2023

Advancing Social Equity and Promoting Black Self-determination: A Community Garden Opportunity Plan for Richmond, VA

Alessandro U. Ragazzi
Virginia Commonwealth University

ADVANCING SOCIAL EQUITY AND PROMOTING BLACK SELF-DETERMINATION:

A COMMUNITY GARDEN OPPORTUNITY PLAN FOR RICHMOND, VA

Prepared By
Alessandro Useze Ragazzi

Master of Urban and Regional Planning
L. Douglas Wilder School of Government and Public Affairs
Virginia Commonwealth University
Spring 2023

HAPPILY NATURAL

Advancing Social Equity and Promoting Black Self-determination:
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**A Capstone Professional Plan
Prepared By:**

Alessandro U. Ragazzi
Master of Urban and Regional Planning
L. Douglas Wilder School of Government and Public Affairs
Virginia Commonwealth University

Prepared For:

Happily Natural Day

Professional Panel Members:

Dr. Meghan Gough
Professional Plan Coordinator
Virginia Commonwealth University

Dr. Ivan Suen,
Primary Advisor
Virginia Commonwealth University

Duron Chavis
Founder and Director
Happily Natural Day

Top photo on cover page-volunteer at Sankofa Community Orchard
taken by Jennifer VanSteenburgh

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Acknowledgments

I would be remiss not to acknowledge the support and advice I received from so many people. Thank you to all of my friends, colleagues, classmates, and professors whose insights helped me guide my research and process my ideas. Of course, thank you to the interviewees who generously donated their time.

I would like to thank my panel for their dedication and guidance.

Dr. Gough for being patient with me and supporting me throughout this entire process. Your comments were always thoughtful and taught me a great deal.

Dr. Suen for being an endless resource for questions about GIS and for helping me think through my research. Thank you for meeting with me so often and always being available to answer my questions.

Duron Chavis for doing this work and showing me what's possible. Thank you for creating Sankofa Community Orchard, the place that inspired this plan.

Finally, I would also like to thank my parents and girlfriend. Your compassion and care were critical to my recovery from an intensive knee surgery. Without your support, this plan would not have happened.

Executive Summary

A growing chorus of planners and policymakers are pushing for cities to integrate and support urban agriculture. They recognize that urban agriculture provides a variety of economic, environmental, and social benefits. These include attracting investment, decreasing stormwater runoff, and strengthening interpersonal bonds between neighbors. Recognizing these benefits, the City of Richmond administers a community garden program known as "Richmond Grows Gardens." Through this program, underutilized city properties are permitted for use as community gardens. However, an emerging concern is the potential for community gardens to perpetuate underlying structures of social and racial inequality through displacement and social exclusion.

Considering these concerns, this plan investigates the implementation of community gardens in Richmond. The following three questions guide this research.

- In which Richmond communities would community gardens have the greatest opportunity to advance social equity and black self-determination?

- How are decisions made on the design, infrastructure, and process of community garden sites in Richmond?

- What are the ways in which the design, infrastructure, and process of community gardens can support social equity and black self-determination?

To answer these questions, this research establishes a methodology for ranking existing and available community garden sites based on the social and racial characteristics of their surrounding communities. Additionally, this research involves interviews with community garden stewards and the City's Richmond Grows Gardens program coordinator.

Ultimately, this plan reinforces the idea that community gardens provide important opportunities to advance social equity and promote black self-determination. Community gardens demonstrate community power and, when implemented with intentionality, give communities the tools they need to define themselves. Accordingly, this plan establishes a credible vision for the future of community gardens in the city and provides pertinent recommendations and implementation strategies to ensure that community gardens advance social equity and black self-determination by anchoring community power.

1.0 | Introduction

A growing contingent of urban planners and policymakers are touting the economic, environmental, and social benefits provided by urban agriculture. Community gardens, in particular, are seen as an important pathway to attract investment, deliver ecosystem services, and build strong social bonds. However, work is necessary to take advantage of the opportunities offered by community gardens and ensure that the benefits are distributed equitably across urban landscapes riddled with social and racial inequality. The purpose of this plan is twofold; to establish a methodology for ranking community garden sites based on their social- and racial-spatial distribution and to outline specific recommendations for the equitable implementation of community gardens in the city of Richmond, Va.

1.1 | Client Description

Happily Natural Day is a non-profit organization founded in 2003 by Duron Chavis. The Richmond-based organization began as a grassroots festival focusing on natural hair, holistic health, and black awareness. In 2009, Mr. Chavis branched out by launching the Richmond Noir Market to tackle the unavailability of local fresh fruits and vegetables in USDA Designated Food Deserts. This work evolved into the development of the McDonough Community Garden in 2012. Presently, in addition to hosting annual festivals, Happily Natural Day coordinates initiatives around urban food justice. Inspired by a vision of self-determination for 'black folk,' Mr. Chavis believes that connecting people with the land promotes holistic health, cultural identity, and social change. Currently, Happily Natural Days manages 8 urban gardens in the Richmond region.

1.2 | Outline of Proposal

This plan is divided into seven sections: introduction, background, context, methodology, findings, recommendations, and implementation. The introduction explains the purpose of the plan, the client for whom the plan was prepared, and the organizational structure of the plan. The next section defends interest in urban agriculture and argues for its just implementation. Subsequently, context is provided on the existing demographics and municipal regulations of urban agriculture within Richmond. Informed by the background section, the methodology details what data was compiled and how that data was analyzed. The findings synthesize the conclusions of the quantitative and qualitative methods performed. The recommendations section develops goals, objectives, and actions to realize the vision of this plan. The last section provides an implementation matrix based on the recommendations.

Figure 1: McDonough Community Garden via richmondgrowsgardens.com

2.0 | Background

Urban agriculture is a broad term that describes a wide range of land-use activities that involve the production, cultivation, processing, and distribution of food within an urban and peri-urban setting. Examples include, but are not limited to, private and community gardens, urban farms, rooftop gardens, and edible landscaping. Practitioners grow raw agricultural products such as fruits, vegetables, honey, and meat within towns and cities for personal consumption, sale, donation, or educational use.[1,2] The practice traces back to the earliest histories of urban settlement.[3]

In the U.S, the industrialization of the late 19th century and the advent of modern sewage and sanitation systems increasingly led planners to view agriculture as a rural activity. Moreover, improved roads and the large-scale farming of grain and meat in the North American interior shifted the geography of agriculture further from urban centers. Despite the implementation of garden programs in a variety of American cities—to address poverty and economic need in the wake of the economic downturns of the late 19th and early 20th century—the general trend continued. By the middle of the 20th century, many cities no longer included agriculture as a recognized land use.[4] The last few decades, however, have seen the goals of planners shift

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[1] McClintock, Wooten, and Brown, "Toward a Food Policy 'First Step' in Oakland, California."
[2] Horst, McClintock, and Hoey, "The Intersection of Planning, Urban Agriculture, and Food Justice."
[3] Voigt, "Pigs in the Backyard or the Barnyard."
[4] Hodgson, Campbell, and Bailkey, "Planning for Urban Agriculture."

again, with many urban areas revising their zoning ordinances and piloting programs to better accommodate urban agriculture.[5] This shift is the result, in part, of grassroots urban gardening movements in the 1970s, Federal investment, and a greater recognition of the potential environmental, economic, and social benefits of urban gardens.[6,7]

2.1 | Community Gardens

Today, much of the urban gardening in the U.S. takes place in community gardens.[8] A collaborative report between the American Planning Association (APA) and MetroAG: Alliance for Urban Agriculture defines community gardens as the following:

> "Small- to medium-scale production of food-producing and ornamental plants, on contiguous or discontinuous plots of land, located on public or private property in residential areas, gardened and managed collectively by a group. Gardening activities and end products are typically used for consumption or education; however, they may also be sold on- or off-site, depending on local government regulations and the goals of the garden as a collective effort."[9]

Figure 2: Volunteers at Sankofa Community Orchard via Jennifer VanSteenburgh

The goals of the gardeners and the constraints of the site influence the design and infrastructure of the garden. Because community gardens are often seen as placeholders for development, land security is an important challenge. Local zoning restrictions, as well, can influence the type of structures, maintenance, and sale of produce for a particular site.[10] Depending on their goals, community gardens face additional challenges in the form of insufficient water access, soil contamination, high start-up and operating costs, a lack of business training, and difficulties generating or maintaining funding.[11] Many of these gardens are experimental, with different

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[5] "From The Ground Up: Planning & Zoning for Urban Agriculture in Greater Kansas City."
[6] Rangarajan and Riordan, "The Promise of Urban Agriculture, National Study of Commercial Farming in Urban Areas."
[7] Hodgson, Campbell, and Bailkey, "Planning for Urban Agriculture."
[8] Nairn and Vitiello, "Lush Lots: Everyday Urban Agriculture From Community Gardening to Community Food Security."
[9] Hodgson, Campbell, and Bailkey, "Planning for Urban Agriculture," 17.
[10] "Community Gardening: Policy Reference Guide."
[11] Hagey, Rice, and Flournoy, "Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities."

combinations of funding, programming, and products.[12] In Seattle, through the P-Patch program, community gardeners lease small plots of land to grow flowers, herbs, and organic produce. While the gardens are public to enjoy, growing the produce is the prerogative of the assigned gardener(s).[13] Other models, such as D-TOWN Community Farm in Detroit employ staff and oversee volunteers.[14] Still, other community gardens are managed solely by volunteers.

Benefits

In a general sense, urban agriculture can provide various environmental and economic benefits. Researchers have demonstrated how an increase in plant foliage, as a result of urban gardens, can decrease stormwater runoff, remove air pollution and improve urban ecosystem services by increasing biodiversity and species preservation.[15] Additionally, urban agriculture can contribute to the productive reuse of contaminated land.[16] Economically, urban gardens are touted for increasing proximate property values and creating a multiplier effect on local employment opportunities.[17,18] Moreover, households that grow or harvest their own food can reduce food expenditures and make their household income available for other purposes.[19]

The social benefits of urban agriculture are well documented. Community gardens inspire a collective investment in the shared fortunes of a neighborhood. Scholars note how community gardens facilitate increased interaction between different peoples across cultures and generations. Urban agriculture offers an experiential opportunity for urbanites, young and old, to educate themselves on nutrition and the growing process. By creating opportunities for mutual trust and sharing within a community, community gardens strengthen interpersonal relationships between neighbors.[20] Moreover, proponents note the contribution of urban agriculture in improving physical and mental health outcomes for participants.

