ADDRESSING FOOD INSECURITY IN FIFEVILLE

Applied Policy Project

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Lastly, I would like to dedicate this project to the community of Fifeville and the millions of people faced with food insecurity each year. I am thankful that I was given the opportunity to help a group of individuals who have been directly impacted by my status as a University of Virginia student for the last five years.

Honor Statement

On my honor as I student, I have neither given nor received unauthorized aid on this assignment.

Mandatory Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

Key Acronyms and Definitions

ACRONYMS

Southern Economic Advancement Project (SEAP)

United States Department of Agriculture (USDA)

DEFINITIONS

Food Insecurity - Food insecurity can be defined as "the limited or uncertain availability of nutritionally adequate and safe foods" (USDA Economic Research Service, 2025).

Food Deserts – Low-income communities with a lack of access to a grocery store that sells healthy and affordable food (Nulph et al., 2011).

Food Apartheids – Coined by food justice activist Karen Washington, a term that draws attention to the inequities present our food system based on race, class, and geography (Walker, 2023). Washington's use of the term seeks to highlight the underlying discrimination tactics present in city planning and policymaking (Walker, 2023).

Gentrification – "The process of upgrading an older, usually low-income neighborhood, which typically results in higher costs of living and residential displacement" (Smith, 2023).

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Executive Summary

The City of Charlottesville's Fifeville neighborhood lacks a grocery store within walking distance for many residents (Tubbs, 2024). In 2019, the United States Department of Agriculture (USDA), recognized Fifeville as a food desert because it was a low-income census tract where a significant number of residents lived over a half mile from the nearest grocery store with cheap and affordable food (Food Access Research Atlas, 2025).

Food deserts exacerbate the effects of food insecurity—the limited access to affordable and healthy foods—and put residents' health and academic performance at risk (USDA, 2025). As the University of Virginia continues to expand its presence in the historic neighborhood of Fifeville (Barr, 2023), leading to an increase of white and high-earning households, it becomes more important to ensure longtime residents are given easy access to affordable foods as to not be pushed out of their community.

The purpose of this project is to provide the Fifeville neighborhood with a clear recommendation on how it can best address its residents' limited access to healthy foods. The neighborhood has identified a building on 501 Cherry Avenue that they would like to use to address the problem of limited access to healthy and affordable foods, however questions remain regarding the best use of the space. After conducting a review of the relevant literature on addressing food insecurity within food deserts, I identified the three following policy options:

1) Open a food cooperative in 501 Cherry Avenue.
2) Operate a neighborhood farmers market in 501 Cherry Avenue
3) Develop a community garden within the Fifeville community.

I then evaluated these policy options with the following five criteria:

1) Effectiveness
2) Cost
3) Cost Effectiveness
4) Equity
5) Feasibility

After I evaluated each policy option using the five criteria, I was left with the following key findings:

1) While a food cooperative would increase the daily servings of fruits and vegetables for over 50 percent of Fifeville's population

(Cummins et al., 2014), it would require Fifeville's steering committee to raise a large amount of grant and city funding.
2) A farmers market would increase daily servings of fruits and vegetables more than a food co-op for about 50 percent of Fifeville's population (Woodruff et al., 2016).
3) A community garden, while the cheapest option, has the lowest feasibility because it would not make the best use of the 501 Cherry Avenue space and has an added barrier of needing approval from UVA Health.

I recommend implementing a neighborhood farmers market in the building on 501 Cherry Avenue. This initiative promises noticeable increases in the daily consumption of fruits and vegetables for the largest number of Fifeville residents. In comparison to more traditional farmers markets, the indoor function of a farmers market in Fifeville will enable it to stay open year-round and sell fresh foods to residents more frequently. The Fifeville Steering Committee will have to raise more grant funding; however, committee members recognize that leasing or buying 501 Cherry Avenue from Woodard Properties would come with increased costs.

Residents of Fifeville are currently struggling to find a dependable means of accessing healthy foods. As a member of Fifeville's Steering Committee, SEAP needs to consider implementing a neighborhood farmers market in the 501 Cherry Avenue building. It will not only increase access to healthy foods for approximately 50 percent of Fifeville's residents but increase their consumption of fruits and vegetables as well. People in food deserts are at an increased risk of experiencing food insecurity, and a farmers market is Fifeville's best bet at reducing this risk for its residents and families.

Client Overview

SOUTHERN ECONOMIC ADVANCEMENT PROJECT

Founded by Stacey Abrams in 2019, the Southern Economic Advancement Project's (SEAP) mission is to partner with other organizations that think about and implement policy to "improve economic security, access to healthcare, and environmental justice for all southerners" (SEAP, 2025). One avenue through which SEAP tries to improve economic security is through the promotion of food security. SEAP works with partners across southern states to advocate for increasing SNAP benefits and passing state policies that will positively impact food-insecure households (SEAP, 2025).

