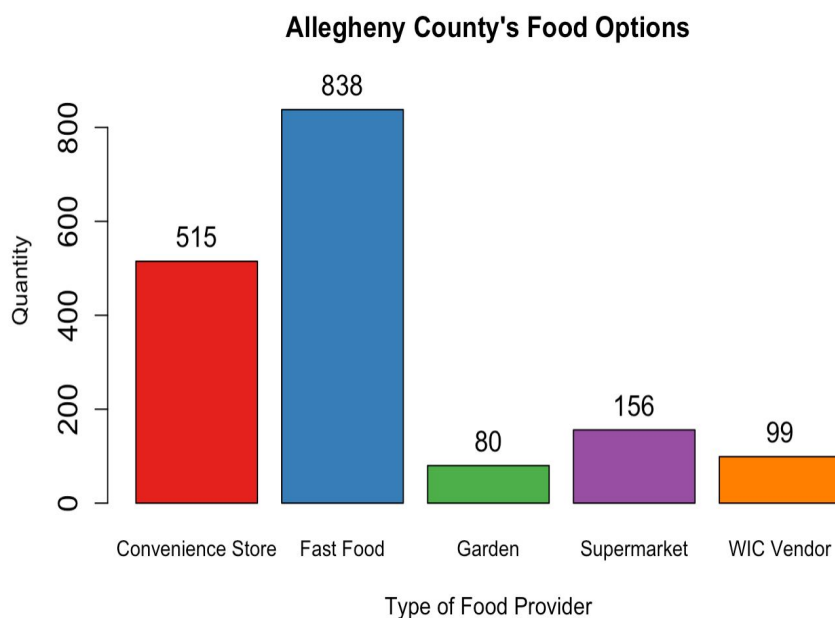
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<sup>75</sup> Ibid.

<sup>76</sup> Ibid.

labor force compared to only almost 40% of Black men. Of similar cities across America 85% of them have a higher employment rate for African Americans than Pittsburgh.<sup>77</sup>

In terms of food options available in Allegheny County as a whole, we created a graph from the data collated from the Allegheny County Regional Data Center. As a whole, the county has a 6:1 Fast Food to Supermarket ratio, with over 60% of these supermarkets offering WIC benefits. We chose to look at Allegheny County as a whole to get a better image of what the Homewood and Hill Districts would look like compared to the region overall. We want to note that 30 out of 80 of these gardens are school gardens which do not impact the available resources of fresh produce for the county as a whole.



(Figure 1)

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<sup>77</sup> Ibid.

## 8.2 Case Study: Homewood

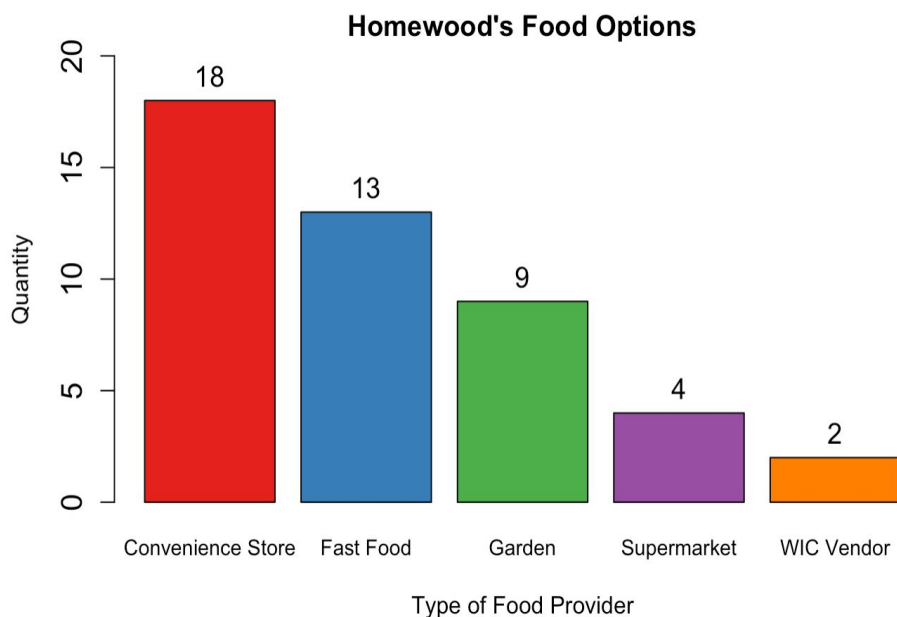
Food insecurity rates in Homewood are estimated to impact between a third and a half of all residents.<sup>78</sup> According to the 2010 Census, demographics of Homewood are 97.8% African American, 1.2% White, 0.3% American Indian, 0.15% Asian, 0.04% Native Hawaiian, and 0.37% other with a population of approximately 6,500. Homewood, a historically redlined community, exemplifies how racism has become a public health crisis, where obtaining basic necessities proves to be a major obstacle for residents.

Due to the lack of grocery stores and viable food options in the Homewood area, residents struggle to reach grocery stores in more affluent neighborhoods, such as Penn Hills and East Liberty for their daily food needs. Moreover, lack of vehicle access proves to be another barrier to obtaining food at these grocers: many residents do not have access to a car and must utilize the bus line, forced to transport groceries from the bus stop to the home. More than 100 households do not have a vehicle and are more than ½ mile from the nearest supermarket, according to USDA maps.

By contrast to the lack of grocery stores and other providers of affordable fresh produce in Homewood, there is a plethora of unhealthy food options available. Below, taken from the Allegheny County, City of Pittsburgh Regional Data Center, is a list of local food providers as of 2018.

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<sup>78</sup> Culgan, Rossilynne, and Colin Deppen. "Fresh Divide: Inside Pittsburgh's Food Deserts, Where Buying Milk or Veggies Is Impossible." *The Incline*, The Incline, 29 Nov. 2019, [archive.theincline.com/2018/10/15/fresh-divide-inside-pittsburghs-food-deserts-where-buying-milk-or-veggies-is-impossible/](https://archive.theincline.com/2018/10/15/fresh-divide-inside-pittsburghs-food-deserts-where-buying-milk-or-veggies-is-impossible/).



(Figure 2)

### 8.2.1 RAND PHRESH Findings

To comprehensively study its effects on consumers in the region, the RAND corporation conducted a study titled PHRESH. PHRESH, which stands for Pittsburgh Hill District /Homewood Research on Eating, Shopping, and Health, was the name of the experiment to answer the question: does introducing a new supermarket into a food desert improve diet and reduce obesity? A group of RAND researchers implemented PHRESH studies--four separate research studies sponsored by the National Institutes of Health (NIH). In their 2011 Baseline survey which collected data from 476 households in Homewood, researchers found that: there was no full-service grocery store in the neighborhood, and none of the 14 food stores in the community sold fresh fruit or vegetables. In addition, 36% of households experienced food insecurity. Health data for respondents show that one in two residents had high blood pressure, one in four had high cholesterol, and one in five had diabetes or heart disease, and two in five had arthritis. The demographics of the respondents were 90% African American and 66% of

respondents had a household income of less than \$20,000 per year. Just over half reported being satisfied with their neighborhood as a place to live.<sup>79</sup>

Rev. Ricky Burgess, who represents Homewood on the Pittsburgh City Council, acknowledges the fact that there is no place to get fresh vegetables. He has insisted on a potential opening of a grocer, a food co-op, more farmer's markets, and overall, fostering greater discussion around the food insecurity of Homewood's business district. In an article for *The Incline*, Burgess explains that the hesitation to implement a local grocery store has risen from concerns of the perception of safety, potential theft in poor communities, and a lack of diverse income levels of shoppers.<sup>80</sup> Residents of Homewood have resorted to urban agriculture in an urgency to feed themselves and their families. Community gardens, such as Ayanna Jones's Sankofa Village Community Garden, have come into fruition where North Braddock Avenue and Susquehanna Street meet.