Figure 3: Volunteers at Uptown Community Garden via richmondgrowsgardens.com

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[12] Nairn and Vitiello, "Lush Lots: Everyday Urban Agriculture From Community Gardening to Community Food Security."
[13] "About the P-Patch Program - Neighborhoods | Seattle.Gov."
[14] White, "Black Farmers, Agriculture, and Resistance."
[15] Hodgson, Campbell, and Bailkey, "Planning for Urban Agriculture."
[16] Hodges Snyder, McIvor, and Brown, *Sowing Seeds in the City*.
[17] Voicu and Been, "The Effect of Community Gardens on Neighboring Property Values."
[18] Hodgson, Campbell, and Bailkey, "Planning for Urban Agriculture."
[19] *Ibid.*
[20] *Ibid.*

Food sovereignty and food justice advocates, who argue for a transformation of the current global food system, point to urban agriculture as a fundamental component of a more self-determined food system. A public health study conducted in 2020 found that non-Hispanic Black Americans were more likely to report living in areas where unhealthy food options overwhelm healthier alternatives relative to adults identifying as non-Hispanic White.[21] These areas, which are often economically distressed, are underserved by full-service supermarkets and experience disproportionate rates of food insecurity. Individuals in low-income urban neighborhoods were shown to have higher rates of diet-driven inflammation, especially a lack of dietary fiber, than their counterparts in higher-income areas. These higher rates of diet-driven inflammation can impair immune function and are associated with chronic diseases such as obesity and hypertension.[22] Focusing on health, advocates stress the ability of urban agriculture to address the failure of food imports to provide access to nutritious food and food security to disadvantaged groups.[23]

Externalities

Figure 4: Chickens at Owl Orchard Community Garden via richmondgrowsgardens.org

It's important to consider, however, that there can be important negative impacts of urban agriculture if not properly managed. Intensive agricultural uses that employ factory farming and industrial fertilizers create health hazards, unpleasant smells, and excessive traffic generation. Even simple community gardens may generate more parking than can be accommodated on the street, or risk contamination from automobile traffic and industrial sites.[24] Sites with poor management risk creating noise and odor nuisances from their composting facilities or their animal-keeping practices.[25] Critically, urban agriculture can also come into conflict with other desired and necessary land uses such as residential development. Cities, generally, have a fixed amount of land and planners may view affordable housing rather than agriculture as the best use of that land.

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[21] Cooksey Stowers et al., "Racial Differences in Perceived Food Swamp and Food Desert Exposure and Disparities in Self-Reported Dietary Habits."
[22] Ciesielski et al., "Elevated Dietary Inflammation Among Supplemental Nutrition Assistance Program Recipients Provides Targets for Precision Public Health Intervention."
[23] Tornaghi, "Urban Agriculture in the Food-Disabling City."
[24] Voigt, "Pigs in the Backyard or the Barnyard."
[25] Hodgson, Campbell, and Bailkey, "Planning for Urban Agriculture."

Beyond the technical impacts, recent scholarship has investigated the ways in which efforts to promote urban agriculture can negatively impact low-income communities through displacement and social exclusion.[26,27] While urban agriculture itself does not inherently drive gentrification, urban agriculture can facilitate the rise of rent gaps in marginalized neighborhoods.[28] Often, black neighborhoods with a history of disinvestment sanctioned by racist policies have a larger proportion of affordable vacant lots than more affluent areas.[29] As more of these lots are turned into community gardens, property values rise. A study in New York City found that properties in low-income neighborhoods within the immediate vicinity of community gardens saw their median value rise by 9.4% in the five years since the creation of the garden.[30] While this is often considered as an argument for the economic benefit of urban agriculture, rising property values can lead to the displacement of long-term residents.[31]

Figure 5: Greens at Sankofa Community Orchard via Jennifer VanSteenburgh

In addition to the risk of displacement, urban agriculture initiatives can also perpetuate the social exclusion of people within their own neighborhoods.[32] A 2011 study of urban gardening in Philadelphia found a higher proportion of white gardeners than black gardeners, even at sites in predominantly black neighborhoods.[33] This research corroborates findings from a 2022 study examining the demographic breakdown of urban gardeners in New York City, Newark, and Los Angeles. The study found that a higher proportion of white participants, in comparison with non-white participants, reported gardening at community gardens.[34] Furthermore, individuals with higher incomes, individuals with more education, and individuals living in a single-family home were more likely to engage in outdoor gardening.[35] These examples illustrate the way urban gardens can negatively impact black communities by perpetuating the racialization and marginalization of black spaces. Implementing community gardens that are inclusionary and culturally appropriate is required to minimize these effects.

[26] Hoover, "White Spaces in Black and Latino Places."
[27] McClintock, "Cultivating (a) Sustainability Capital."
[28] *Ibid.*
[29] "From The Ground Up: Planning & Zoning for Urban Agriculture in Greater Kansas City."
[30] Voicu and Been, "The Effect of Community Gardens on Neighboring Property Values."
[31] McClintock, "Cultivating (a) Sustainability Capital.
[32] Hoover, "White Spaces in Black and Latino Places."
[33] Meenar and Hoover, "Community Food Security via Urban Agriculture."
[34] Das and Ramaswami, "Who Gardens and How in Urban USA."
[35] *Ibid.*

2.2 | Theoretical Framework

This section outlines the theoretical motivations for this plan and the theoretical perspectives which frame the research findings and inform the recommendations.

Figure 6: Sankofa Community Orchard via Jennifer VanSteenburgh

In a 2010 book entitled, "The Just City," Susan Fainstein argued that justice should be the principal guide of municipal policy.[36] By publicly orienting towards justice, cities would have a sense of direction that is often missing in other common approaches to municipal governance. For Fainstein, justice is grounded in a universal sense of fairness. She lists three important criteria of urban justice; democracy, diversity, and equity. Democracy and diversity on their own, however, are not sufficient to ensure justice. In fact, the results of citizen deliberation may deny justice based on the particular values of the most active participants. For instance, when wealthier residents successfully petition against affordable housing in their neighborhood, they deny housing opportunities to those in need. Likewise, diversity can be used to promote heterogeneity at the expense of just outcomes. While gentrification is successful at diversifying low-income areas in the urban core and, through displacement, diversifying surrounding counties, it often does so to the detriment of the long-term residents' sense of place and community networks. For Fainstein, prioritizing equity is crucial to ensure a fair distribution of benefits and the mitigation of negative outcomes in urban contexts. While not dispensing with diversity or democracy, equity should be the primary aim of urban policy.[37] Of course, the pursuit of equity is not without its

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[36] Fainstein, *The Just City*
[37] *Ibid.*

critics, who deride it as a paternalistic attempt to socially engineer equal outcomes.[38] However, this view fails to distinguish between equity and equality. Equity is distinct from equality and can be rightly understood using the capabilities approach articulated by Martha Nussbaum. In this light, urban policy should advance policies that provide the *opportunity* for all residents to realize what they are capable of. Whether those capabilities are actualized or whether those capabilities are equal is another matter.[39]

Orientation towards justice by prioritizing equity, however, cannot ignore the racialization of people that informs much of the dynamics of American cities. The centrality of racial exclusion and injustice in our recent history—beginning with native expropriation and genocide and African slavery—requires comparably central efforts to rectify it.[40] Despite a lack of biological or anthropological support, race maintains a predominant position in our social and material reality. The American urban landscape is, in many ways, defined by race. Urban space is racialized—through a history of racial violence, government coercion, and private bigotry—so that certain spaces are associated with certain races.[41,42,43,44] As a result of these historical processes, the urban reality is segregated by race and 'Black' spaces are marginalized. Urban neighborhoods with a history of disinvestment (i.e., black neighborhoods) have higher concentrations of poverty, a demonstrable lack of fresh healthy foods, higher rates of food insecurity, and poorer diet quality.[45] In this urban context, equity is inextricably linked to racial justice and attempts to maximize benefits and minimize impacts will require privileging 'black' spaces. Privileging black spaces is needed to reverse the flow of racialization and enable black residents to define themselves, rather than be defined.[46] This liberation is critical to realizing a 'just' city.

For African Americans, promoting self-determination through agriculture has a long history. From the Negro Farmer's Conference organized by Booker T. Washington in 1902, to the North Bolivar County Farm Cooperative founded in 1967, to the Detroit Black Community Food Security Network started in 2006, agriculture has long been considered central to resistance, liberation, and community power.[47] The implementation of community garden programs, given the social benefits discussed previously and the role of agriculture in black resistance, could advance social and racial equity in urban contexts. Sensitivity, however, is required given the potential land-use conflicts with affordable housing.

[38] Peterson, "Equity."
[39] Nussbaum, "Capabilities as Fundamental Entitlements."
[40] Mills, *Black Rights/White Wrongs*.
[41] Kobayashi and Peake, "Racism out of Place."
[42] Rothstein, *The Color of Law*.
[43] Wilson, "The Political and Economic Forces Shaping Concentrated Poverty."
[44] Lipsitz, "The Racialization of Space and the Spatialization of Race."
[45] Freedman et al., "Food System Dynamics Structuring Nutrition Equity in Racialized Urban Neighborhoods."
[46] Mills, *Black Rights/White Wrongs*.
[47] White, "Black Farmers, Agriculture, and Resistance."
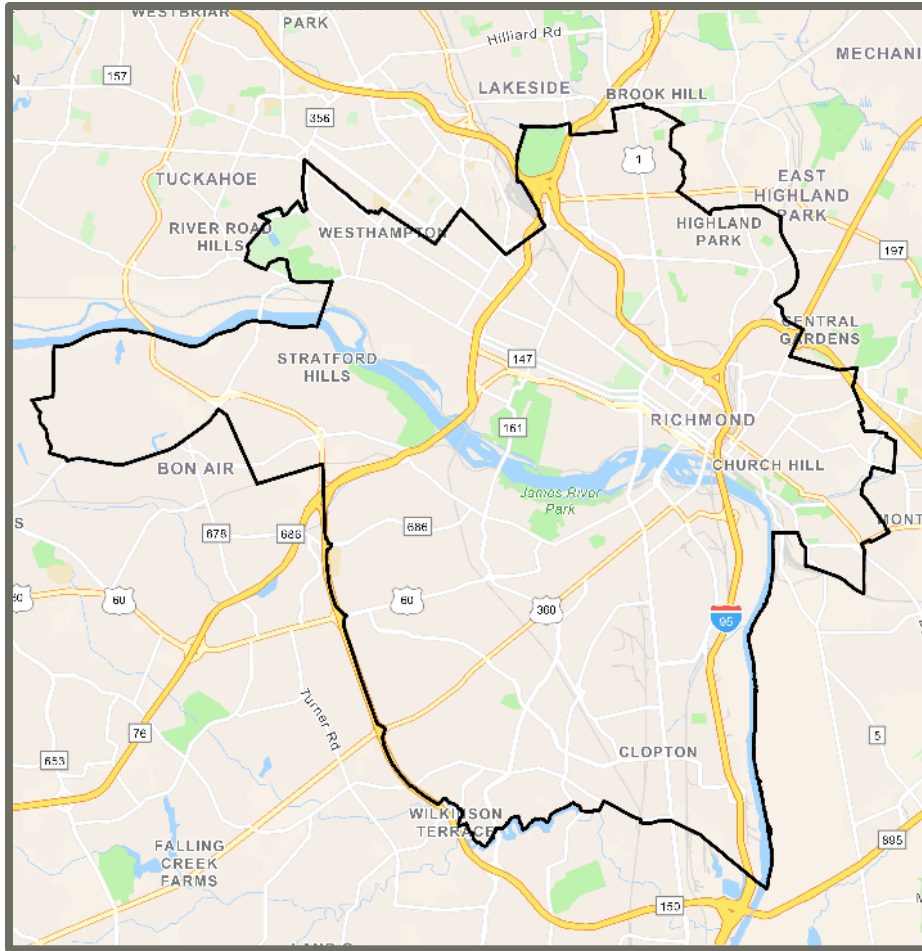
Figure 7: Map of Study Area - Richmond, Va