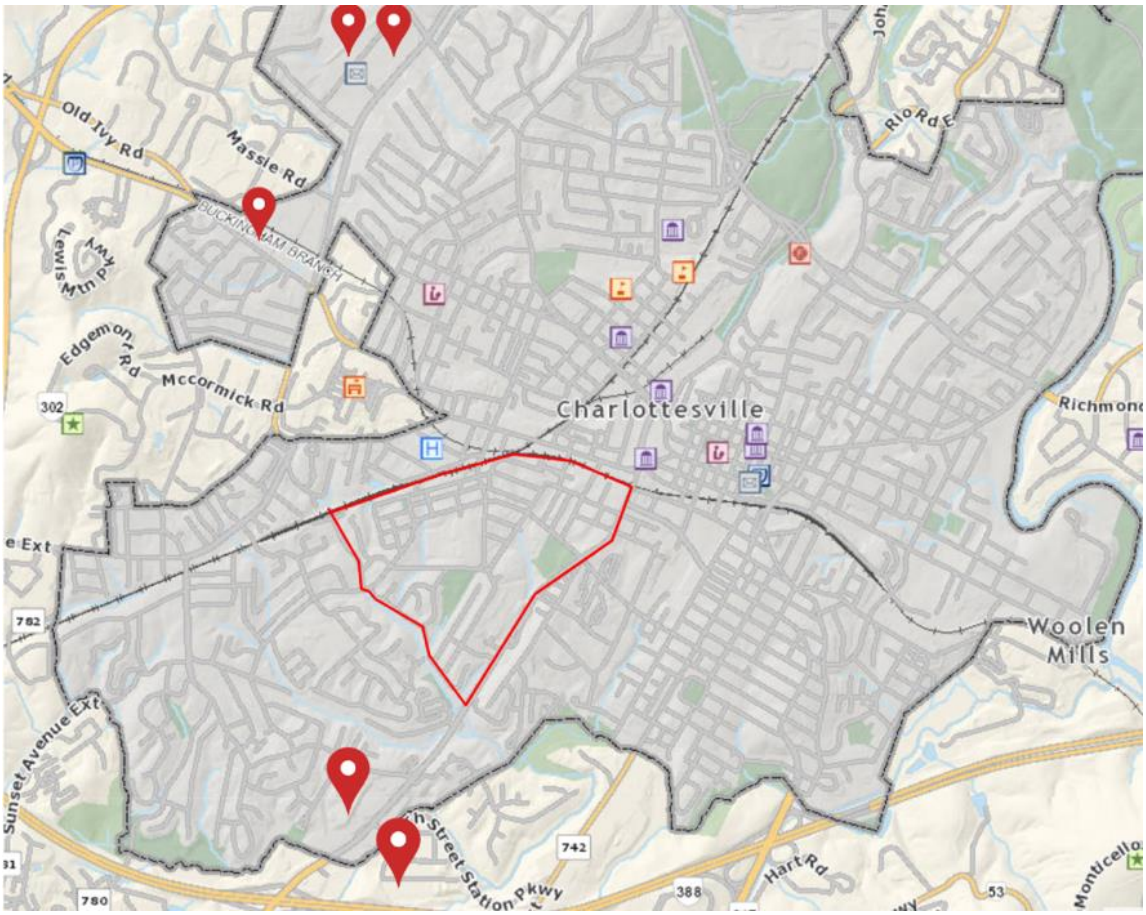
Problem Definition

INTRODUCTION

Within the City of Charlottesville, behind the University of Virginia's Medical Center, there exists a neighborhood that lacks access and availability to healthy foods. A large number of residents in the Fifeville neighborhood, a predominately black and low-income neighborhood, are more than a half mile away from a grocery store with affordable and healthy food options (Food Access Research Atlas, 2025). With UVA's continued expansion of its medical center (O'Hare & Mitchell, 2023), residents are growing more concerned that gentrification will price them out of their neighborhood (O'Hare, 2023).

PROBLEM STATEMENT

The Fifeville neighborhood lacks access to a reliable, healthy, and affordable supply of food. Currently, the Fifeville neighborhood is going through gentrification (Cameron & Kahrl, 2021). As a predominantly Black community, this gentrification has led to increased property taxes and rents (Cameron & Kahrl, 2021). **Long-time residents of Fifeville do not want to leave their neighborhoods, but the inability to afford basic amenities, such as healthy foods, could force them out of their homes**.



This image shows Fifeville in proximity to its nearest grocery stores. The red outline denotes Fifeville while the red location pins denote grocery stores.
The map was accessed using *Albermarle GIS Web*

BACKGROUND

Food Insecurity

Food insecurity was measured for the first time in 1995 when the USDA released its first annual survey of household food insecurity (Coleman-Jensen, 2015). From 1995-2006, people with very low food security were described as "food insecure with hunger" (USDA Economic Research Service [ERS], 2025). In 2006, the USDA replaced "food insecure with hunger" with "very low food security" to distinguish food insecurity from hunger (USDA ERS, 2025). Very low food security refers to experiencing food insecurity to such an extent that eating patterns are disrupted and food intake is reduced because a household cannot afford to purchase enough food (USDA ERS, 2025).

Before policymakers thought about food insecurity, they focused their attention on hunger. Hunger first gained attention from policymakers during the 1930s when the Great Depression drove 25 percent of the workforce to unemployment (Johns Hopkins Center for A Livable Future, n.d.). Because Americans could now afford less food, US farmers were producing more crops than they could sell for a profit (Johns Hopkins Center for A Livable Future, n.d.). To attempt to resolve both hunger and overproduction, Congress enacted the first farm bill in 1933 (Kurtz, 2023). Among other reforms, the 1933 Farm Bill paid farmers to cut back on their production and bought surplus agricultural goods from farmers to give to Americans facing hunger (Kurtz, 2023).

The passage of the 1933 Farm Bill marked a move from the privatization of hunger relief to federally backed hunger relief, inspiring Congress to take further action to reduce hunger (Johns Hopkins Center for A Livable Future, n.d.). In 1946, Congress passed the National School Lunch Program (NSLP) (Johns Hopkins Center for A Livable Future, n.d.). The NSLP is a federally assisted meal program that provides nutritional, low cost or free lunches to children in public schools, nonprofit private schools, and residential child care institutions (USDA Food and Nutrition Service, 2017). In 1946, approximately 7.1 million children participated in the NSLP (USDA Food and Nutrition Service, 2017). In 2016, approximately 30.1 million children participated in the NSLP (USDA Food and Nutrition Service, 2017). The emergence of the NSLP in 1946 appears to be the first time the federal government directly addressed children experiencing hunger in the US.

Since 1933, Congress has passed 18 farm bills. The Farm Bill, which is maintained and drafted by the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry (National Sustainable Agriculture Coalition, 2025), authorizes the USDA to implement certain programs. Title 4 of the 2018 Farm Bill authorizes the USDA to implement nutrition programs such as the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Program for Women, Children, and Infants (WIC) (National Sustainable Agriculture Coalition, 2025). SNAP provides low-income families with food benefits that will supplement their grocery budget (USDA, n.d.). WIC provides states with federal grants so that they can supplement food, healthcare referrals, and nutrition education to low-income, breastfeeding, and non-breastfeeding postpartum women, as well as infants and children younger than the age of five (USDA, 2022).

Vulnerable Groups

Households containing families of color are disproportionately affected by food insecurity. Across the United States, 22 percent of Black people were labeled as food insecure in 2023 (Feeding America, 2025). According to the USDA, more than 9 million Black people in the US lack access to enough food to promote healthy and active lives (Rabbitt et al., 2024). Causes of food insecurity in Black communities include racism and discrimination, low wages and unemployment, and food deserts (Feeding America, 2025).

Children are one of the most vulnerable groups in terms of food insecurity. Children need a nutrient-dense diet to promote their health and well-being (Mayo Clinic, 2022). Food insecurity can negatively affect a child's development and academic performance (Feeding America, 2025). In terms of development, of children between the ages of 4 to 36 months old, children in food-insecure households are two-thirds more likely to experience developmental risk than children in food-secure households (Rose-Jacobs et al., 2008). In terms of academic performance, researchers have found that food-insecure, school-aged children score significantly lower on reading and math tests than children who are food secure (Feed the Children, 2023).