In further attempts to alleviate the food insecurity crisis, Homewood residents also conceived the Homewood Food Access Group, which includes BUGS: Black Urban Gardeners and Farmers of Pittsburgh Co-op--founded by executive director Raqueeb Bey. Beyond striving to address the issue of food inaccessibility, the program is meant to teach about African culture and sustainability, as well as be a place of healing for mental health concerns--residents refer to it as a "healing garden". The co-op acquired a vacant lot from the city's Adopt-a-Lot program in 2016, which allows them to grow fresh produce. The future plans of BUGS include weekly farm stands or resident-run grocery stores; and ultimately, to grow their network through a community-based approach.

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<sup>79</sup> "PHRESH Findings." *RAND Corporation*, [www.rand.org/well-being/community-health-and-environmental-policy/projects/phresh/findings.html](http://www.rand.org/well-being/community-health-and-environmental-policy/projects/phresh/findings.html).

<sup>80</sup> Culgan, Rossilyne, and Colin Deppen. "Fresh Divide: Inside Pittsburgh's Food Deserts, Where Buying Milk or Veggies Is Impossible." *The Incline*, *The Incline*, 29 Nov. 2019, [archive.theincline.com/2018/10/15/fresh-divide-inside-pittsburghs-food-deserts-where-buying-milk-or-veggies-is-impossible/](http://archive.theincline.com/2018/10/15/fresh-divide-inside-pittsburghs-food-deserts-where-buying-milk-or-veggies-is-impossible/).

### 8.3 Case Study: The Hill District

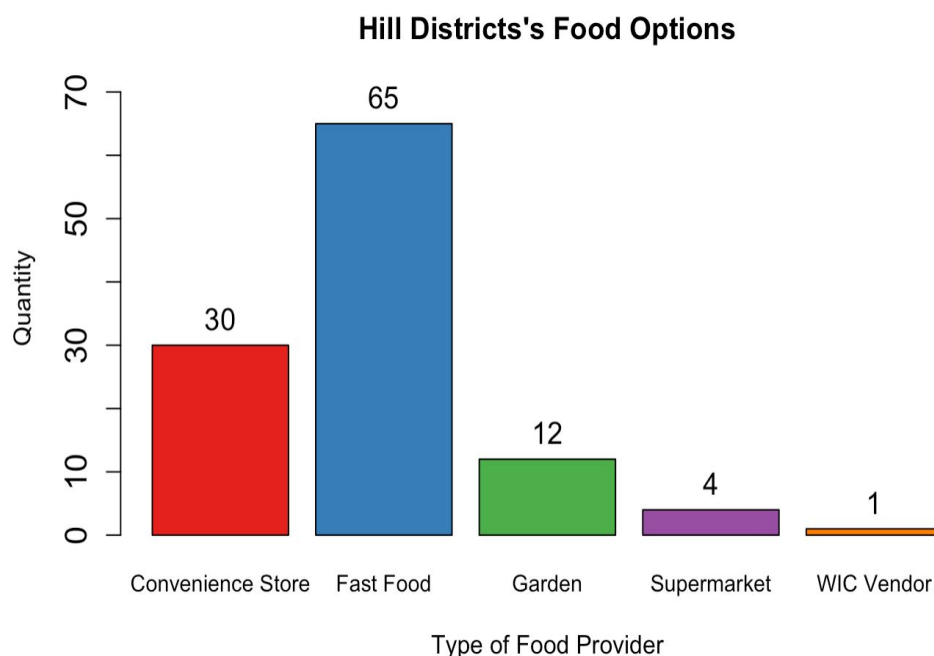
The Hill District is one of Pittsburgh's earliest and largest neighborhoods--a "crossroad of the world", The Hill District has historically been home to rich diversity in culture, arts, and literature, playing a role in shaping the city's culture. With a demographic composition of 92% Black, 2.4% Hispanic, 0.6% White, and 5% other, the Hill District is an area that was historically designated as hazardous (colored red) by the HOLC's security map. From the mid-20th century to the present day, residents have played a role in shaping the Civil Rights movement, forging the push to uplift and build upon African American culture and legacies in a historically marginalized community. As a part of the Greater Hill District Master Plan (2011)--an agenda striving for growth and regeneration of the neighborhood--program initiatives have been addressed to alleviate issues of food insecurity in the Hill District.

Initiatives have included discussion of encouraging community agriculture--it suggests implementing a governing association or organizational board that also establishes educational and social events surrounding the benefits and strategies of urban gardens. If sufficient vacant lots--temporarily being held by a community land bank or public entity--can be acquired, it may be possible to grow produce at a greater level than the existing community gardens. These are often organized as nonprofits. The benefits accrued are not only an influx of fresh, healthy food into the community, but also agricultural jobs skills and experience in business management. The goals of this program initiative ultimately include: improving maintenance of vacant lots, providing residents with adequate garden space, and creating economic opportunities and workforce development.

From the data that we collected from the Allegheny Regional Data Center, in Figure 3 we saw that the Hill District is not devoid of locations to eat necessarily, but rather lacking in



locations where one could access fresh produce. Of the gardens listed, four of them are school gardens, which serve little to no benefit to the overall population in terms of where they can find produce for themselves or their families.



(Figure 3)

### 8.3.1 RAND Case Study: Shop ‘N Save

One notable attempt to alleviate food insecurity in Pittsburgh was the establishment of a Shop ‘N Save within the Centre Heldman Plaza across from the Hill House Association in the Hill District in October of 2013. The study, funded by the Healthy Food Financing Initiative, supplied the Hill District with a full-service supermarket in October 2013. Variables measured included food shopping behaviors, diet, and body mass index (BMI) before and after the implementation of the supermarket, using Homewood as a demographically-similar comparison neighborhood. The presence of a grocery store in the district produced a significant effect on residents’ neighborhood satisfaction. Both residents who shopped and who did not shop at the

Shop n' Save experienced increased neighborhood satisfaction. Neighborhood satisfaction is very important, but unfortunately satisfaction alone does not determine positive health outcomes. And though “perceived access to healthy food improved significantly more among regular supermarket users than among other Hill District residents”, even perceived access to healthy food does not itself change the health of a community.<sup>81</sup>

The study found that among Hill District residents, no statistically significant change in dietary outcomes was observed; however, there was less consumption of sugar and empty calories such as solid fat and alcohol. Additionally, the introduction of the supermarket showed an improvement in neighborhood satisfaction. However, researchers observed the study had no effect on residents BMI--no significant changes in the rates of obesity were observed.