3.0 | Context

The city of Richmond, the study area for this plan, is located along the fall line of the James River and is the capital of the Commonwealth of Virginia. Historically, this land was part of a larger area called Tsenacomoco by Virginia Algonquin peoples.[48] The genesis of the present city was originally laid out by Major William Mayo in 1737.[49] Prior to abolition, Richmond was an important slave market and, during the Civil War, served as the capitol of the Confederacy. The population peaked in 1970 but generally declined between 1950 and 2000. The turn of the 21st century, however, has seen the population rise steadily. As of 2021, the city boasts a population of around 227,000.[50]

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[48] Salmon, "Tsenacomoco (Powhatan Paramount Chiefdom)."
[49] "Richmond | City, Virginia, & Population | Britannica."
[50] "U.S. Census Bureau QuickFacts."

3.1 | Demographics

This plan focuses on the demographic data relevant to identifying which areas of the city have the greatest opportunity to advance racial and social equity. These include statistics on race, employment, education, poverty, housing, and food security.

Race

Per the most recent decennial census, the largest racial groups are black alone (40.3%) and white alone (43.1%). Despite the parity in populations, black residents and white residents are not distributed evenly across the city. Figure 8 illustrates the distribution of black residents across the city by block group. The northeast and southeast of Richmond show the highest concentrations of black residents, with some areas over 78% black. In the northwest, however, the black population is under 17%. In the communities with higher concentrations of black residents, community gardens have the opportunity to connect individuals with the land and promote self-determination and collective agency.

Percent of Black Residents

0.5% - 16.9%
17% - 37.4%
37.5% - 60.3%
60.4% - 76.6%
76.7% - 94.6%

N

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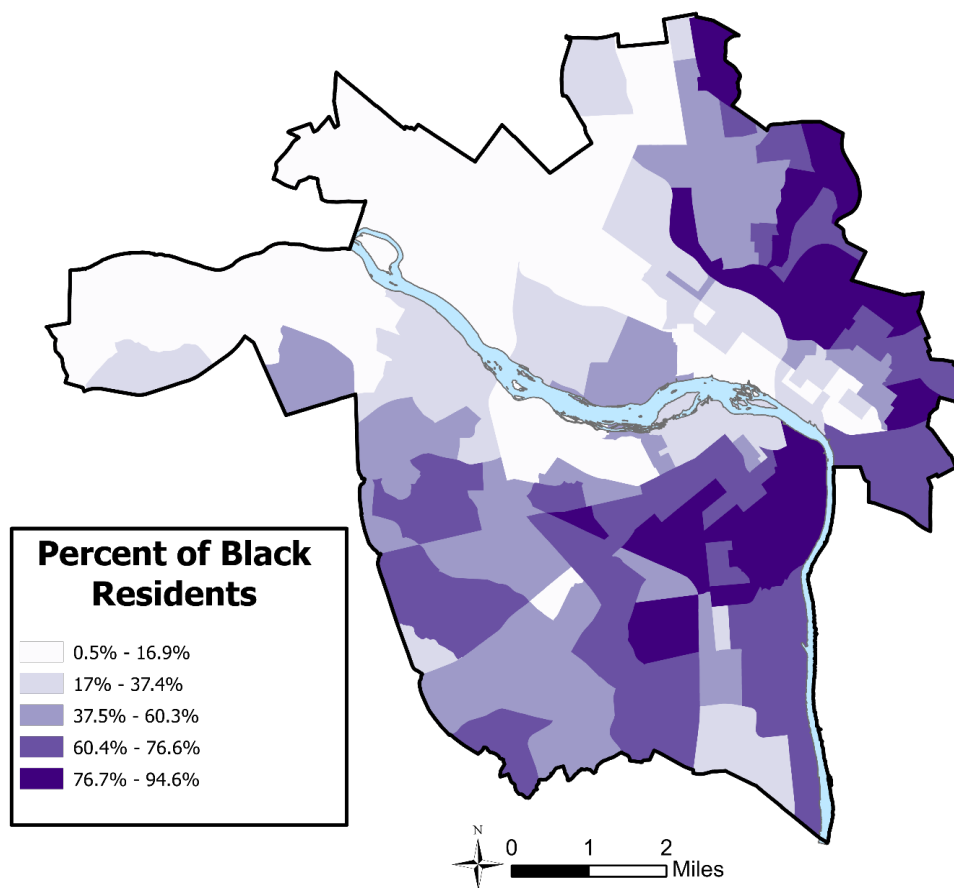
Figure 8: Residents Identifying as Black, 2020

Employment

In 2020, the city-wide unemployment rate was measured at 6.3% compared to the national average of 5.4%. Per Figure 9, areas with low unemployment percentages are distributed throughout the city, with unemployment over 14.81% in particular communities in the south, north and east. In areas of high unemployment, community gardens can assist with workforce training and increase the opportunities for employment.

Percent of Residents without Employment

- 0% - 2.7%
- 2.8% - 7.7%
- 7.8% - 13.9%
- 14% - 25.2%
- 25.3% - 53.9%
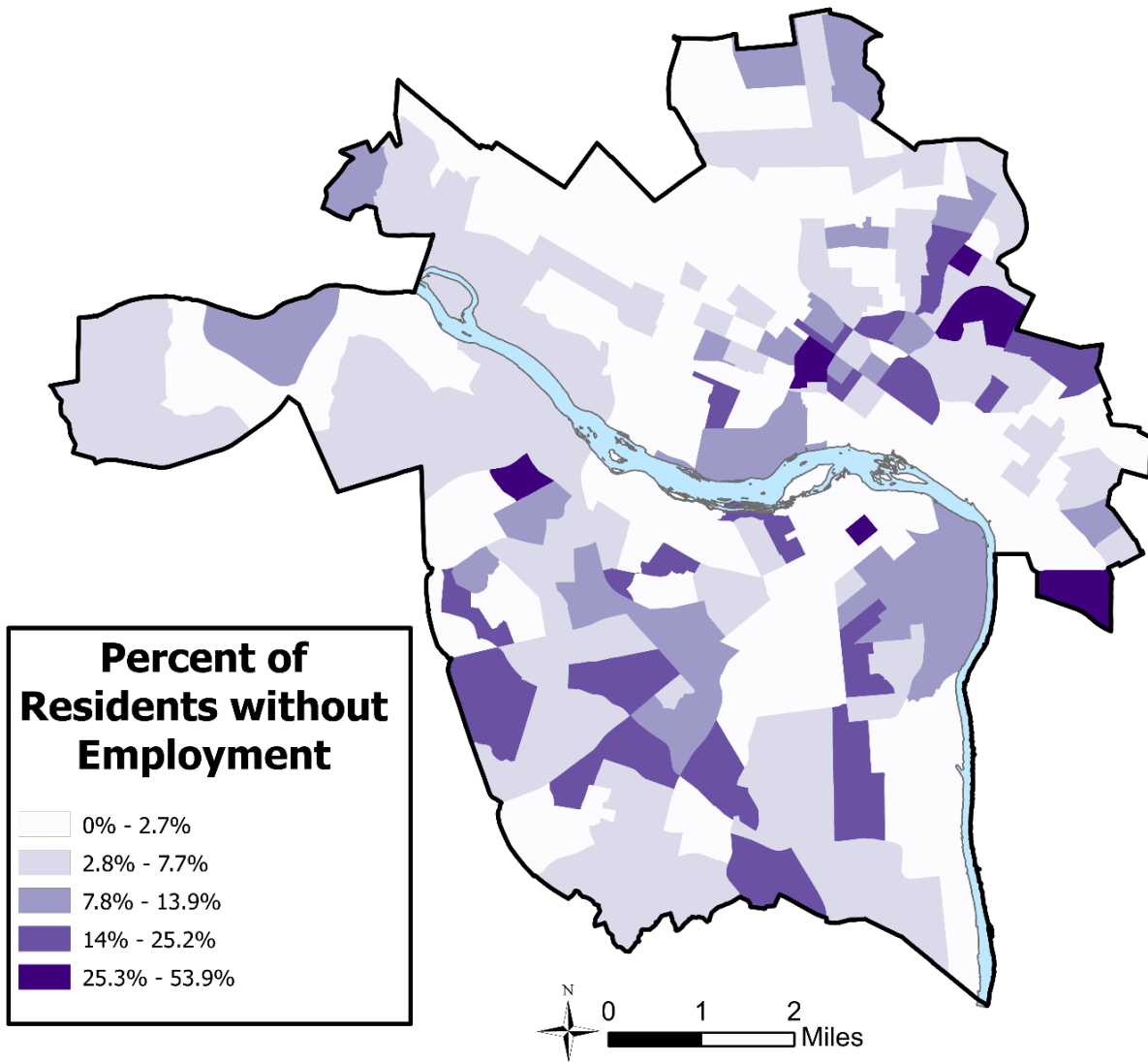
Figure 9: Population Unemployed, 2020

Education

Of the population 25 years and older, 34.4% have a high school degree equivalent or less. Per Figure 10, the largest share of these residents is located in the southside and northeast of the city. There are large swaths of the city with concentrations of low educational attainment over 65%. As learning centers, community gardens have the potential to educate individuals on biology, farming, the environment, and more.