Food Deserts

Food deserts are areas where people have limited access to a variety of healthy foods (Caporuscio, 2024). In 2019, the USDA's Food Access Research Atlas categorized Fifeville as a food desert because it was a low-income area with a large share of residents over one-half mile away from the nearest grocery store (Food Access Research Atlas, 2025). While living in a food desert is not a cause of food insecurity, it can worsen the effects of food insecurity (Anderson, 2023). In 2020, 54 million people were food insecure, with 23.5 million of these individuals living in food deserts—a rate of approximately 44 percent (Ney, 2021). Food deserts also have greater effects on those who are low-income and/or lack reliable transportation (Anderson, 2023). Those who are unable to travel to the grocery store typically turn to nearby gas stations or small markets that sell lower quality and less healthy foods (Anderson, 2023). This leaves people living in food deserts more susceptible to facing negative consequences of food insecurity such as decreased health outcomes (Anderson, 2023).

History of Fifeville

Fifeville is one of Charlottesville's oldest and most dense neighborhoods (O'Hare & Mitchell, 2023). In 1822, James Dinsmore built the Oak Lawn manor home along what is now Cherry Avenue (O'Hare & Mitchell, 2023). Throughout the 1800s, smaller homes were built in the surrounding area by individuals who worked at Oak Lawn (O'Hare & Mitchell, 2023). In the 1880s, one of the farms built around Oak Lawn, owned by the Fife family, was divided and sold to Black and White families, resulting in a predominately Black neighborhood to the East (O'Hare & Mitchell, 2023). In the 1920s, Fifeville experienced large development, and it was not until recent years that the neighborhood was heavily developed again. (O'Hare & Mitchell, 2023).

While Fifeville has been, and continues to be, a predominately Black neighborhood, the University of Virginia's expansion of its medical center, and its recent purchase of the 5-acre Oak Lawn Property, has encouraged more white, higher-earning individuals to move into Fifeville (O'Hare & Mitchell, 2023). This shift in demographics has cause the median sales price of houses to significantly increase. Houses that cost around 60,000 dollars in 1993 could now be worth upwards of 600,000 dollars (O'Hare & Mitchell, 2023). The neighborhood is vastly different from what it was 30 years ago.

Despite the heavy development that has occurred within Fifeville in recent years, the neighborhood has struggled to provide residents with reliable access to healthy foods. In 2002, the neighborhoods sole grocery store—Estes IGA Foodliner—closed its doors (O'Hare, 2023). Not only did it serve as the site of grocery shopping for most residents, but it also served as a source of income for residents (O'Hare,2023). Estes IGA Foodliner was replaced by Kim's Market, which closed around 2019 (O'Hare, 2023). While it is unclear why either location closed, high costs associated with buying the land left the space unoccupied until Woodard Properties bought the space for $3.5 million (O'Hare, 2023). Since Woodard Properties bought the building in 2022, it has remained empty (O'Hare, 2023).

The space that held both Kim's Market and Estes IGA Foodliner.
Image obtained from Charlottesville Tomorrow (O'Hare, 2023).

POTENTIAL CONSEQUENCES

Experiencing food insecurity can negatively influence one's health and academic performance.

Health

An American Heart Association study found that food insecurity was linked to cardiovascular disease and higher mortality rates (Sun et al., 2020).

Food insecurity has also been linked to increased risk of obesity. In a 12-state study found that food insecure adults were 32 percent more likely to be obese than food secure adults (Pan et al., 2012).

Facing more health concerns due to food insecurity then leads to economic consequences as individuals have to expel a large expenditure of financial resources to pay for their medical care

(Mollenkamp, 2025). Individuals in food insecure households spend approximately 45 percent more on medical care annually then individuals in food secure households (Carlson and Llobrera, 2022).

Academic Performance

As UVA's connection to Fifeville grows, so too does the number of students live in the Fifeville neighborhood. College students are not exempt from having to drive far to access a grocery store, thus feeling the effects of living in a food desert on food availability. Food insecurity impacts college-aged students too.

A study of food insecurity's impact on the academic performance of college students found that students experiencing food insecurity were 3.5 times more likely to drop out of college than their food secure peers (Phillips et al., 2018). These students were also more likely to drop out of college in favor for wage earning jobs that would enable them to provide for themselves (Phillips et al., 2018). When faced with food insecurity, students must make a difficult decision between being able to afford food or being able to afford higher education.

Reviewing the Literature

As food insecurity is defined as the limited access to healthy and affordable foods, I have decided to split the literature into two categories: 1) increasing access to healthy foods and 2) increasing the consumption of healthy foods. While increased access is important to reducing food insecurity, it only resolves part of the problem. Residents in Fifeville to consume the food they eat to reduce the increased risk of health consequences and weakened academic performance that are associated with facing food insecurity.

INCREASING ACCESS TO HEALTHY FOODS

A key component of food insecurity is peoples' lack of access to healthy foods. US Hunger has collected over 100,000 food insecurity surveys since 2020. Within one subset of the surveys, 42.6 percent of respondents reported having no means of transportation to go to grocery stores with healthy food options (U.S. Hunger, 2022). To evaluate the perceptions of access to food in cities, a study used the 2014 National Survey of Community-Based Policy and Environmental Supports for Healthy and Active Living to collect data on 2,2029 municipalities with 1,000 or more persons (Dumas et al., 2021). The researchers excluded 10 municipalities from their study, leaving a sample size of 2,019 municipalities (Dumas et al., 2021). When examining the prevalence of municipal-level transportation policies that consider food access, these researchers found that, of the approximately 1,338 municipalities that had public transportation, 33.8 percent considered food access in their transportation planning (Dumas et al., 2021). This number is smaller in the South, with only 32.2 percent of all municipalities considering food access in their transportation planning (Dumas et al., 2021). In conclusion, this study exhibits a lack of consideration for the role transportation can play in increasing access to healthy foods.

To support the argument that public transportation plays a key role in reducing food insecurity, studies have examined the effect of public transportation accessibility on food insecurity. Using the Current Population Survey Food and Supplement and the National Transit Data between 2006 and 2009, one study found that, as access to public

transportation for food insecure households increased, household food insecurity decreased by 1.6 percentage points (Baek, 2016).

INCREASING CONSUMPTION OF HEALTHY FOODS

While increasing access to healthy foods is critical to reducing food insecurity, so is increasing individuals' consumption of healthy foods. Many initiatives have been adopted across the US to reduce food insecurity in food deserts, including food cooperatives, community gardens, food banks, and farmers markets. In this section, I will evaluate the literature surrounding some of these initiatives.