Ultimately, the implementation of a supermarket in the Hill District led to improvements in some aspects of residents' diet and overall well-being.<sup>82</sup> The study was published in the *American Journal of Preventive Medicine*, which stated overall, “Placing supermarkets in food deserts to improve access may not be as important as simultaneously offering better prices for healthy foods relative to junk foods, actively marketing healthy foods, and enabling consumers to resist the influence of junk food marketing.”<sup>83</sup> Primarily, the results show that the implementation of a grocery store may increase access to food for residents, but does little to change the dietary habits of residents, ensure affordability of nutritious food, or alleviate food insecurity at large. The collected data prompt a significant understanding of the factors that may contribute to obesity to inform future policies, which will be addressed below.

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<sup>81</sup> Dubowitz et al., Tamara. “What Happens When a Food Desert Gets a Supermarket?” *RAND Corporation*, 3 Nov. 2015, [www.rand.org/pubs/research\\_briefs/RB9874.html](http://www.rand.org/pubs/research_briefs/RB9874.html).

<sup>82</sup> Ibid.

<sup>83</sup> Ghosh-Dastidar et al., Bonnie. “Distance to Store, Food Prices, and Obesity in Urban Food Deserts.” *American Journal of Preventive Medicine*, Elsevier, 10 Sept. 2014, [www.sciencedirect.com/science/article/abs/pii/S0749379714003705](http://www.sciencedirect.com/science/article/abs/pii/S0749379714003705).

## 9. Policy Context

Lack of access to healthy food options is an issue that has been handled in many different ways in different regions of the United States. Although not necessarily meant to address food deserts nationally, school meals for lower-income children and families have been essential to providing free or affordable lunch to over 30 million children per day. The programs have also provided breakfast to 13.5 million children and lifted nearly 1.5 million people out of poverty in 2013. In 2014 and 2015, low-income food-insecure households with school-age children accounted for 84% of the children who accessed free or reduced-price lunches through the NSLP, either in combination with SNAP benefits or alone.<sup>84</sup> School lunch programs have thus served to free up household resources for lower-income families.<sup>85</sup> Research has also shown that after-school programs help get more students to attend school, have a better chance of moving to the next grade, and improve their test scores.<sup>86</sup> These free or reduced-price school meals not only address affordability, but also provide healthy options for students. In 2012-2013, nutrition standards were updated nationally requiring more grains, fruits and vegetables in the NSLP and lunches provide students with about one third or more of the recommended levels for key nutrients. Moreover, meals “must provide no more than 30 percent of calories from fat and less than 10 percent of calories from saturated fat.”<sup>87</sup> According to the Food Research Action Center, these subsidized meals are beneficial to lower-income children’s weight status and Body Mass

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<sup>84</sup> Ralston, Katherine, and Alisha Coleman-Jensen. “USDA’s National School Lunch Program Reduces Food Insecurity.” *USDA ERS - USDA’s National School Lunch Program Reduces Food Insecurity*, 2017, [www.ers.usda.gov/amber-waves/2017/august/usda-s-national-school-lunch-program-reduces-food-insecurity/](http://www.ers.usda.gov/amber-waves/2017/august/usda-s-national-school-lunch-program-reduces-food-insecurity/).

<sup>85</sup> Rachidi, Angela. “School Meals: An Important Income and Nutrition Support for Low-Income Children.” *AEI*, 2015, [www.aei.org/poverty-studies/school-meals-an-important-income-and-nutrition-support-for-low-income-children/](http://www.aei.org/poverty-studies/school-meals-an-important-income-and-nutrition-support-for-low-income-children/).

<sup>86</sup> Pekow, Suzanne. “What Children in Food Deserts Do during the Summer.” *APM Reports*, APM Reports, 19 June 2020, [www.apmreports.org/episode/2017/07/10/brain-food](http://www.apmreports.org/episode/2017/07/10/brain-food).

<sup>87</sup> Hayes, Clarissa, and Geraldine Henchy. “Benefits of School Lunch.” *Food Research & Action Center*, 17 Mar. 2017, [frac.org/programs/national-school-lunch-program/benefits-school-lunch](http://frac.org/programs/national-school-lunch-program/benefits-school-lunch).

Index (BMI). Moreover, these school lunches have been shown to reduce obesity rates by at least 17 percent and reduce overall poor health by at least 29 percent.<sup>88</sup> Therefore, these school meals have been shown to have positive health effects on children who otherwise couldn't afford or access these healthier options.

More directly, however, Congress has recognized the issue of lack of nutritional food and in December of 2009, the House of Representatives introduced a bipartisan resolution supporting a future, national, Healthy Food Financing Initiative (HFFI) to find ways to increase access to healthier foods in underprivileged communities. President Barack Obama included in his 2011 and 2012 budget proposals, funding for the initiative and in November 2010, bipartisan legislation for the HFFI was introduced in both houses of Congress. Moreover, first introduced in 2017 and then re-introduced in 2019, bipartisan legislation called "Healthy Food Access for All Americans," was proposed by Congress. This legislation proposed to amend internal revenue codes to provide tax credits and grants for providing access to healthy food in food deserts. This would include many of the on-the-ground efforts by local activists to provide healthy options such as food banks, farmer's markets, and mobile markets.<sup>89</sup>

At times, national efforts have fallen short of being able to help lower-income neighborhoods gain access to healthy food options. For example, "As part of Michelle Obama's healthy eating initiative, a group of major food retailers promised in 2011 to open or expand 1,500 grocery or convenience stores in and around neighborhoods with no supermarkets by 2016."<sup>90</sup> An Associated Press analysis showed that these retailers only built new supermarkets in a fraction of the neighborhoods that need them. According to the report, "barely more than 250

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<sup>88</sup> Hayes, Clarissa, and Geraldine Henchy. "Benefits of School Lunch." *Food Research & Action Center*, 17 Mar. 2017, [frac.org/programs/national-school-lunch-program/benefits-school-lunch](http://frac.org/programs/national-school-lunch-program/benefits-school-lunch).

<sup>89</sup> "H.R. 4260 — 115th Congress: Healthy Food Access for All Americans Act." [www.GovTrack.us](http://www.govtrack.us). 2017. December 18, 2020 <<https://www.govtrack.us/congress/bills/115/hr4260>>

<sup>90</sup> "Big Grocery Chains Leave U.S. 'Food Deserts' Parched." CBS News, CBS Interactive, 7 Dec. 2015, [www.cbsnews.com/news/big-grocery-chains-leave-u-s-food-deserts-parched/](http://www.cbsnews.com/news/big-grocery-chains-leave-u-s-food-deserts-parched/).

of the new supermarkets were in so-called food deserts, or neighborhoods without stores that offer fresh produce and meats.”<sup>91</sup>

Different states have also passed their own forms of state legislation seeking to curb food deserts and the lack of access to healthy foods. The CDC enacted an analysis on healthier food retail legislation between January 2001 and January 2011 to analyze how states have responded to the issue.<sup>92</sup> These legislations have either served to establish task forces or advisory panels to study the issues of access or provide financial assistance and other incentives to attract retailers and grocery stores with healthy options to underprivileged areas. The analysis showed that 12 states, including Pennsylvania, enacted legislation between 2001 to 2011, and 7 additional states introduced legislation that did not pass.