Percent of Residents with High School degree or Less

- 0% - 10.8%
- 10.9% - 26.3%
- 26.4% - 43.1%
- 43.2% - 65%
- 65.1% - 96.4%
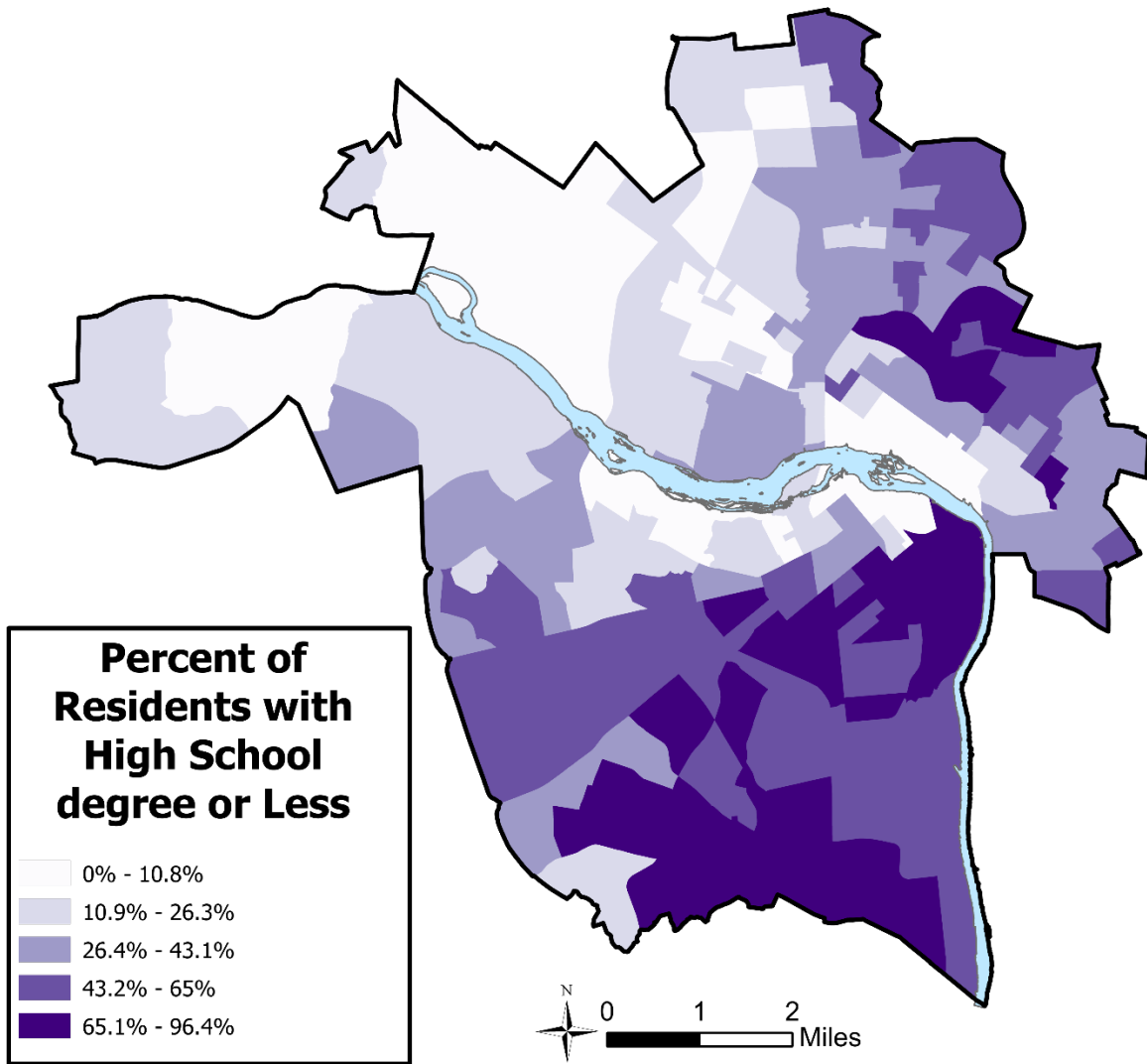
Figure 10: Educational Attainment, 2020

Poverty

The percentage of residents in poverty in Richmond is just under 21% compared to the national rate of 12.8%. Per Figure 11, poverty is concentrated in the northeastern and southern portions of the city. By attracting investment, community gardens can improve the economic prospects of a neighborhood. Caution is required as community gardens can also contribute to the displacement and exclusion of these same communities.

Percent of Residents in Poverty

- 0% - 7.4%
- 7.5% - 17.4%
- 17.5% - 29.6%
- 29.7% - 49.2%
- 49.3% - 100%
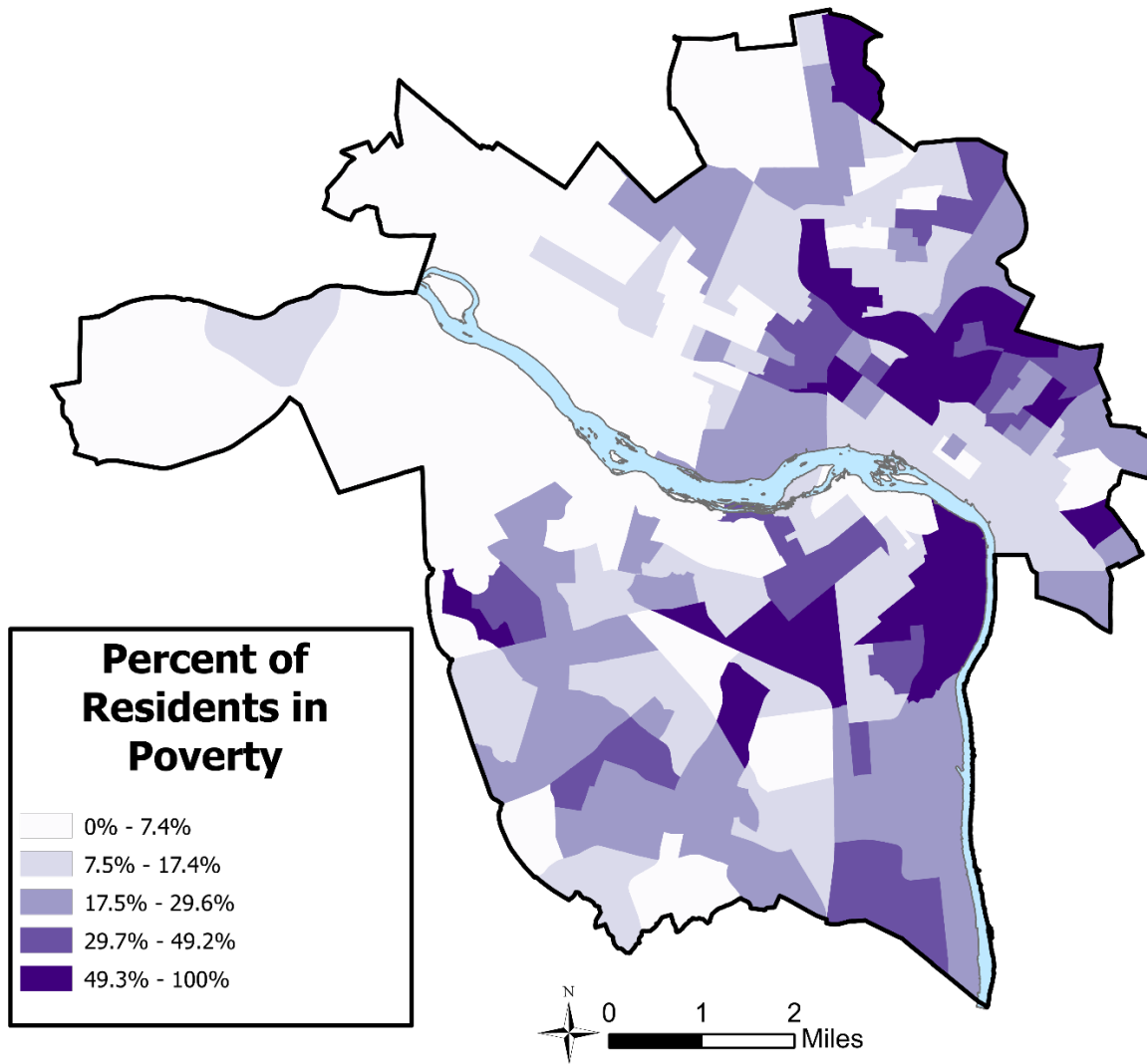
Figure 11: Population in Poverty, 2020

Food Security

The percentage of households receiving food assistance is 14.5% compared to the national average of 11.4%. Per Figure 12, the northern and western swaths of the city share very few of the individuals using SNAP benefits. On the other hand, there are several areas in the southeast and northeast that include block groups with over 55% of residents using food stamps. In these areas, community gardens can increase a community's input into the growing, processing, and distribution of their food.