Food Cooperatives

Also known as grocery cooperatives, food cooperatives are food markets or grocery stores owned and operated by a community (Robbins, 2022). Studies have found mixed results on the effectiveness of food cooperatives to increase the consumption of healthy foods in food deserts. One found that, while food cooperatives increased access to healthy foods, increases in the consumption of fruits and vegetables were not statistically significant (Cummins et al., 2014). The researchers evaluated the impact of the Pennsylvania Food Financing Initiative on a food desert in Philadelphia (Cummins et al., 2014). The initiative sought to improve food accessibility and health through the implementation of a neighborhood grocery store. While awareness of food access increased, the study did not find improvements in the purchasing of healthier foods nor health outcomes (Cummins et al., 2014). After comparing fruit and vegetable intake among residents before and after the implementation of the grocery store, the researchers found a small increase in daily fruit and vegetable intake between .23 and .28 servings (Cummins et al., 2014). While food cooperatives might increase daily fruit and vegetable intake, it has yet to be seen if this increase is significant enough to bring meaningful changes to the consumption of healthy foods in food deserts.

Community Gardens

Studies that have examined the effect of community gardens on food insecurity have found that community gardens increase the consumption of fruits and vegetables among participants (Algert et al., 2016; Carney et al., 2012; Litt et al., 2011). Two studies compared

the effectiveness of home gardens versus community gardens (Algert et al., 2016; Litt et al., 2011). One of these studies evaluated the effect of community gardens in 58 different block groups in Denver, CO (Litt et al., 2011). Compared to home gardeners, the researchers found that more community gardeners met national recommendations to eat 5 vegetables a day than both home gardeners and nongardeners (Litt et al., 2011). 56 percent of community gardeners reached this national recommendation compared to 37 percent of home gardeners and 25 percent of nongardeners (Litt et al., 2011). Community gardens show potential in terms of increasing the consumption of fruits and vegetables within neighborhoods in urban cities.

Farmers Markets

Studies of farmers market initiatives have found that such markets increase participants' consumption of fruits and vegetables (Ruelas et al., 2012; Woodruff et al., 2016). In one study, evaluates the effects of the Fresh Food Market Program—a fruit and vegetable market—in Cobb County, Georgia (Woodruff et al., 2016). Between 2010 and 2014, over 25 percent of residents, and over 40 percent of children were living below the federal poverty line (Woodruff, 2016). When surveyed, 69 percent of returning customers noted that the market made shopping for fruits and vegetables easier (Woodruff et al., 2016). 79 percent of these customers said their fruits and vegetables were less expensive when bought from the farmers market (Woodruff et al., 2016). Relevant to the topic of consumption, 55 percent and 65 percent of customers noticed an increase in their consumption of fruits and vegetables, respectively (Woodruff et al., 2016). Farmers markets are one potential strategy to significantly increase the consumption of fruits and vegetables among low-income individuals.

Conclusion

Because there is already space within which Fifeville can implement a recommendation, I believe the most effective options will be those that focus on increasing residents' consumption of healthy foods. Therefore, I will evaluate food cooperatives, farmers markets, and community gardens as my three options.

Options for Fifeville

As a member of Fifeville's Steering Committee, SEAP wants to provide the Fifeville neighborhood with a solution that best benefits the community. In this section, I will outline the three options I identified in my review of existing literature: a food cooperative, a neighborhood farmers market, and a community garden.

There are two relevant similarities between all three policy options. These include:

1. All three would be funded through grants and funding from the City of Charlottesville
2. A building already exists on the Cherry Avenue land; however, it would need to be renovated to meet the needs of the option.

OPTION ONE: OPENING A FOOD CO-OP

The space on Cherry Avenue would be transformed into a food cooperative (food co-op). A food co-op is a food market or grocery store owned and operated by the community (Robbins, 2022). The Fifeville Neighborhood Association (FNA) would own the building, being responsible for setting prices of goods and operating the store, but employ residents to work in the co-op. The food co-op would be open to all people, not just residents in the Fifeville neighborhood.

Fifeville would source these healthy foods through local farmers and vendors. Food co-ops have been utilized by communities to give local farmers and vendors more business (Sutter, 2018). Because many of the foods sold in the Fifeville co-op would be sourced locally, the produce and protein options given to shoppers will be higher-quality and healthier (Sutter, 2018). While Fifeville's food co-op would invite local farmers and vendors to bring their goods into the area, food co-ops also include foods from recognizable brands, like Coca-Cola, Kellogg, etc. In 2012, The Healthy Corner Store Initiative (HCSI) took place in 400 corner stores in Philadelphia (Cavanaugh et al., 2014). A nationally recognized model, the HSCI seeks to increase access to and availability of healthy foods in urban areas (Cavanaugh et al., 2014). The HSCI gave enrolled stores 100 dollars in exchange for them adding two healthy food products into their inventory (Cavanaugh et al., 2014). These products were chosen from seven healthy food categories (Cavanaugh et al., 2014). The categories included: fresh fruits and vegetables, canned/frozen fruits and vegetables, low-fat dairy, lean meats, whole grains, healthy snacks, and healthy

beverages (Cavanaugh et al., 2014). Fifeville's food co-op does not need to include strictly healthy foods, however it should target foods from these seven categories.

To fund the Fifeville food co-op through grants, Fifeville should consider national initiatives such as the Healthy Food Financing Initiative (HFFI). The USDA, influenced by the Pennsylvania Food Financing Initiative, created HFFI in 2014 (HFFI) (Cummins et al., 2014). The Pennsylvania Food Financing Initiative's food co-op program was tested in two neighborhoods of a low-income, predominately Black neighborhood (Cummins et al., 2014). The Pennsylvania Food Financing Initiative provides grants and loans to offset infrastructure and has aided in the development and expansion of 88 food retail projects (Cummins et al., 2014). Similarly, the HFFI provides financial assistance to eligible fresh, healthy food retailers to overcome the high costs and barriers to entry in underserved communities (Healthy Food Financing Initiative, n.d.).

OPTION TWO: RUNNING A NEIGHBORHOOD FARMERS MARKET

The space on Cherry Avenue would be used for an indoor farmers market. Farmers markets are public and recurring assemblies of farmers selling the food that they produced directly to consumers (Farmers Market Coalition, 2025). Unlike a food co-op, prices at the farmers market would be set by solely set by vendors. As a low-income neighborhood, Fifeville's residents need access to affordable foods. Fifeville could lessen the burden of the cost of healthy foods by running a farmers market that accepts SNAP benefits (Ruelas et al., 2012). Typically, farmers markets are found outdoors, in parking lots or parks (Ruelas et al., 2012). This is true of other farmers markets in the Charlottesville area, however the building on Cherry Avenue provides the Fifeville neighborhood with a unique opportunity to operate an indoor farmers market. This also provides stability for the market, as the space would be safe from outdoor weather conditions, such as rain, snow, or wind.