Pennsylvania was very proactive in passing HR 13 in 2003, which established a Task Force to study the issue and in 2004, passed SB 1026 Act 22, which through the Pennsylvania Fresh Food Financing Initiative, was given about \$150 million, to provide resources to attract grocery stores and supermarkets to the communities lacking them. The program was very holistic in providing funding for many different types of projects and costs including pre-development expenses, land acquisition/assembly, store building/construction, equipment and furnishings, and general capital or development projects. The program went on from 2004 to 2010 when its funds ran out, and by June 2010, more than 72.2 million dollars in loans and 12.1 million dollars in grants were approved.<sup>93</sup> Overall, these national and local initiatives have invested well-meaning dollars into creating greater food access to adults and children alike; yet, programs have failed to alleviate the most pressing disparities of this crisis on a local level.

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<sup>91</sup> “Ibid.

<sup>92</sup> “State Initiatives Supporting Healthier Food Retail: An Overview of the National Landscape.” *CDC*, 2011, [www.cdc.gov/obesity/downloads/healthier\\_food\\_retail.pdf](http://www.cdc.gov/obesity/downloads/healthier_food_retail.pdf).

<sup>93</sup> “Pennsylvania Fresh Food Financing Initiative.” *Reinvestment Fund*, 22 Dec. 2015, [www.reinvestment.com/success-story/pennsylvania-fresh-food-financing-initiative/](http://www.reinvestment.com/success-story/pennsylvania-fresh-food-financing-initiative/).

## 9.1 Pittsburgh's Current Policies

The City of Pittsburgh has handled the issue of food deserts in different ways for the last few decades. A number of initiatives have been implemented; however, residents of Homewood and the Hill District continue to struggle to access and acquire adequate nutritious food. Among relevant stakeholders is the Pittsburgh Food Policy Council, that “seeks policies that promote local food growing, sustainable agriculture, equitable development and access to healthy food, particularly in low-income communities.”<sup>94</sup> The PFPC has examined various facets of Pittsburgh's food system and has developed potential policy recommendations accordingly, as well as analyzing the effectiveness of the current policies in place. The Greater Pittsburgh Food Action Plan was a report published in September 2020 that serves as a policy roadmap to strategically make sustainable, equitable use of the region's resources. The report cited several areas of current policy--including what has well-served the community and what can be improved in the future--through five goals, each with recommendations, strategies, relevant stakeholders, and next steps to facilitate its achievement.

Currently, there are funding streams allocated to support the local food system, but there is a lack of strategic coordination, communication, and allocation to specific projects. For instance, there are resources available for food entrepreneurs, but they remain underutilized and unaccessed because they are disparate and not well connected.<sup>95</sup> There is additional startup and early growth capital available to support local farmers early in their business, but the serious funding gaps are enough to prompt better loan terms or a more specific, transparent allocation for a targeted cause. Moreover, grants are available for community gardens, urban farms, and small farms in the region through opportunities such as Grow Pittsburgh, Western Pennsylvania

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<sup>94</sup> “Pittsburgh Food Policy Council, [www.pittsburghfoodpolicy.org/](http://www.pittsburghfoodpolicy.org/).”

<sup>95</sup> “Greater Pittsburgh Food Action Plan.” *Greater Pittsburgh Food Action Plan*, Pittsburgh Food Policy Council, 2020, [foodactionplan.org/](http://foodactionplan.org/), 47.

Conservancy Sustainability Fund Program, and National Young Farmers Coalition Grant program--allocated in limited and small increments. Fresh Corners, healthy food retail outlets that strive to bring food into low-access communities, is also supported through government funding. There is a high demand for expansion of existing funds to support such healthy food retail businesses, local entrepreneurs, and initiatives that allow greater reach of resources.<sup>96</sup> Evidently, the gaps inherent in the haphazard distribution of funds is a place of serious improvement to target through policy. To solve this concern, a potential solution must strategically invest stable and secure funds into areas of need, as well as bring awareness to such available resources in a more coherent, transparent system.

Other programs such as Adopt-A-Lot exist to transform vacant lots into garden or food access space, but are once again underutilized due to the short term lease policies that disincentivize lease holders sweat equity and financial investment in properties.<sup>97</sup> In order to use this concept to better serve the community, the Urban Development Authority developed the revamped Farm-A-Lot program in 2017. However, the process of practically implementing these strategies has been stagnant. Additionally, after school programs and summer-long meal sites partnered with Live Well Allegheny and Learn & Earn program provide food resources to children in need. These are useful in their current scope but could be expanded to benefit more children, who evidently continue to suffer from the damaging effects of living in a food desert, especially as the COVID-19 pandemic disrupts a child's typical school schedules and functions.

Notably, the GPFAP survey also showed that 67% of respondents stated that purchasing local food was important to them, but 77% claimed that cost was a barrier.<sup>98</sup> This demonstrates an interest and acknowledged value in purchasing nutritious, local food options; however, the

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<sup>96</sup> Ibid., 62.

<sup>97</sup> Ibid., 30.

<sup>98</sup>Ibid., 60.

high costs render the choices inaccessible to many. With price as a barrier, local small farms are left unsustainable and unable to compete with large retail corporations. Creating more cost-effective opportunities that incentivize the purchasing of local food can support local entrepreneurs, motivate healthier food choices, and feed the community overall. One potential incentive implemented by other cities and counties is an expansion of funding or private grants towards SNAP Incentive Programs and farmers market coupons, such as Food Bucks. Along this vein, the Gus Schumacher Nutrition Incentive Program funding is currently being allocated to the Food Trust to fund Food Bucks sites throughout Allegheny County. This is a very impactful, helpful investment in initiatives that could be strengthened and expanded.

Finally, the Pennsylvania Fresh Food Financing Initiative, a statewide financing program designed to attract supermarkets and grocery stores to underserved urban and rural communities, was used to support grocery stores in Allegheny County. As of December 2009, the FFFI had attracted 203 applications from access PA, with 88 applications approved for funding. In total, its key partner The Reinvestment Fund had approved more than \$72.9 million in loans, and \$11.3 million in grants.<sup>99</sup> The goal of these initiatives was to provide an initial investment to bring healthy food retailers to food deserts. The Pennsylvania initiative succeeded in constructing new grocery stores and increasing residents' access to healthy food, but no data regarding a change in residents' health has been recorded for Pittsburgh residents specifically. While the Pittsburgh Food Policy Council and financing programs have been somewhat successful in efforts to shape, improve, and create new policies, Homewood and the Hill District remain classified as food deserts; evidently, there is great room for improvement. The achievements and shortfalls of these

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<sup>99</sup> Evans, Dwight. "Budget Briefing: Report on Key Issues from the House Appropriations Committee." *National Conference of State Legislatures*, Mar. 2010, [www.ncsl.org/documents/labor/workingfamilies/pa\\_fffi.pdf](http://www.ncsl.org/documents/labor/workingfamilies/pa_fffi.pdf).



initiatives have worked to formulate our understanding of the current health crisis and the potential policy solutions needed to alleviate such pressing issues in the city of Pittsburgh.

## 10. Policy Options and Recommendations

When considering solutions to address food deserts in Pittsburgh and the health disparities that result, it is crucial to acknowledge that both affordability and accessibility are critical factors to acquire healthy food. The results of the RAND PHRESH study demonstrate how the establishment of a grocery store did little to improve the diet of residents, and ultimately, that improved access to grocery stores cannot necessarily improve the health disparities inherent in food deserts. Although the store granted greater access to fresh food by reducing the distance residents had to travel and alleviating the burden of transporting groceries on a bus line, low-income residents continued to struggle to afford fresh produce, showing that the ability to invest in nutritious food is largely dependent on one's income. Moreover, many residents were not well educated on the nutritional value of foods or how to prepare them, demonstrating that food preparation knowledge must also be considered in a policy solution. Improving accessibility to food is not a complete solution alone; therefore, it is optimistic to invest in long-term equitable solutions that overcome price and knowledge barriers.