Percent of Residents Receiving SNAP Benefits

- 0% - 6.3%
- 6.3% - 15.7%
- 15.8% - 29.6%
- 29.7% - 55.4%
- 55.5% - 100%
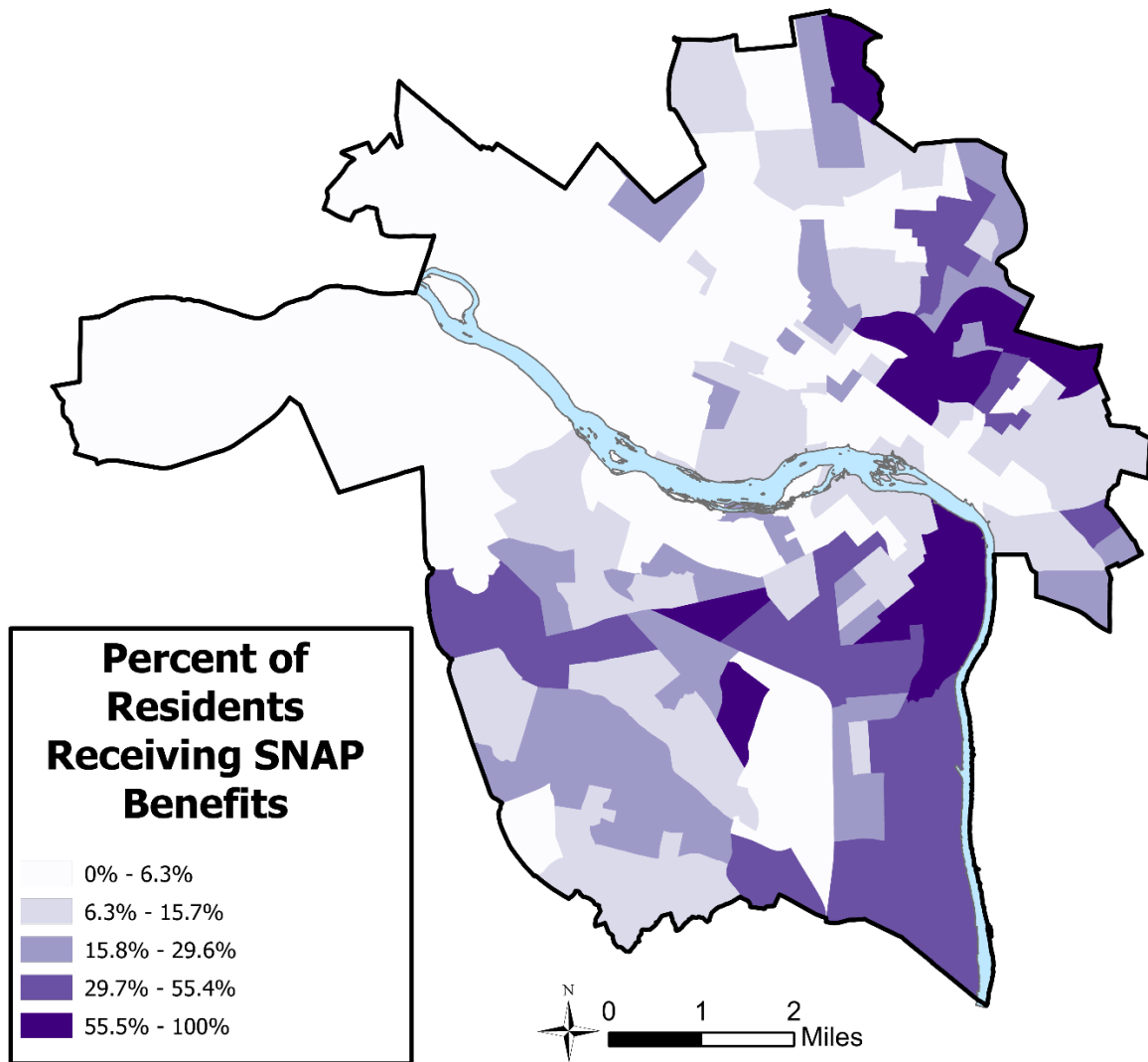
Figure 12: Population receiving Supplemental Nutrition Assistance Program (SNAP) Benefits, 2020

Housing

The percentage of residents living in rental units, and thus with less space and stability to upkeep their own gardens is 56.3%. Per Figure 13, block groups along the northeastern and southeastern banks of the James River include over 78% of residents living in rental units. In these areas, community gardens can offer space for individuals who live in apartments or do not share the housing stability of owner-occupants.
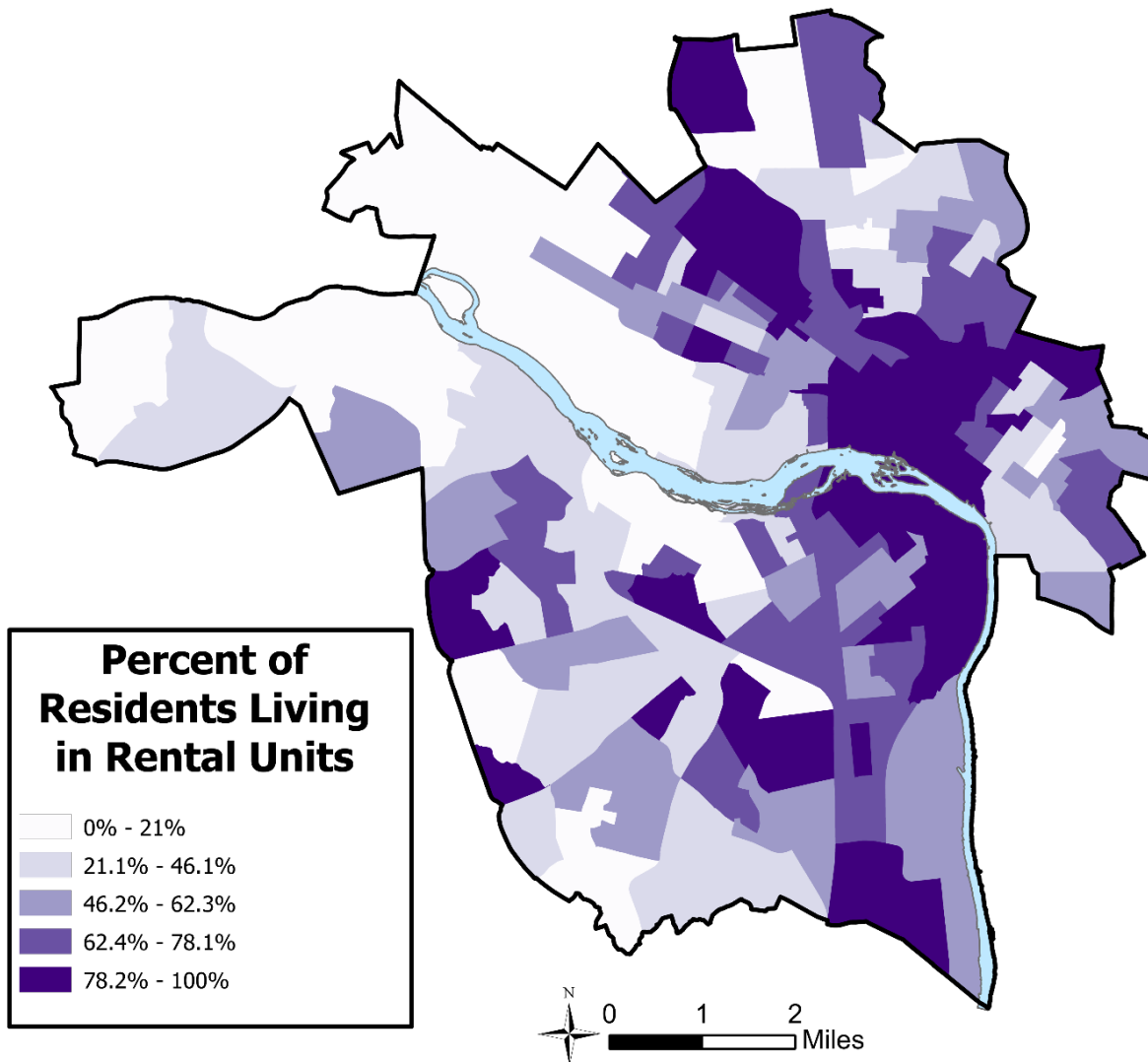
Figure 13: Residents Living in Rental Units, 2020

3.2 | Current Municipal Policy

Plan Guidance

Two recent Richmond Plans have detailed objectives and actions that offer insight into the city's goals for urban agriculture. The Richmond 300 Master Plan, which was adopted in 2020, references urban agriculture in its Thriving Environment Chapter. Expanding access to the local healthy food system and prioritizing residents in low-income areas is a stated objective of the master plan. To accomplish this, City planners suggest expanding the current community garden program so that community gardens on public lands have a set of standards and guidelines that "ensure transparency, continuity of use, community benefit, and access to a water source." [51] Furthermore, they recommend developing educational materials that explain where urban agriculture is currently permitted by-right. They are also considering modifying the Zoning Ordinance to expand where urban agriculture is permitted by-right. Lastly, by creating opportunities to fund technical support, tools, and processes, they seek to ensure all residents can participate in urban agriculture.[52]
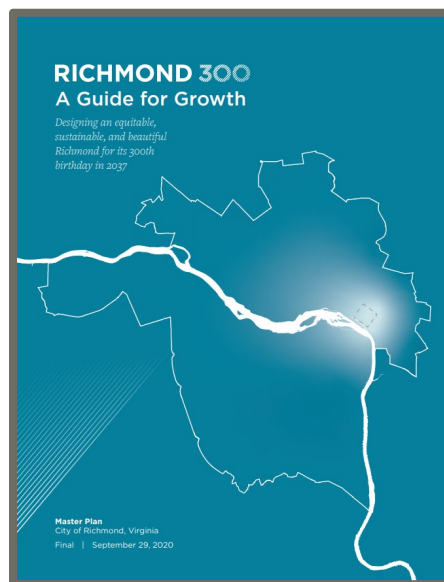
Figure 14: Richmond 300 Plan Cover
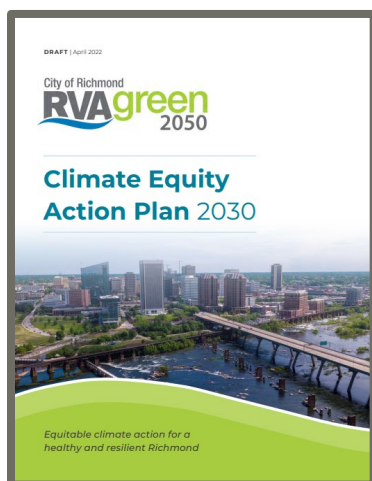
Figure 15: RVAgreen2050, Climate Equity Action Plan Cover

In addition to the guidance provided by the Master Plan, the draft of the City of Richmond's Climate Equity Action Plan 2030 which is expecting approval this year, is supportive of urban agriculture in its Environment Section. In fact, the first objective is to "make sure all residents have the opportunity to engage with healthy natural resources, spaces, and biodiversity."[53] One strategy to this end is the development, funding, and implementation of an urban and community agriculture program. The following actions are put forward in the plan. The first one is to "increase the visibility and accessibility of the Richmond Grows Gardens urban agriculture program." This involves "partnering with food justice community organizations," increasing the "funding for staffing, maintenance, and materials" as well as encouraging the cultivation of native

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[51] "Richmond 300: A Guide for Growth," 172

[52] *Ibid.*

[53] "RvaGreen 2050, Climate Equity Action Plan," ENV-1

plants and developing an apprenticeship training program.[54] In addition, the plan suggests identifying what changes are needed in the community garden ordinance for the selling of produce grown in community gardens. The last action in this strategy is to "incentivize owners of multifamily dwellings to remove barriers to individuals growing their own food and allow universal access to community gardening and composting."[55]