Farmers markets provide a farm-to-table experience for consumers. Unlike grocery stores and public markets, farmers markets without permanent structures are one-day markets that provide consumers with fresh fruits and vegetables (Ruelas et al., 2012). This highlights another benefit of a permanent structure for a neighborhood farmers market in Fifeville. Fifeville would run the market multiple times a

week, providing residents with fresh, healthy foods over an entire weekend—Friday through Sunday.

Finally, a farmers market enables Fifeville to distribute a diverse range of products to its residents. A study of farmers markets in 24 Los Angeles neighborhoods did an audit of the goods sold during farmers markets (Ruelas et al., 2012). Farmers markets in Los Angeles mostly had vendors selling fruits and vegetables, however there were vendors selling eggs, dairy, meat, cooked and prepared meals, and non-food products such as art (Ruelas et al., 2012). The Fifeville market would emphasize the distribution of healthy foods, such as fruits and vegetables, but would also include vendors that targeted other healthy food groups.

OPTION THREE: GROWING A COMMUNITY GARDEN

Fifeville would grow a community garden within the Fifeville community. In contrast to a food co-op and a farmers market, a community garden would need to be implemented outdoors, as the current building is not fit for a garden. Community gardens are sections of land where collective gardening of fruits and vegetables takes place (Egli et al., 2016). This type of gardening places a large emphasis on increasing self-consumption of fruits and vegetables (Egli et al., 2016). A community garden would be a project that all residents, including entire families, can participate in and gain benefits from.

The community garden could provide work to residents of the community. In Baltimore, Maryland, the Duncan Street Miracle Garden is a community garden located in a food desert (Corrigan, 2011). A study of this community garden observed that there were 11 gardeners for 17 plots of land. Community gardens typically operate on large amounts of land; however, there is a potential opportunity for Fifeville to work with the University of Virginia to make a community garden plausible. When UVA bought the Oak Lawn property, a property of 5.2 acres (Spencer, 2023), they sought to gain feedback from Fifeville residents on how to repurpose the land (UVA Health, 2025). This community process will run through 2025 (UVA Health, 2025). Fifeville would suggest to UVA that the space be split between increasing healthcare opportunities and prioritizing the agricultural development of Fifeville.

A community garden in Fifeville would also be a site of learning. A study of the Harvest Fiesta project observed the role education played in a community garden project in a rural community in Oregon

(Carney et al., 2012). Families enrolled in the program shared and learned about nutrition and how to engage in physical exercise (Carney et al., 2012). As a result, the researchers observed community building (Carney et al., 2012). To encourage participation, Fifeville would incorporate gardening classes that teach about nutrition into their community gardening initiative. The Fifeville Neighborhood Association (FNA) might consider asking local farmers to introduce the basics of gardening and supply the neighborhood with seeds for the garden. If local farmers cannot supply the neighborhood with seeds, home development stores such as Lowes also sell seeds.

Evaluative Criteria

SEAP is committed to finding solutions that guarantee equitable access to healthy food for residents in the South (SEAP, 2025). Therefore, an intervention in the Fifeville neighborhood must be *effective* in making healthy food available to residents and be *equitable*. SEAP also aims to bring economic security into these Southern communities, meaning the solution must not bear great *costs* on the community to implement, nor should it be too expensive for residents to participate in (SEAP, 2025). Therefore, I will evaluate my three potential options with the following criteria: effectiveness, cost, cost effectiveness, equity, and feasibility.

EFFECTIVENESS

To meet SEAP's goal to end food insecurity throughout communities in the South, a solution implemented in Fifeville must provide residents with a stable and adequate supply of healthy food. Moreover, a solution will not only increase access to healthy foods but also increase residents' consumption of healthy foods.

To evaluate the effectiveness of each option, I will use previously conducted studies to estimate the increase in consumption and the percentage of the population that uptakes the proposed solution.

Consumption

Consumption will be measured using daily servings of fruits and vegetables.

Uptake

Uptake will be measured as the percent of Fifeville's population that is predicted to utilize each option.

COSTS

Because Fifeville is a historically low-income neighborhood (O'Hare, 2024), the proposed solution should not place a big financial burden on its residents. However, Fifeville plans to pay for the option I

recommend using grants and funding from the City of Charlottesville. Therefore, costs will be measured as the startup costs (in USD) Fifeville would need to raise, in both grant and city funding, to initiate their project. How I calculate the costs is explained in the appendix of this project.

COST EFFECTIVENESS

By measuring cost-effectiveness, I am evaluating whether the cost of implementing an option is worth the increase in consumption of fruits and vegetables it is estimated to cause. To calculate cost effectiveness, I first multiply the total Fifeville population by the percent of the population that is anticipated to engage with the option. I then multiply the newly calculated value by the expected increase in consumption provided by each option. Finally, I divide the estimated costs by the second calculated value to estimate the cost per daily increase in fruits and vegetables for the percent of the population that would use the option.

EQUITY

A proposed policy option will be considered equitable if it manages to provide Black residents with a source of employment and if it improves outcomes of food accessibility and consumption for non-white individuals. I will analyze existing survey data to estimate how employment rates among Black adults will change for each policy option. I will utilize experimental data to evaluate how each policy option increases access to, and consumption of, healthy foods for non-White populations in comparison to White populations. It would be beneficial if the data spoke to the ability to improve the desired outcomes in predominantly Black neighborhoods and low-income neighborhoods, however some data only compare non-White outcomes to White outcomes. Thus, I will measure equity on a high, medium, and low scale, scoring each policy option by how well they target low-income and non-White residents.

FEASIBILITY

Finally, the Fifeville neighborhood must be able to handle any proposed solution. I will thus be measuring both administrative and political feasibility. When determining administrative feasibility, I will

consider the space available in the neighborhood to implement a solution, the resources and labor the Fifeville Neighborhood Association has in its possession, and how quickly the community will need a solution to be implemented. A proposed option with high feasibility would be easy to implement within the building on 501 Cherry Avenue and would be well received by residents. An option with medium feasibility will possess one of these characteristics, and an option with low feasibility will possess neither of these characteristics.

Evaluating the Options

Now that I have laid out my three options and the five criteria by which I evaluate them, the following section will detail my evaluation of the policy options.

OPTION ONE: OPENING A FOOD CO-OP

A food co-op, owned and operated by the Fifeville community, would be opened in the space on Cherry Avenue. To stock the food co-op, there will need to be relationships built with local vendors and farmers who can produce fresh produce and healthy meals.

Effectiveness

To generate an estimate of the effectiveness of establishing a food co-op, I utilize Cummins et al.'s 2014 study on the effects of a neighborhood grocery store in a community in Philadelphia, Pennsylvania that is characterized as a food desert. The community was low-income and underserved.