While achieving food sovereignty is the ultimate goal, food insecurity within the city of Pittsburgh is the most pressing issue, especially within majority Black neighborhoods. With the addition of the COVID-19 pandemic putting people out of secure work and preventing children from getting meals provided at school, food insecurity is an even more pressing problem. Thus, the need to consider long-term equitable solutions eliminates first-glance solutions; namely, urban gardens are not an equitable option. To elaborate, Pittsburgh is an urban city, and Homewood is among the more densely populated places within its city limits. Urban gardens and other semi permanent public infrastructure take up increasingly limited land. Where possible, land should be prioritized for other uses, namely housing and businesses, both of which provide

taxable income to the local community and either employment or housing respectively, both obvious public goods. However, land currently in disuse and with no clear path to largely infrastructural improvement may very well benefit the community as a garden. As the average real estate value in the neighborhood is approximately \$93,500, in order to break even in terms of the tax revenue value of private use, a public lot must provide approximately \$3600 or more in social value as its tax revenue can no longer be expected. This is naturally a very different situation than currently neglected properties.

In the short term, this is therefore a reasonable step for plots in disuse without sizable infrastructure built upon them. However, the value of property in the area is on an upwards trajectory changing the break-even value of public use land moving forward. We therefore conclude that, while valuable in the abstract, urban gardens should be approached not as permanent fixtures of the community but rather seen as annual uses of otherwise derelict property - part of the short term stop gap against food insecurity but not a long term solution to it. The approach to long term policy must be built separately from the conventional farming-centric model that has proven beneficial in more rural environments but is not economically sustainable in growing city neighborhoods. Effective use of urban gardening requires more easily available low value and low use land than can be expected in an ideally functioning form of Homewood.

Shop 'N Save failed, both in terms of sales and, accordingly, its ability to drastically change the food intake of residents, but that doesn't mean no grocery store will ever be able to be economically viable ever again. As residents grow wealthier, and as the area becomes more densely populated, the community's ability to support a grocery store in the future will accordingly increase, but public policy must likewise make space for such development. A

grocery truck, providing substantially less total food sold, less total jobs, less total variety of foods available and less outside investment into the community, cannot be expected to replace a full grocery store and yet it cuts into the potential customer base of such development. As such, though valuable in the short term, grocery trucks represent a possible long term problem for the community even as grocery stores too are not a short term solution.

With the limits of grocery stores and urban gardens having been addressed, the practical potential of three solutions are put forth within this proposal: investments in community development through specific projects and existing nonprofits, stretching food dollar benefits, and expanding the reach of mobile farmers markets. As detailed, there are many reasons why food deserts are a serious problem, based on various theories of justice. In particular in this work we are focusing on Capabilities Theory, Hermeneutical Injustice, and Egalitarian Conceptions. Under each of these theories, for differing reasons, food deserts are wrong, as has been outlined above. Given this, any policy implementation ought to be designed to deal with the reasons that, under these three theories, food deserts are morally wrong. Therefore, expanding SNAP Incentives is the best option here presented to achieve these ends. The format of the policy lends itself to some of the theories, and it would avoid, generally speaking, active harms in other areas.

### 10.1 Potential Solution One: Community Development Block Grant Funding

Community Development Block Grant Funds are a potential tool to directly invest in urban development projects and programs within Homewood and the Hill District. According to the Housing and Urban Development (HUD) Exchange, eligible activities must “address community development needs having a particular urgency because existing conditions pose a

serious and immediate threat to the health or welfare of the community”.<sup>100</sup> Considering the dire health effects that follow a lack of sufficient food access as put forth previously, food deserts prove to be a serious and immediate threat posed to residents of the Hill District and Homewood. With a majorly low-income demographic and lag in growth compared to neighboring metropolitan areas, these communities are ideal candidates to accrue the benefits of CDBG funds.

Investment projects can improve the overall living environment, expand economic opportunities, and offer prolific community development--if strategically and transparently utilized, funds can be targeted to address food deserts in Homewood and the Hill District by offering specific ways to allocate money and resources. Specific community development block grant funding could be directed towards Human Services Projects that address hunger and nutrition for low to moderate income residents. Business Development Projects or Commercial Revitalization Projects should also be considered to invest funding in already existing retail venues. Moreover, the grants may be given to create more affordable housing for residents, indirectly alleviating food insecurity. As many residents prioritize rent and living expenses before other necessities, having an affordable living situation would allow a greater investment in healthy, nutritious food.

Potential projects may include renovating vacant buildings to be used as grocery retailers, increasing accessibility to bus lines and existing farmers markets, or developing public park space to be used as a community garden site. In one instance, the Village of Westboro, Wisconsin is a model example of a community capitalizing on CDBG Funds to benefit the region at large. With limited resources and \$127,000 in CDBG Funding, the Village successfully

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<sup>100</sup> “CDBG Entitlement Program Eligibility Requirements.” *HUD Exchange*, US Department of Housing and Urban Development, [www.hudexchange.info/programs/cdbg-entitlement/cdbg-entitlement-program-eligibility-requirements/](http://www.hudexchange.info/programs/cdbg-entitlement/cdbg-entitlement-program-eligibility-requirements/).

renovated an unused church building into a new library and community center. The library currently hosts a weekly arts education program among other functions for aspiring artists.<sup>101</sup> Existing vacant buildings in Homewood and the Hill District could be sites for potential transformation, creating more areas to produce or allocate food.

The choice to pursue CDBG Funds must follow a strategic, transparent plan that thoroughly describes the community needs of the neighborhoods of interest in order to best serve the needs of the communities. Evidently, each plan will include unique advantages and limitations; moreover, a plethora of rules and requirements amidst the application process may prove to be a barrier in moving plans underway. A strategic task force with a detailed plan and budget is necessary to manifest a successful CDBG allocation. If efficiently implemented, initiatives provide a clear blueprint to uplift marginalized communities--one that results in improvements in the economic and overall well-being of the surrounding region.

However, there are severe challenges in acquiring CDBG block grant funding. To begin, local government has little if any ability to force federal money into our city as federal money is used in manners meant to help the totality of the American public, not individual pockets of need. With the exception of emergency funding, it is virtually impossible to get funds for Pittsburgh without an immediate expectation following on behalf of many other cities across the state and nation with the resultant funding being divided in so many directions as to become individually negligible even as it remains relatively substantial in totality. A secondary problem is how exactly this funding is or is not spent. Yes it is true that it can be allocated towards nonprofits working to alleviate food deserts – Just Harvest and 412 Food Rescue among them,

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<sup>101</sup> Day, Nate and Larson, Mike. “16 Inspiring Examples of Communities Capitalizing on CDBG Funding.” *Short Elliott Hendrickson Inc.*, 26 Apr. 2018, [www.sehinc.com/news/16-inspiring-examples-communities-capitalizing-cdbg-funding](http://www.sehinc.com/news/16-inspiring-examples-communities-capitalizing-cdbg-funding).

but what it can't do is actually fix the underlying reason for the existence of food deserts; lack of economic prosperity among residents. Like Grocery trucks, however valuable for people in poverty and in food deserts a food rescue program may be in the short term, it is also precisely systems such as the food rescue that, in aggregate and when substantially funded, eat into the market share of any potential food suppliers within the area. This, therefore, is a band-aid solution, and one that, ultimately, results in a systemic integration of long-term poverty and food insecurity. It is difficult to overstate the cost thereof.