Code of Ordinances

While plans address future goals, the City of Richmond Code of Ordinances constitutes the municipal laws and regulations governing the city. These laws and regulations concern urban agriculture on three occasions. In Chapter 4, Article II, Division 4, municipal code dictates the city "may issue permits to persons for the keeping, placement, or maintenance of female chickens on any parcel or real property in residential zoning districts of the City. Roosters shall not be permitted."[56] The application for the permit includes a $60 application fee and limits the number of chickens to six. A background check is required, and permits expire every 12 months. They can be renewed, however, with the submission of a new permit and accompanying $60 fee. The Code of Ordinances also permits the "propagation and cultivation of crops, flowers, trees and shrubs which are *not* offered for sale on the premises" in residential zoning districts.[57] There are no additional restrictions, as long as home gardening is done for personal consumption or donation purposes. The code also addresses the eligibility criteria for starting a community garden on city-owned property in Chapter 8, Article VIII, Division 5. Groups may apply for a permit with an initial application fee of $50 with an annual renewal fee of $25.[58]

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[54] "RvaGreen 2050, Climate Equity Action Plan," ENV-6
[55] *Ibid.*
[56] City of Richmond, VA., Code of Ordinances
[57] *Ibid.*
[58] *Ibid.*

Richmond Grows Gardens Program

To support the establishment of community gardens, the Parks and Recreation Department of the city government administers a community garden program whereby city-owned property is identified for use as a community garden. Figure 16 displays the existing and available garden sites. In line with the conditions established by the city ordinance, interested groups can apply for a permit to develop an available site. The stated goals of this program are to "improve the quality of life for residents, create a healthy environment and enhance economic development and job creation opportunities."[59] The City hopes to accomplish this by transforming underutilized city-owned property into productive gardens which increase "access to fresh, nutritional food for residents-particularly those in underserved communities." [60]
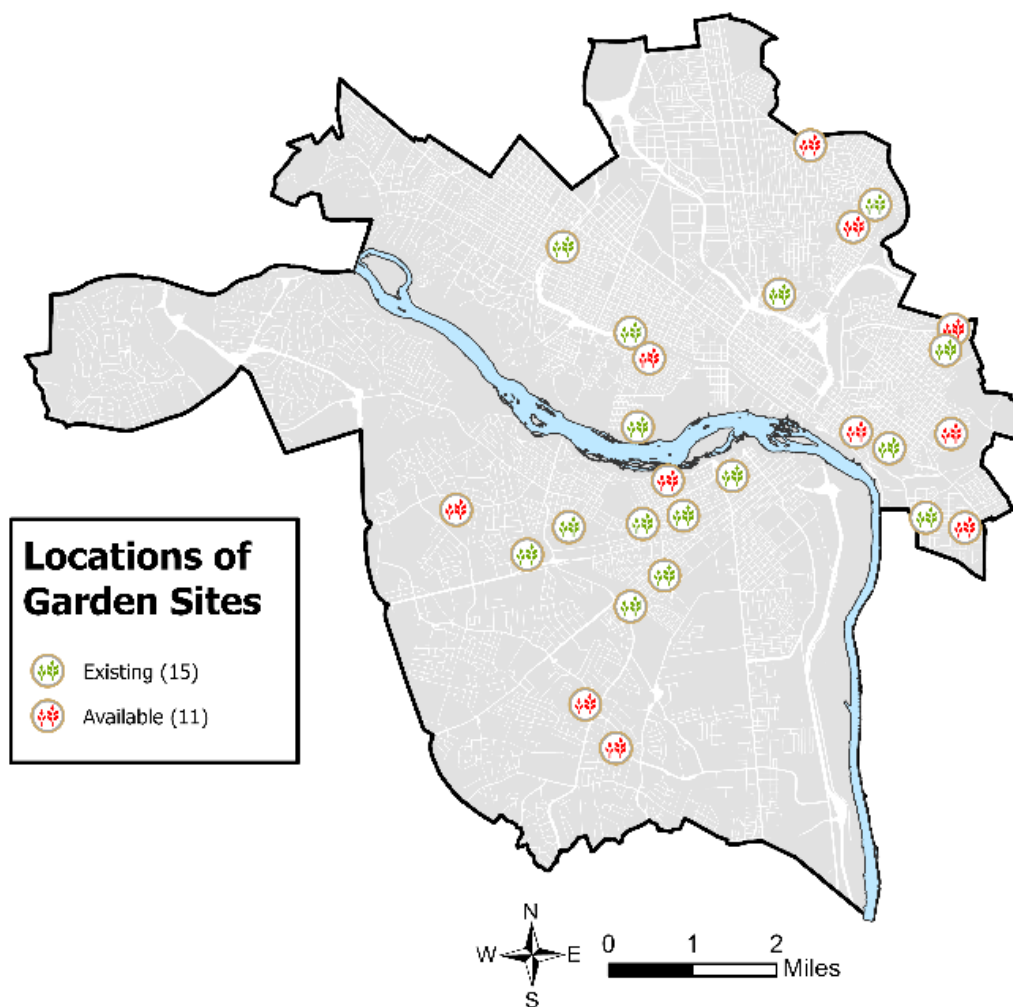
Figure 16: Richmond Grows Gardens Sites

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[59] "Community Gardens | Richmond."
[60] *Ibid*

4.0 | Methodology

The purpose of this research is two-fold; to investigate the socio-racial-spatial distribution of existing and available community garden sites in Richmond, VA and to provide recommendations to maximize the benefits, minimize the costs, and support social equity and black self-determination in community gardens across the city of Richmond. To accomplish the former, the creation of a Community Garden Social Opportunity Score (CGSOS) and a Community Garden Racial Opportunity Score (CGROS) was necessary to rank communities on the basis of opportunities for social and racial justice. The CGSOS uses five dimensions for the formulation of a composite social opportunity score. These dimensions include education, employment, food security, housing, and poverty. The CGROS relies on a singular dimension: racialized status. For this plan, communities are defined by US Census block groups, which are a common unit of study in urban research. For the purposes of this analysis, community gardens refer to the existing and available publicly owned sites permitted through the Richmond Grows Gardens (RGG) program in the city. This analysis does not include private community gardens or other urban farms.

The use of geographic information systems (GIS) software was necessary to perform the spatial analysis and rank the community garden sites based on their existence within communities of higher social and racial opportunity. Likewise, SPSS software was used to produce descriptive statistics and classify groups of garden sites based on their opportunity scores.

Having identified the socio-spatial distribution of community garden sites, interviews were conducted with the stewards of existing community gardens and the City of Richmond's Community Garden Coordinator for the RGG program. These interviews served to gain insight into how decisions are made regarding the design, infrastructure, and process of community gardens around the city. Framed by the perspectives and values identified in the background research, this insight was synthesized with the quantitative findings and used to make recommendations on future goals, objectives, and actions. The entire process is guided by the following research questions:

- In which Richmond communities would community gardens have the greatest opportunity to advance social equity and black self-determination?

- How are decisions made on the design, infrastructure, and process of community garden sites in Richmond?

- What are the ways in which the design, infrastructure, and process of community gardens can support social equity and black self-determination?

4.1 | Data Collection

The first part of this research is concentrated on producing and analyzing the spatial distribution of communities that would be most impacted and/or receive the most benefits from community gardens relative to other communities in Richmond, Va. While the demographic and spatial data is publicly available, this plan relies heavily on original research for the creation of a ranked index to determine the final CGSOS. Therefore, this plan draws on techniques and research methods used for similar analyses like the 2021 Health Equity Index and the 2022 Food Security Index created by Conduent Healthy Communities Institute. Each Index gives zip codes, census tracts, counties, and county equivalents an index value from 0 (low need) to 100 (high need). For the 2021 Health Equity Index, the measure is determined by socioeconomic need correlated with poor health outcomes. For the Food Security Index, the measure is determined by food access correlated with economic and household hardship. In both cases, the indexes use demographic data correlated with their target to provide justification for public investment and policy. Furthermore, to help find locations of highest need in the region, the selected locations were ranked 1 (low need) to 5 (high need) based on their index value relative to similar locations within the region. Similarly, the Area Deprivation Index created by researchers at the University of Wisconsin School of Medicine and Public Health (UWSMPH) Center for Health Disparities Research identifies neighborhoods facing health disadvantages. They created the index by combining several indicators from American Community Survey 5-year estimates. These were weighted according to the results of a statistical analysis and combined into a single score. While neither of these indexes measure community garden opportunity, they provide a useful framework for building the social index in this plan.

For this research, demographic data was obtained via the U.S. Census website. Demographic statistics were downloaded at the block group level for the city of Richmond. Several characteristics of block groups, including race, poverty, SNAP enrollment, unemployment, and rental units were obtained from the 2020 Decennial Census and from the American Community Surveys (ACS) 2020 5-year estimates. The block group feature layers used to map the block group data was provided by the U.S. Census Tigerline Geodatabase for 2020. Similarly, the addresses of RGG sites were downloaded as feature layers from the City of Richmond's official GIS database.

The email addresses of community garden stewards are publicly available on the Community Gardens webpage on the City of Richmond website. The email addresses were used to contact stewards and schedule interviews.

4.2 | Community Garden Opportunity Scores

In which Richmond communities would community gardens have the greatest opportunity to advance social equity and black self-determination?

Developing an index requires a clear understanding of the concept and components being measured. The concept of community garden social opportunity is derived from the theoretical frame identified in the background section and consists of five dimensions including education, employment, food security, housing, and poverty. For each census block group component, the indicator was standardized by ranking each block group in comparison to the other block groups in the city. The five dimensions were then summed, and the total of each block group ranked relative to the other block group totals (Table 1). This produced the final CGSOS. For the CGROS, there was a sole indicator which was ranked in comparison with other block groups (Table 2).

Table 1: Community Garden Social Opportunity Score (CGSOS)

Dimensions	Census Block Group Components	Opportunity	Source
Education	regular high school diploma or alternative credential rate	Community gardens can serve as learning centers.	Table B15003 ACS 2020
Employment	unemployment rate	Community gardens can teach skills and provide opportunities for employment.	Table B23025 ACS 2020
Food Security	SNAP enrollment rate	Community gardens can increase a community's input into the growing, processing, and distribution of their food.	Table B19058 ACS 2020
Housing	rental occupancy rate	Community gardens can offer space for individuals who live in apartments or do not share the housing stability of owner-occupants.	Table B25003 ACS 2020

Poverty	poverty rate	Community gardens can attract investment and improve the economic prospects of a neighborhood.	Table B17017 ACS 2020

Table 2: Community Garden Racial Opportunity Score (CGROS)

Dimensions	Census Block Group Components	Opportunity	Source
Racialized Status	black identification rate	Community gardens can serve to connect African Americans with the land and promote self-determination and collective agency	Table P1 Census 2020

Having calculated opportunity scores for each block group, the next step was the spatial analysis. Using the geographic identification number (GEOID), the opportunity scores were joined to the Richmond block groups feature layer in ArcGIS. The block groups feature layer was symbolized to create a choropleth map shading each block group according to its score within five equal intervals. Next, the locations of RGG sites were overlaid on the choropleth map and the Generate Near tool was used to identify block groups within 150 feet of any given site. If multiple block group scores were within the radius, the scores were averaged to produce a final score. The distribution of RGG sites and their corresponding CGSOS and CGROS was examined in SPSS, and a quadrant graph was created to demonstrate sites above and below the median in both categories.