Consumption: Fruit and vegetable intake increased by about 0.23 to 0.28 daily servings among those who shopped at the new grocery store (Cummins et al., 2014).

Uptake: 51.4 percent of residents in the neighborhood used the new supermarket for any kind of food shopping (Cummins et al., 2014).

Cost

Per the Food Co-op Initiative, the average cost of leasing a space the size of a small co-op, like the building on Cherry Avenue, was 300 dollars per sq foot in 2015 (Reid, 2017). In today's dollars, this would be equivalent to $399.47 (Webster, 2025). The building on Cherry Avenue is 7000 feet squared. Therefore, the price of opening a new food co-op today would equal $2,796,290. In addition, the food-coop will need to pay for refrigerators and freezers and their installation, shelving, interior design, and utilities. This produces a final cost of $3,274,990. **Appendix A**

Cost Effectiveness

To calculate cost effectiveness, I first multiply the 2021 population of Fifeville by the rate of residents in the Cummins et al.'s study that shopped at the supermarket. The population of Fifeville in 2021 was 4,357 individuals (O'Hare & Mitchell, 2023) and 51.4 percent of the population is estimated to shop at the store (Cummins et al., 2014). I then multiply this new value of 2239.498 by the expected increase in daily servings. Finally, I divide the estimated cost of $3,274,990 by the estimated increase in servings for the portion of the population that will use the supermarket. This gives me a cost effectiveness range of $5222.77 to $6358.16 per increase in daily serving of fruits and vegetables.

Equity

To evaluate the equity associated with establishing a food co-op, I continue to analyze the results from Cummins et al.'s 2014 study of food deserts in Philadelphia. These neighborhoods were predominately Black communities with the total number of participants that were Black accounting for approximately 84% of those whose fruit and vegetable intake were measured (Cummins et al., 2014). Thus, because the overall increase in intake increased by less than .30 servings, it appears that food co-ops have little to no effects on Black populations consumption of more healthy foods. Although it might increase their access to healthy foods. However, a food co-op can be equipped to provide those on food assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), with free food or foods at a cheaper price. This enables easier access to healthy foods for those who are low-income residents. For these reasons, establishing a food co-op gets a medium score for equity.

Feasibility

In terms of feasibility, given the building that the 501 Cherry Avenue building has previously served the purpose of being a grocer, a food co-op will be easy to implement in the space. In terms of buy-in from residents, the Steering Committee tested the feasibility of opening a market. Residents have often expressed that they would like a grocery store to fill the space on 501 Cherry Avenue (O'Hare, 2023). Additionally, as found in the Cummins et al. (2014) study, over 50 percent of Fifeville residents would participate in a food co-op, further defending the argument that residents would be support this option.

The large support displayed by residents and the buildings previous use as a small market suggest that a food co-op has high feasibility.

OPTION TWO: RUNNING A NEIGHBORHOOD FARMERS MARKET

An indoor farmers market would be operated in the building on Cherry Avenue. The farmer's market would be similar to the food co-op, however local farmers and vendors would be selling their goods directly to consumers.

Effectiveness

To generate an estimate of the effectiveness of a neighborhood farmers market, I utilize estimates from Jilcott Pitts et al.'s (2015) study of farmers markets in urban areas in North Carolina. They evaluated both areas with high poverty and low poverty (Jillcott Pitts et al., 2015). The study compared neighborhoods with varying Healthy Outlet Zoning scores—the accessibility to and quality of six different food outlet subsections in a county or municipality zoning ordinance—to estimate the effect of farmers market shopping on fruit and vegetable intake (Jillcott Pitts et al., 2015).

Consumption: The researchers found that, regardless of a county or municipality's healthy Outlet Zoning Scores, residents in communities with access to a farmers market, who shopped at farmers markets, consumed .80 more daily servings of fruit and vegetables than those who never shopped at farmers markets (Jillcott Pitts et al., 2015).

Uptake: To measure uptake, I utilize Woodruff et al.'s (2016) study of the Farm Fresh Market (FFM) program, which placed markets in parking lots around Cobb County, Georgia. This study observed that those who shopped at the FFM at least once per week were more likely to report increases in fruit and vegetable consumption than those who shopped at the market less than weekly (Woodruff et al., 2016). Therefore, I estimate the uptake rate of a farmers market in Fifeville as the likelihood for residents to shop at the market at least once per week. The FFM study observed that 49 percent of the participants shopped at the market at least once weekly (Woodruff et al., 20

Cost

Like a food co-op, the most significant costs associated with running a farmers market is the actual space the market is held at. Because the Fifeville Neighborhood association has the ability to occupy an indoor space on Cherry Avenue, the estimated costs would be the $2,796,290 required for leasing the space. There are then smaller costs associated with starting a farmers market such as, interior design, tables, and chairs. This totals to a cost of $2,871,810. **Appendix A**

Cost Effectiveness

To measure the cost effectiveness associated with operating a neighborhood farmers market, I first multiply the population size of Fifeville by percent of residents expected to participate in a farmers market. This gets me a value of 2134.93. I then multiply this new value by the expected increase in daily servings of fruits and vegetables associated with shopping at a farmers market of 0.80. Finally, I divide this value by the total cost associated with operating a farmers market of $2,871,810. This results in a cost effectiveness of $1,681.44 per increased daily serving of fruits and vegetables.

Equity

To evaluate the equity of farmers markets, I examine the findings in Lowery et al.'s 2016 study on the impacts of farmers markets in 24 different Los Angeles neighborhoods. This evaluated whether the offerings at each of the markets improved food security among low-income, non-white communities. The researchers found that fewer fresh fruits and vegetables were found at farmers markets in predominately non-White communities (Lowery et al., 2016). It was also found that low-income communities have significantly smaller booths (Lowery et al., 2016). In conclusion, the findings suggest that farmers markets exacerbate the disparities between rich and poor, and white and non-White, communities in access to healthy foods (Lowery et al., 2016). However, like at a food co-op, Virginia allows farmers market to accept the use of food stamps or vouchers (Virginia Department of Social Services, 2025). This will reduce the costs associated with purchasing food from vendors. Therefore, a farmers market scores medium on equity.

Feasibility

In terms of administrative feasibility, the study conducted by Woodruff et al (2016) suggests that approximately half of Fifeville will participate in a farmers market. This suggests that Fifeville residents would approve of the implementation of a farmers market. Because 501 Cherry Avenue was a former grocery store, it has been proven that the building is equipped for the buying, selling, and storage of fresh foods. Finally, given the presence of other farmers markets in Charlottesville, such as the market at IX park, there are plenty of vendors in the area. There should be few barriers to filling the market space with many vendors and farmers. Because residents would participate of a farmers market, and the space could meet the needs of local farmers and vendors, a farmers market has high feasibility.