Overall, Community Development Block Grant Funding (CDBG), if it were accessible as a tool and used as such to invest in projects in the area, could have intense benefits. However, while the acquisition of this type of funding could be a great benefit to communities, acquiring funding is not in itself a policy prescription. It is a policy prescription to suggest that they should be pursued, but the implications of the use of that funding would depend very heavily on the nature of its use. However, the process of funding application can change the intended policies to more effectively reach the funding. Given this, we cannot effectively determine what the CDBG funds, if acquired, would be used for. Therefore, no argument can be made at this time as to the implications of an eventual CDBG.

## 10.2 Potential Solution Two: Green Grocer Farmers Market Truck

A Green Grocer mobile farmers market truck is an additional solution that strives to create greater food access and affordability while also supporting local farmers. According to the Pittsburgh Food Bank website, a Green Grocer is “designed to travel into food desert communities to provide the fresh food options that are currently missing from the landscape”.<sup>102</sup>

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<sup>102</sup> “Green Grocer.” *Greater Pittsburgh Community Food Bank*, 2020, [www.pittsburghfoodbank.org/what-we-do/food-to-people/green-grocer/](http://www.pittsburghfoodbank.org/what-we-do/food-to-people/green-grocer/).

Partnered with local growers, small businesses, corner stores, and nonprofits, the mobile food market can create a more equitable food network. In an article to the *New Pittsburgh Courier*, mobile markets coordinator Josh Anderegg stated, “We believe that everybody has the right to access fresh fruits and vegetables, fresh food, and have a choice about it. The Green Grocer is an attempt to try to make that situation better in neighborhoods that have been denied that opportunity of access”.<sup>103</sup> To further alleviate the chronic issue of food insecurity that continues to oppress Pittsburgh residents--especially in its predominately African American communities--an expansion of the Green Grocer could potentially aid in better food access and affordability.

Food that is sold upon the truck is based primarily on the season, with some items being available year-round, such as many fruits, vegetables, and dry goods. As many farmer’s markets and community gardens tend to only remain open and operating in the warmer months--as running food stands becomes less popular through the winter--the truck also conveniently transcends such seasonal barriers in the most difficult to access times of year. In addition to proscribing more affordable healthy food by accepting SNAP benefits, a mobile farmers market can also overcome the access barrier by bringing the food to where it is most needed. Possible site hosts include libraries, medical centers, nonprofits, food banks, farms, and more. For many Homewood and Hill District residents without a car, accessing the nearest food outlet by public transportation, foot, or ride-sharing service is a strenuous barrier. Residents in these neighborhoods are notoriously burdened by the infrequent and distanced run-times of Port Authority buses, with the additional obstacle of Pittsburgh’s pedestrian-unfriendly topography.

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<sup>103</sup> Taylor Jr., Rob. “‘Green Grocer’ Providing Fresh Food to Many Black Neighborhoods.” *New Pittsburgh Courier*, 19 Feb. 2020, [newpittsburghcourier.com/2020/02/18/green-grocer-providing-fresh-food-to-many-black-neighborhoods/](http://newpittsburghcourier.com/2020/02/18/green-grocer-providing-fresh-food-to-many-black-neighborhoods/).



Therefore, eliminating the distance needed to travel for food is an attractive solution. The food truck also overcomes the price barrier--while anyone is able to shop at the truck market, it accepts various forms of payment such as cash, credit and debit cards, SNAP/EBT, FMNP and SFMNP vouchers, Veggie RX, Food Bucks, and Just Harvest Fresh Access Coins, as well as making use of various food benefit incentives--those who use EBT cards also receive a \$2 coupon to spend at a market for every \$2 spent.

Partnered with the Urban Redevelopment Authority of the City of Pittsburgh, there are currently seventeen Green Grocer market stops in seventeen neighborhoods across the Western Pennsylvania region. One market location has been placed in the Centre Heldman Plaza within the Hill District--the location of the former Shop 'n Save--posing as a short-term solution to fill the gap in food access the grocery store once held for residents. With only one truck operating in Homewood and one in the Hill District, each running twice a month for two hours at a time, this reach could be expanded in the most problematically food insecure regions. The time frame as it operates currently--with only one truck operating during the daytime on weekdays in Homewood and the Hill District--may prove to be a barrier to working citizens who cannot leave daytime jobs to acquire groceries. However, the mobile market has become an increasingly appealing approach during the COVID-19 pandemic, as many strive to avoid crowds within popular stores. The truck has since demonstrated new health and safety guidelines, such as mask-wearing and social distancing. The grocer on wheels could serve as a safer, more comfortable alternative to disperse crowds and keep most vulnerable populations protected. Ultimately, a Green Grocer mobile truck can provide a safe, convenient, and affordable solution to healthy food access, if its operation is frequent enough to sufficiently serve citizens--an additional truck and/or more

frequent times and locations of operation in Homewood and the Hill District could be one step in a healthier, more equitable direction.

Notably, the greatest barrier to assuring this service is acquiring the resources necessary for its undertaking. For one, there must be an adequate supply of produce obtained from partnered growers, subsequently organized for distribution, to match increased truck operations. Although the mobile truck market provides an alternative to navigating the crowds of traditional retail stores, implementing adequate COVID-19 safety protocols--such as masks, gloves, sanitization, and informative posters--will also demand greater efforts and resources. In order to avoid favoritism to select food desert neighborhoods such as Homewood and the Hill District, the expansion of truck operations may need to be applied to all seventeen currently participating Western Pennsylvania neighborhoods. Naturally, expanding these services would require a greater investment, much of it to places that are not in need of it.

Green Grocery Farmers Market Trucks are therefore, though well intentioned, not a good model for a sustainable and equitable future. To take the example of Giant Eagle, which started in Pittsburgh and has now expanded to about 500 locations, an average storefront is responsible for over \$20,450,000 in annual revenue.<sup>104</sup> While there has never been a Giant Eagle in Homewood, the previous grocery store in the area, Shop and Save, was unprofitable and failed as it made significantly less than this amount while unable to sell at the same upcharge rate.

A Grocery Truck, though better than nothing in the short term, represents an existential threat to the far more stable grocery store. In and of itself, the fact that they eat into the market share of grocery stores, even make grocery stores economically inefficient at any level at all, would be an acceptable cost were the grocery trucks to be of equal health benefit as a conventional grocery store, but unfortunately they are not. They offer insufficient food access in

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<sup>104</sup> "Giant Eagle." Forbes, Forbes Magazine, [www.forbes.com/companies/giant-eagle/?sh=700d1a22cdaa](http://www.forbes.com/companies/giant-eagle/?sh=700d1a22cdaa).

so much as they are available only a small subset of the time as is a permanent location. In the case of any community this more limited form of access would be problematic, but in the case of Homewood, with a higher than state average number of single parent homes, most of them women working full time, the cost of limited time windows for food accessibility is greatly compounded.