4.3 | Stakeholder Interviews

How are decisions made on the design, infrastructure, and process of community garden sites in Richmond?

Interviews were conducted with stewards for existing community gardens and the City Community Garden Coordinator in charge of the RGG program. These interviews were conducted via Zoom and in person over the course of two months between February and March of 2023. For the

garden stewards, the questions focused on identifying the decision-making behind the design, infrastructure, and process of the community garden site (Appendix A). The questions for the City Community Garden Coordinator were focused on the background, opportunities, and challenges of the RGG program. Notably, the questions were open-ended and other more specific questions were asked based on the interviewee's response. All of the garden stewards were contacted but only six were interviewed. This was due, in part, to a lack of response from gardeners and, in part, due to the time constraints of the research. The garden stewards who were interviewed, however, were diverse and representative of the gardens (Appendix B).

Analytical Methods

Interviews were recorded and memorandums of the interviews created (Appendix C). These memorandums were used to highlight important takeaways related to the decision making behind the design, infrastructure, and process of community gardens within the RGG program. As interviews progressed, reoccurring themes were identified and presented as findings.

4.4 | Synthesis

What are the ways in which the design, infrastructure, and process of community gardens can support social equity and black self-determination?

Finally, the existing literature and the research findings were synthesized to determine the strengths, weaknesses, and opportunities of community gardens to support social equity and black self-determination. This synthesis provides the basis for establishing a credible vision for the future of community gardens and informs pertinent recommendations in support of that vision. Guided by the theoretical framework which privileges social equity and racial liberation, garden sites with higher opportunity scores were highlighted for special attention.

Figure 17: Chilling at Sankofa Community Orchard via Jennifer VanSteenburgh

5.0 | Findings

This section reports the research findings of the community garden social and racial opportunity scores for city block groups and the GIS analysis of both existing and available community garden sites. Additionally, this section presents several key themes that emerged from the interviews with the garden stewards as well as the RGG Community Garden Coordinator. Lastly, it includes a final synthesis of the strengths, weaknesses, and opportunities of community gardens to support social equity and black self-determination in the city of Richmond.

5.1 | Community Garden Opportunity Scores

Figure 18 displays the social opportunity scores of block groups across the city of Richmond. The block groups are shaded in five equal intervals and demonstrate the spatial distribution of community garden social opportunity across the city. In general, block groups in the northeast and throughout the south of the city have higher social opportunity scores. Figure 19 displays the racial opportunity scores of block groups across the city of Richmond. Like Figure 20, the block groups are shaded in five equal intervals and demonstrate the spatial distribution of community garden racial opportunity across the city. The map displays high concentrations of racial opportunity in the northeast and southeast of the city. For a complete table of block group scores see Appendix D.

Figure 18: Map of Community Garden Social Opportunity Scores (CGSOS)

Map Legend

Social Opportunity →

Low ——— High

Richmond Grows Gardens Sites

○ Existing (15)
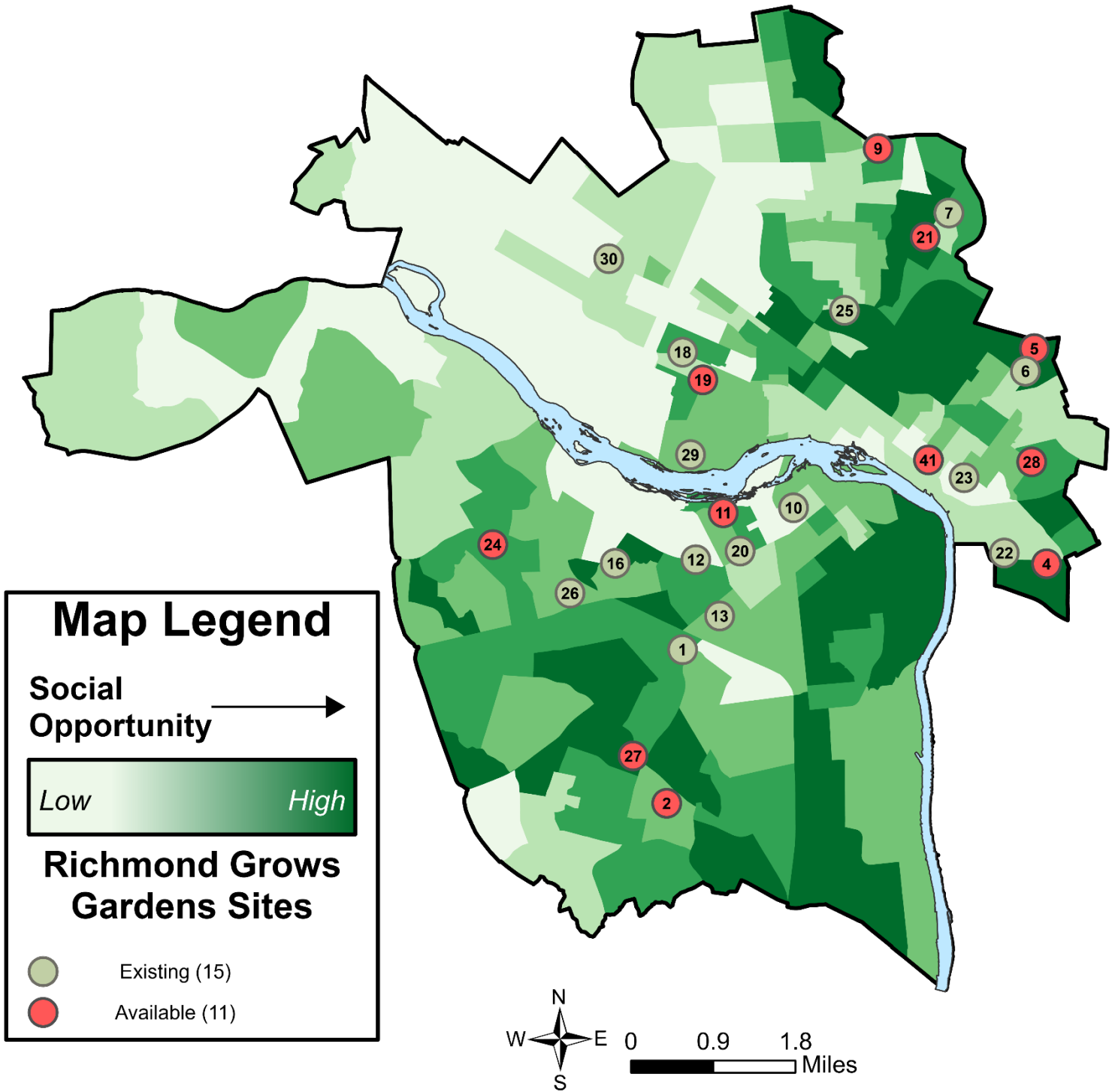
● Available (11)

Figure 19: Map of Community Garden Racial Opportunity Scores (CGROS)

Map Legend

Racial Opportunity →

Low ▬▬▬▬ High

Richmond Grows Gardens Sites

⬤ Existing (15)
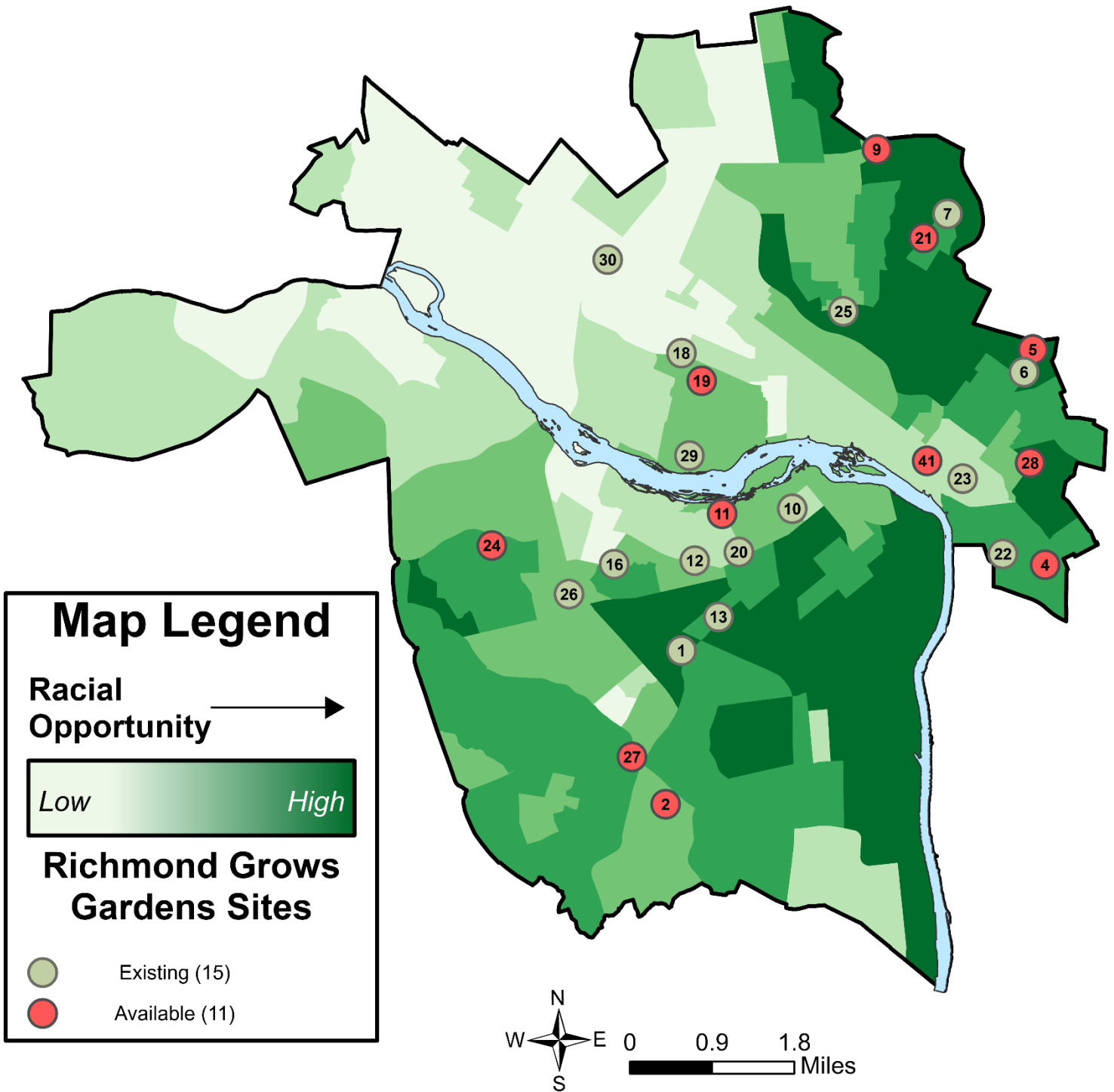
🔴 Available (11)