OPTION THREE: GROW A COMMUNITY GARDEN

A community garden would be grown in Fifeville, suggesting to UVA that the property on Oak Lawn be partially devoted to constructing several plots of land to house the garden and encourage residents to help operate the garden.

Effectiveness

To generate an estimate of the effectiveness of a community garden, I utilize estimates from Litt et al.'s (2011) study of community garden participation on fruit and vegetable intake in Denver, Colorado. The residents observed in this study were adults living in urban areas who were split into groups of community gardeners, home gardeners, and nongardeners (Litt et al., 2011).

Consumption: Compared to home gardeners and nongardeners, the study found that fruit and vegetable consumption increased more for community gardeners, whose consumption increased almost one full serving per day (Litt et al., 2011).

Uptake: Only nine percent of the survey's respondents participated in community gardening (Litt et al. 2011).

Cost

I expect the costs of starting a community garden to range from $12,000 to $50,000 (Truic, n.d.). These costs are predicted using

Truic's business idea guide. These costs include land preparation, installing infrastructure for irrigation, purchasing tools and equipment, developing garden plots, and administrative costs such as licensing and obtaining insurance (Truic, n.d.). These costs are subject to change given the size of the garden and how many people it will be serving.

Cost Effectiveness

Using the population of the Fifeville neighborhood of 4,357 residents, I multiple the approximate increase in serving size of 1 for nine percent of the total number of residents. This provides an overall serving size per day of 392.13 servings. I then divide the cost range of $12,000 to $50,000 by 392.13. This provides a cost effectiveness of $30.60 to $127.51 per increase in daily serving of fruits and vegetables.

Equity

To evaluate the equity associated with growing a community garden, I examine the findings of Burt et al.'s (2021) mixed studies review of the outcomes of community garden participation. Their study focused on interventions with adults as to not conflate their findings with school programming. The study found that community garden participation may improve community connectedness, decreasing food insecurity among people of color (Burt et al., 2021). Beyond the development of social networks, community gardens might create a space for people to organize themselves, bolstering their connection to their own identity (Burt et al., 2021). It should be noted, however, that there is room to grow on evaluating how non-white, low-income individuals are impacted by community garden participation, limiting a full analysis of how equitable community gardens are. For that reason, community gardens get a score of medium on equity.

Feasibility

In terms of administrative feasibility, a community garden would require the Fifeville neighborhood to dedicate a large amount of time beyond starting the garden. The study conducted by Litt et al. (2011) found that only nine percent of residents would participate in a community garden. This suggests that residents would not engage with a community garden. Additionally, given the characteristics of the space on Cherry Avenue that make it ineligible as a space for the garden, it might be difficult for the community to find ample space to

place the garden. Fifeville might consider asking UVA Health to split the property on Oak Lawn, however the UVA medical center wants to fill Oak Lawn a project that meets UVA's needs as well. Because residents are unlikely to participate in a community garden project, and 501 Cherry Avenue is not constructed to sustain a garden, a community garden receives a low feasibility score.

OUTCOMES MATRIX

	Effectiveness		Cost	Cost Effectiveness	Equity	Feasibility
Food Co-op	.23 to .28 more servings/day	51.4% of residents will participate	$3,274,990	$5222.77 to $6358.16 /increase in daily serving	Medium	High
Farmers Market	.80 servings/day	49% of residents will participate	$2,871,810	$1,681.44 /increase in daily serving	Medium	High
Community Garden	~1 Serving/day	9% of residents will participate	$12,000 - $50,000	$30.60 to $127.51 /increase in daily serving	Medium	Low

The above table shows strength of each option per piece of evaluative criteria using a green gradient. The darker the shade of green, the better the option scored for that criterion.

Recommendation

As highlighted in the above table, I suggest that a neighborhood farmers market be implemented in the Fifeville neighborhood because it is the most promising in terms of improving nutritional outcomes and food security amongst residents within the community. First, while less effective at increasing servings of fruits and vegetables than a community garden, a farmers market will significantly increase the daily fruit and vegetable intake among residents. When the comparing the cost of a farmers market to a food co-op, they will be relatively the same, however, because farmers markets are more effective, they are also more cost effective. While it is important to note the steep costs associated with starting a farmers market due to having to lease the building, the neighborhood sees potential for eventually buying the space from Woodard Properties. This is different from a community garden where tools, equipment, infrastructure, and crops would need to be purchased or replaced more than once.

The last notable component of a farmers market is its high feasibility. There are an ample number of Black vendors in and around Charlottesville that could participate in a farmers market with the proper licensing and food safety standards. As compared to the other policy options, a farmers market requires simpler renovations and less

equipment, making it the best option when compared alongside a food co-op and community garden. Additionally, where the farmers market would occur is already known in comparison to a community garden. Finally, the success of other farmers markets in the Charlottesville area leads me to believe that a farmers market in Fifeville would also experience success in its operation and attendance.

Implementation

While a neighborhood farmers market shows promise as a tool to increase the consumption of healthy foods among Fifeville residents, it is yet to be seen whether its supply of healthy foods will be stable enough to meet the full requirements for food security. Unlike a food co-op or a community garden, food from a farmers market would likely only be feasible to provide on the weekends. This would not solve the full problem experienced by residents of Fifeville. For example, families with young children would still need to travel farther than one mile to get groceries for school lunches or meals during the week.

The second issue with implementing a neighborhood farmers market is that it would require the FNA and the steering committee that SEAP is on to reevaluate the opinions of the residents living in Fifeville. Because many residents hoped for a corner grocery store or market, the introduction of a farmers market would likely disappoint some individuals. There would need to be a plan in place to approach potential negative remarks from resident of Fifeville.

STAKEHOLDERS

The residents of Fifeville are the first key stakeholder group involved in moving the farmers market forward. Residents in Fifeville must be willing to participate in a farmers market for an increase in access to healthy foods and an increase in the consumption of healthy foods to be seen within the neighborhood. An unwillingness for residents to engage with a farmers market would not reduce the risk of facing food insecurity that Fifeville residents are facing.

The steering committee is the first stakeholder involved in moving the farmers market forward. The committee is responsible for applying to grants, finding vendors, creating a budget for starting the farmers market, campaigning for the recommendation to the City of Charlottesville, and other tasks associated with getting the farmers market started. The steering committee acts as the main line of communication between Fifeville and the City of Charlottesville and is also handling most administrative duties for moving the farmers market forward.