Trucks also represent far less variety of food types. Beyond the obvious desire for further food types simply as an end of itself, this also means that trucks are less desirable as a comparative choice against existing less healthy food sources, something shown by the comparative consumer rate between a proper supermarket like Giant Eagle, \$20,450,000 in revenue, with the currently circulating truck system, divided across 17 markets, averaging only slightly above a tenth of that in annual meal provisions per location.<sup>105</sup> Even when accounting for the less frequent openings, this still shows far lower sale rates for the grocery truck than the proper store. Grocery trucks therefore represent a failure of vision long term and ultimately harm the long term health outcomes of the community despite their noble intentions.

From an egalitarian perspective, a truck has very limited advantages. While it does bring food into the food desert, this same process creates a different system for food distribution in the area, thereby reinforcing egalitarian injustice. Similar concerns will emerge when facing issues of hermeneutical injustice, as adding grocer trucks hardly changes the fact that the experience faced by groups in food deserts is fundamentally different and unjust. Green grocer trucks are not a common sight in areas with supermarkets. Finally, from a capabilities perspective, while the grocer trucks do expand coverage somewhat, accessibility and timing for the trucks would still likely be an issue. While they might protect some people's capabilities, many would be unable to

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<sup>105</sup> "Impact Stats." *Greater Pittsburgh Community Food Bank*, [www.pittsburghfoodbank.org/the-impact/impact-stats/](http://www.pittsburghfoodbank.org/the-impact/impact-stats/).

access the trucks, leaving their capabilities unprotected. However, at least nobody is being forced to access the trucks. Evidently, Green Grocer trucks carry both practical and ethical concerns. Therefore, an empowered SNAP program, such as the one outlined below, seems to better align with the vision of the capabilities theory. While it might not deal directly with issues of food accessibility in an area, the increase in buying power and support would likely better support capabilities than periodic access to a grocer truck.

### 10.3 Final recommendation: SNAP Incentives

The final, and recommended solution we put forth in this proposal is an expansion of SNAP incentive programs in the Pittsburgh region. SNAP incentive programs encourage SNAP customers to spend their benefits at select locations, such as farmer's markets or partnered organizations, through offering financial bonuses. The Food Insecurity Nutrition Incentive (FINI) grant program allowed for the conception of the SNAP Market Match program--one example of an initiative that effectively further stretches money spent food benefits for those struggling to afford food. The SNAP Market Match program may be implemented through a various number of strategies; for instance, one method may be to provide SNAP customers with one Market Match dollar or EBT Tokens toward a SNAP-eligible purchase for every dollar of SNAP benefits spent at the market. Or, other cash incentives may include coupons towards their next purchase. This incentive could be authorized towards nonprofit organizations, local and state government entities, or any SNAP retailer.

Secondly, an additional worthwhile incentive initiative is the Summer EBT Program, aimed specifically at children in food deserts who are evidently susceptible to the negative health consequences of food insecurity. Through a Summer EBT Program, children can receive a dollar amount through Pittsburgh Public Schools to purchase food over the summer. This is especially

crucial to be offered through the summer months outside of the academic year, when children cannot utilize the lunch programs offered in public schools.

Thirdly, Western PA's "Food Bucks" program is a current SNAP incentive program that could be expanded to benefit Homewood and the Hill District. Food Bucks are currently offered in forty retail settings across the region, partnered with local organizations and businesses.

According to the Food Trust, there are currently two partnerships within the Hill District region: Bedford Hill Apartments and the Centre Heldman Plaza (Green Grocer). Within the Homewood region, Food Bucks can be utilized at four locations: two farmers markets, Alma Illery Medical Center (Green Grocer), and the East End Food Co-op. Given that farmers markets remain closed through the winter months and the limited pickup times that may not be possible for working families, these regions are in evident need of greater investment in such initiatives.

This initiative enhances the customer's buying power, a step towards overcoming the affordability barrier many food insecure residents face. As these incentives can be used at farmer's markets, it also effectively supports local small business owners and growers in the region. The challenge inherent in an expansion of SNAP incentive lies in knowledge barriers: citizens may not be aware of the location of local farmers markets, realize that the markets accept food benefits, nor have sufficient knowledge as to how to properly prepare the produce offered. In order to overcome these obstacles, greater outreach and marketing could serve as a potential solution. A SNAP incentive initiative could also be coupled with, firstly, an outreach program to inform potential customers of their SNAP eligibility--many currently do not receive benefits for which they are qualified. This outreach program could also market the various SNAP-accepting locations to inform residents of how and where to use their benefits in the form of pamphlets or posters; in the case of the summer EBT program, it may be helpful to send

children home from school with advertising flyers. Finally, educating customers on the uses of their purchased produce through brochures or demos at the locations of service as a facet of this program could eliminate the knowledge barrier that may stand between effective use of the acquired food. These additional initiatives are not necessary, but would effectively complement an expansion of SNAP incentives in the Homewood and the Hill District by broadening the reach and traffic of the consumer base.

### 10.3.1 Lehigh Valley: SNAP Incentives Case Study

A successful, beneficial expansion of SNAP incentives has been demonstrated in the Greater Lehigh Valley region of Pennsylvania. In an effort to identify areas that lack access to fresh, local fruits and vegetables, the Nurture Nature Center submitted a project sponsored by the National Institute of Food and Agriculture that established a set of objectives to fill gaps in food insecurity in low-income neighborhoods. This example can be used as a model to demonstrate the benefits and disadvantages of implementing greater SNAP incentive programs in regions, barriers to be expected, and how a similar system in Pittsburgh may effectively overcome such challenges.

Objectives for this initiative included creating a recognizable “brand” for the program, expanding SNAP incentives to existing partners in underserved areas, increasing year-over-year benefit use across the county, identifying areas in most need of greater access outlets, and testing the implementation of incentives in existing Healthy Corner Stores. The project involved efforts to develop an outreach campaign, educate farmers pertaining to SNAP acceptance, recruit corner stores, and promote various locations to begin accepting SNAP benefits. The program was naturally faced with many challenges due to the COVID-19 pandemic, including financial costs to ensure a safe environment for staff and customers, forcing several outlets to close. Another

difficulty was the lack of consistent participation from corner store outlets--small independent grocery stores may prove to be more stable--in addition to struggles of sourcing local food products and recruiting staff that is knowledgeable of SNAP benefit usage. To accomplish future objectives and overcome such challenges, the initiative plans to perform the following: expand on marketing in-person and online, ensure proper COVID-19 safety precautions, and distribute informational brochures across partnership locations, and work closely with local growers to increase food production. Ultimately, the program continues to expand the amount of locations that accept benefits by partnering with more small grocers and corner stores, and increasing use of mobile markets.

In the following progress reports that measured effectiveness of the program, data showed a 7% decline in the Fresh Food Bucks transactions and an 11% decrease in overall SNAP incentives due to the aforementioned challenges in 2019, prior to the pandemic. However, after implementing new goals, expanding outreach, and taking practical health precautions, overall transactions increased by 15% in the first half of 2020 compared to 2019. Farmer's markets accounted for the highest amount of redeemed SNAP incentives across all outlets, with 40% of total redeemed incentives and a higher proportion of repeat customers than other outlets. Corner stores proved to be the second highest, with 37% of transactions. Mobile markets showed to mostly benefit the low-income senior demographic.<sup>106</sup> The results of this study demonstrate that by expanding the number of outlets that accept SNAP benefits--especially farmers markets and corner stores--more residents were served, with farmers markets and corner stores proving to

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<sup>106</sup> *Expanding SNAP Incentives across the Greater Lehigh Valley (PA) - NURTURE NATURE CENTER, US Department of Agriculture, 2020, [portal.nifa.usda.gov/web/crisprojectpages/1012562-expanding-snap-incentives-across-the-greater-lehigh-valley-pa.html](https://portal.nifa.usda.gov/web/crisprojectpages/1012562-expanding-snap-incentives-across-the-greater-lehigh-valley-pa.html).*

be most visited. However, modeling a similar program within Pittsburgh would evidently require a careful consideration of the successes and shortfalls encountered by this initiative's example.

### 10.3.2 Ethical Implications of SNAP Incentives

SNAP benefits, compared to the earlier potential recommendations, first do no harm. When balancing economic prosperity and short term food availability, for this alone, they should be lauded. Getting good, healthy food into the hands of impoverished people, in and of itself, is a good thing void of context. Getting that food into people's hands in a manner, like the SNAP benefit, that helps build up long term food sales and thereby build the workplaces and economic drivers that will eventually help rebuild a flailing economy is better. As people become wealthier, under a system reliant on food trucks to provide low cost healthy foods, the incentives to create more variety through a grocery store are in direct competition with the trucks. The same is true of a food rescue program. With a SNAP benefit program, the gradual shift upwards, the gradual economic expansion necessary for long term physical and emotional health within the district, is able to be done seamlessly as aid is being provided not at the level of procurement but rather at the level of consumption.

That said, SNAP too is flawed. If the government is to provide monetary assistance to its citizenry, any limitations placed on that assistance must be justified. By any of the ethical frameworks discussed, be it epistemic justice, rational egalitarianism or a capability analysis, limitations on the spending options of citizens cannot be considered the norm but must rather be defended. To build into our policy therefore upon a presumption that the state or local non-profits know best what impoverished members of society ought to spend their money on fails fundamentally to account for that sovereignty, and more than the existential injustice of lost autonomy, such limitations fail practically.



The true cost of food is not simply the ticket price, whether subsidized or not, of a meal when bought. It's also the opportunity cost of cooking it. It's the cost of labor time lost when in transit to and from the store. It's the cost of time lost with children, of an ailing grandparent providing childcare, it's the cost and potential risk of travelling alone in a place one might not feel totally comfortable. All of this and more are not accounted for even by generalized SNAP benefits, but when we build incentive programs on top of those, making even among foodstuff certain goods more or less affordable based on the decision processes of the state and not the individual actually living the experience of poverty and food insecurity, we take away foundational agency and divorce the system built from the system experienced. To defend such a program, one must answer the fundamental question as to why it is legitimate to presume a more proper comprehension of "correct" decision making than those actually experiencing their effect. Absent an answer, such incentives fundamentally fail to address the needs of people. Therefore, expanding SNAP incentives is not a solution to food deserts, nor is it a perfect option. There are numerous issues with it. However, it would still do something to alleviate current and direct harms, as per the three theories of justice outlined above.

Expanding SNAP incentives fits very well under Capabilities Theory, as outlined by Martha Nussbaum. Most notably, in so far as under Capabilities Theory the moral necessity is to ensure that there is the capability for these values. While it will fail to expand access to food for those who cannot effectively access a supermarket which can accept SNAP benefits, for those who can, increased SNAP incentives could make a big difference, especially as concerns issues of capabilities as outlined in Table 1.

More critically, SNAP, while it does restrict the use of these benefits to foodstuffs, is not designed as a program to force participation. Rather it allows those who qualify for it to have

access to the program. This perspective is well aligned with Capabilities Theory, as it aims to allow for the opportunity to have access to these resources without forcing it.

Expanding SNAP incentive programs will not do much as concerns Hermeneutical Injustice. While increasing access for those on the program would help alleviate harms, it would not change the inherent hermeneutical issues in the food system. While it is true that outreach programs would likely increase the number of those eligible for SNAP benefits who receive them, it would not be to such an extent that it would likely change the minority status of these individuals. This leaves a present hermeneutical issue, as this group would still have a seriously separate experience from the rest of society, leaving a similar state, albeit with a somewhat larger minority group, as before implementation.

Approaching SNAP incentives from an Egalitarian perspective does little to assist in the effort, as the program, while it does support those in need, has severely limited effects on the egalitarian issues with food deserts. While the program would arguably decrease the active oppression experienced by some, it also creates a problematic relationship between those who are receiving the aid and the organizations providing it. Moreover, it still draws a distinguishing line between the socio-economic classes. So while an expansion the program will likely increase equality, there are remaining egalitarian concerns beyond that.

While it is flawed in numerous ways that have been outlined above, the outlined SNAP plan is by far the best option of these three to implement in the city of Pittsburgh, when we consider through lenses of Capabilities, Hermeneutics, and Egalitarianism.

## 11. Implementation of SNAP Incentives Expansion

In order to increase SNAP incentives in Pittsburgh, some major steps would have to be taken. However, Pittsburgh could follow the Greater Lehigh Valley (GLV) model, although that is still an ongoing experiment, results should be released after 2021. Whether or not the GLV model is used, however, the challenge of actualizing an increase of SNAP incentives would be in coordinating between the various not-for-profit organizations, federal government, local authorities, and food sellers to enact any of the possible changes. If the city is truly committed to making this SNAP expansion happen, it should assign someone on staff to coordinate between these different groups.

The City would have to decide which of the many groups in working this area nationally, statewide, and locally it would want to partner with to achieve these ends. Given that SNAP is a national program, the city's power to create direct change locally is limited, but not nonexistent. With permission from the Department of Agriculture, Pittsburgh could follow the model of the Lehigh Valley, creating cohesive brand identity and expanding SNAP incentives. But the final decision would rest with the Department of Agriculture. Short of creating its own SNAP analogous program, which would be redundant and expensive, the City of Pittsburgh has to work collaboratively to this valuable end.

## 12. Conclusion

The issues of racial health disparities in Pittsburgh have at least in part been created by the intentional racist redlining of Pittsburgh districts, leading to the current food crisis. These problems have been exacerbated over the years, and as of now--despite well-intentioned policies on a national and local level--issues of food insecurity in both Homewood and the Hill District persist. This is problematic on numerous levels, as people are being treated unequally through no fault of their own and being left unable to access necessities. The lack of access to healthy food has also led to severe negative health outcomes in these areas, including increased risk of obesity, chronic cardiovascular diseases, cancer, and mental illness. While there is no direct, absolute solution to the existence of these food deserts, we can propose potential solutions to alleviate the harms created by them. After exploring the investment potential of Community Development Block Grant Funds, an increase in scope of Green Grocer Farmers Market Truck stops, and an expansion of SNAP Incentives, we ultimately recommend this final option--an expansion of SNAP incentives, such as Food Bucks and a Summer EBT Program, is the optimistic solution to alleviate the food desert crisis. This recommendation may be logistically difficult to implement for the City of Pittsburgh, but far from impossible, and will ultimately expand food access and extend purchasing power in these areas. SNAP Incentive expansion is an optimistic option, both ethically and practically, as it will expand capabilities with a minimum of harm. We hope and anticipate, through the aid of the City of Pittsburgh and legislative efforts, that future policies can work to close the gap in the disparaging racial health disparities the city currently faces.

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