Woodard Properties is another important stakeholder. They currently own the property on Cherry Avenue and are thus in charge of deciding

who will be able to lease or buy the property from them. Without Woodard Properties full participation, there will be a setback as far as where the farmers market will be located.

Another important stakeholder group is the vendors and local farmers whose goods need to be sold at the farmers market. They play the role of supplier, without them there is no increased supply of healthy foods to provide to the residents of Fifeville. The more vendors and farmers sell goods, the greater supply of healthy foods. This makes them one of the most important stakeholder groups alongside Woodard Properties.

The final key stakeholder is the City of Charlottesville. Any licenses that Fifeville needs to renovate the space, and the licenses needed by vendors of the farmers market need to sell their goods, will require the approval of the City of Charlottesville. When finalizing vendors for the farmers market, it will be important to ensure that they will be able to receive the proper licensing to participate in the selling of foods to Fifeville residents. Additionally, the City is also important to moving this farmers market forward because they have the financial capability to help support some of this project in the Fifeville neighborhood. Any money they can put towards this project will help deduct from the amount of grants the steering committee needs to apply for.

WORST CASE SCENARIO

Although unlikely, there is still a possibility that Woodard Properties decides to no longer lease the property for the farmers market or leases the property to a company outside of the Fifeville community that adds to the problem of gentrification. While unlikely, I believe it is still important to consider this possibility when thinking about implementation because without this building no recommendation can be implemented, and it will setback the timeline to have a reliable food source in Fifeville. For that reason, SEAP should consider looking for a backup space that could hold the farmers market or coordinating with one of the other retailers that Woodard Properties is considering in the process of leasing or selling 501 Cherry Avenue.

I believe that it there is a likely risk of not receiving enough money from the City of Charlottesville and grant applications. As a small community, Fifeville is depending on the City and grants to fund most of this project. Because the purchasing of the property is the majority if the total cost for the farmers market, SEAP can reduce cost for Fifeville by searching for equipment that is cheaper in value. It can

consider buying mostly in bulk for tables or booths or consider buying used equipment that will cost less than newer materials. Additionally, the farmers market does not need to have high costing interior design. I would suggest keeping the inside of the farmers market simpler to avoid large costs. SEAP should also consider asking for volunteers from within the Fifeville community to help with designing the inside of the market.

Lastly, there is a likelihood that very few vendors sign up to sell their goods at the farmers market. Given Fifeville's mission to implement an equitable solution and market foods grown and made by local Black vendors and farmers, the community is limited in who they can target as a potential participant in the farmers market. To get around this risk, I recommend that Fifeville look a little farther out than the Charlottesville/Albemarle area. It would also be beneficial for SEAP to consider other small local vendors that they might think to include in the farmers market.

NEXT STEPS

The next steps SEAP and the Fifeville Steering Committee need to take to implement a neighborhood farmers market are as follows:

1. Conduct a new feasibility test with residents
2. Meet with Woodard Properties
3. Make a budget
4. Apply for grants
5. Develop an operational plan
6. Open the market

The motivation behind making use of 501 Cherry Avenue to reduce the risk of food insecurity among residents was the execution of a feasibility test that revealed the desire for the market to reopen as a small market. It is important for residents to buy-in to the policy option adopted by the Steering Committee, and thus a new feasibility study should be conducted to gauge resident interest in a farmers market. This feasibility test should be run through the summer, lasting no more than three months.

After gauging resident approval of the farmers market, a meeting needs to be coordinated with Woodard Properties to build relations. It would be beneficial to include Fifeville residents in this meeting that can describe the importance of a neighborhood farmers market from those directly impacted by its implementation. SEAP can use this

meeting to evaluate the likelihood that the building is sold or leased for the farmers market plan developed by the steering committee.

After confirming that Woodard Properties is going to allow the property to be leased or sold for the farmers market, a budget needs to be made to identify all costs associated with renovating, remodeling, and opening the farmers market. Additionally, because the Steering Committee is applying for both grants and city funding, the committee needs to decide what the grant money will fund and what they will ask the city to fund. After budgeting for the farmers market, the committee must begin applying to grants. Establishing a budget should take the committee 1-2 weeks, another 1-2 months to apply to grants, and one month to 18 months to hear back about grant funding (Dunn, 2024).

Once over three-quarters of the funding for the farmers market has been acquired, increasing the likelihood that it will open for operation, an operational plan needs to be outlined. The operational plan will identify the day-to-day operations of the farmers market, the mission and goals of the farmers market, and how to achieve this mission and goals. Is there space to higher residents as coordinators who identify and confirm possible vendors? Who will be responsible for getting the market ready on days it operates? What days are most feasible for the farmers market to be open? These are all questions to consider in the operational planning stage. The committee should take one month to finalize its operational plan before spending the remaining time before the market opens to follow their plan.

Finally, once the previous steps are all complete, it will be time to open the market. The committee should plan to host an opening day event that increases the visibility of the new farmers market in Fifeville and highlights the purpose of the market—to increase access to and availability of healthy foods for residents in Fifeville.

CONCLUSION

As a nationally recognized food desert, Fifeville places its residents at an increased risk of facing food insecurity and, consequently, poorer health and academic outcomes. A farmers market in the Fifeville neighborhood will increase food security while providing an equitable solution that will enable low-income residents to make use of food assistance programs. A farmers market will decrease food insecurity by increasing both access to and consumption of healthy and affordable foods for approximately half of its residents. As a

neighborhood with a population of 4,357 residents, this means that over 2,000 more people in Fifeville and the City of Charlottesville will face a reduction in their risk of becoming food insecure (O'Hare & Mitchell, 2023). All people should have unrestricted access to affordable and healthy food, and a farmers market is Fifeville's opportunity to provide this right to its residents.

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Appendix A: Costs

FOOD CO-OP

Item	**Cost**
Leasing the Building	$2,796,290 (Reid, 2017)
Utilities	$2.10 per square foot (Jidoun, n.d.) 2.1 x 7,000 = $14,700
Interior Design	$150 per hour (Behm, 2022) over approx. 3 months 150 x 12 x 40 = $72,000
Buying equipment - *Refrigerated cases* - *Shelving* - *Deli equipment*	$56 per square foot (Jidoun, n.d.) 56 x 7,000 = $392,000
Total	$3,274,990

FARMERS' MARKET

Item	**Cost**
Leasing the Building	$2,796,290 (Reid, 2017)
Interior Design	$150 per hour (Behm, 2022) over approx. 3 months 150 x 12 x 40 = $72,000
Tables	$60 per table (Home Depot, n.d.) Approx. 40 tables for vendors and farmers 60 x 40 = $2400
Chairs	$14 per chair (Home Depot, n.d.) Approx. 80 chairs 14 x 80 = $1,120
Total	$2,871,810