The scores of the existing and available community garden sites are evidenced in Table 3 and Table 4. Of the existing sites, Charles S. Gilpin and Roots of Woodville have the highest social opportunity and racial opportunity scores. Chimborazo Playground Community Garden and Humphrey Calder have the lowest social opportunity and racial opportunity scores. Of the available sites, Site ID 4 and Site ID 5 have the highest social opportunity scores. Site ID 5 and Site ID 28 have the highest racial opportunity scores. The lowest social opportunity scores are Site ID 41 and Site ID 19, and the lowest racial opportunity scores are Site ID 41 and Site ID 11.

Table 3: Richmond Grows Gardens Existing Sites Opportunity Scores

Site ID	Garden Name	Address	Social Opportunity Score	Racial Opportunity Score
1	Stockton Community Garden	3911 Stockton Street	72	80
6	Roots of Woodville Neighborhood Garden	1901 N 28th Street	99	99
7	6 Points Community Garden	3001 3rd Avenue	52	83
10	Alice Fitz Community Garden	1303 Perry Street	20	43
12	McDonough Community Garden	3300 McDonough Street	33	37
16	Owl Orchard Community Garden	807 W 44th Street	66	61
13	Broad Rock Community Garden	404 E Broad Rock Road	53	86
18	Uptown Community Garden	2201 Parkwood Avenue	47	32
20	Fonticello Food Forest	2813-A Bainbridge Street	40	30
22	Powhatan Hill Community Garden	20 Williamsburg Avenue	32	72

23	Chimborazo Playground Community Garden	3000 E Grace Street	6	24
25	Charles S. Gilpin Community Garden	1420 St. Peter Street	100	97
26	Sankofa Community Orchard	313 Covington Road	60	51
29	Maymont Community Garden	1907 Texas Avenue	58	55
30	Humphrey Calder Community Garden	4 N Thompson Street	21	16

Table 4: Richmond Grows Gardens Available Sites Opportunity Scores

Site ID	Address	Requires Raised Bed	Water Source	Social Opportunity Score	Racial Opportunity Score
2	4300 Ferguson Lane	no	none	51	53
4	1422 ⅓ Garber Street	yes	cistern	90	78
5	2700 Fairfield Avenue	yes	none	99	99
9	207 E Ladies Mile Avenue**	yes	none	53	71
11	712 W 26th Street	yes	none	53	39
19	1800 Maplewood Avenue	yes	none	36	53
21	2600 2nd Avenue	yes	none	67	83

24	6033 Glenway Drive	no	none	**68**	**70**
27	4857 Warwick Road	no	none	**85**	**63**
28	1201 ½ N 38th Street	yes	none	**70**	**88**
41	101 N 24th Street	no	none	**11**	**28**

**As of writing, this parcel is being transferred to the Maggie Walker Community Land Trust for use as affordable housing

The opportunity scores are mapped onto a quadrant graph in Figure 20. The quadrants are determined by the median score for the existing and available garden sites and classify the gardens based on whether their scores fall above or below the median for social and racial opportunity. The median social opportunity score is 53 and the median racial opportunity score is 62. Per Figure 20, ten existing and available garden sites fall at or below the median for both racial and social opportunity. Four sites fall at or below the median for social opportunity but above the median for racial opportunity. Similarly, four sites fall at or below the median for racial opportunity but above the median for social opportunity. Eight garden sites fall above the median for both social and racial opportunity. Figure 21 demonstrates where the available sites fall within the quadrant. There are four at or below the median for both social and racial opportunity. There is one at the median for racial opportunity but above the median for social opportunity and one garden at the median for social opportunity but above the median for racial opportunity. Lastly, there are six available sites above the median for social and racial opportunity.

Figure 20: Richmond Grows Gardens Sites Quadrant Graph
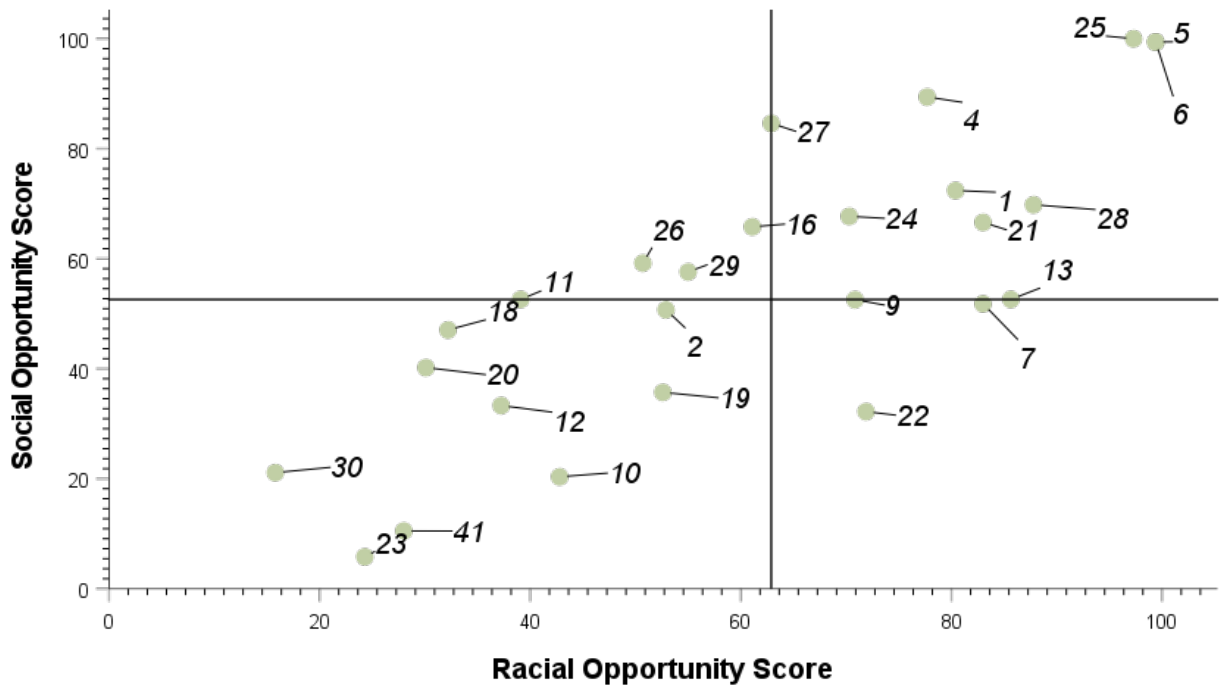
Figure 21: Richmond Grows Gardens Sites Quadrant Graph: Available Sites
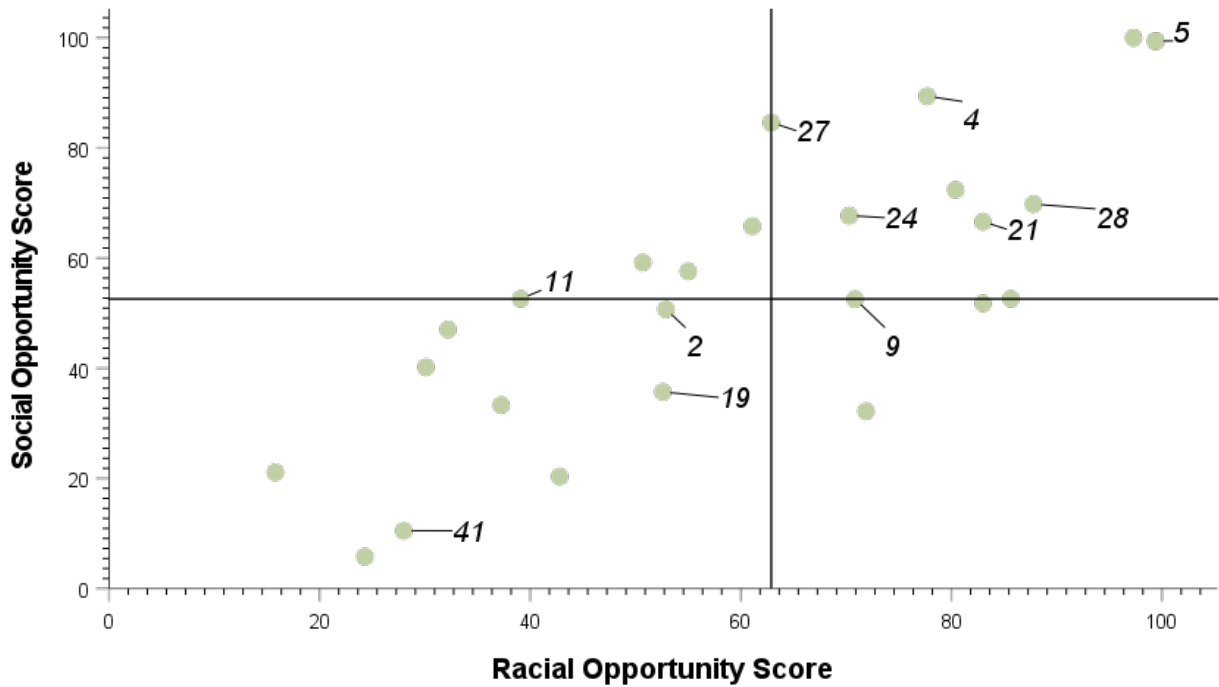
5.2 | Interview Findings

This section presents several themes that emerged from the interviews regarding the decision-making around the design, infrastructure, and process of community gardens in the city of Richmond.

Figure 22: Richmond Grows Gardens Sites Quadrant Graph: Garden Sites for Stewards Interviewed
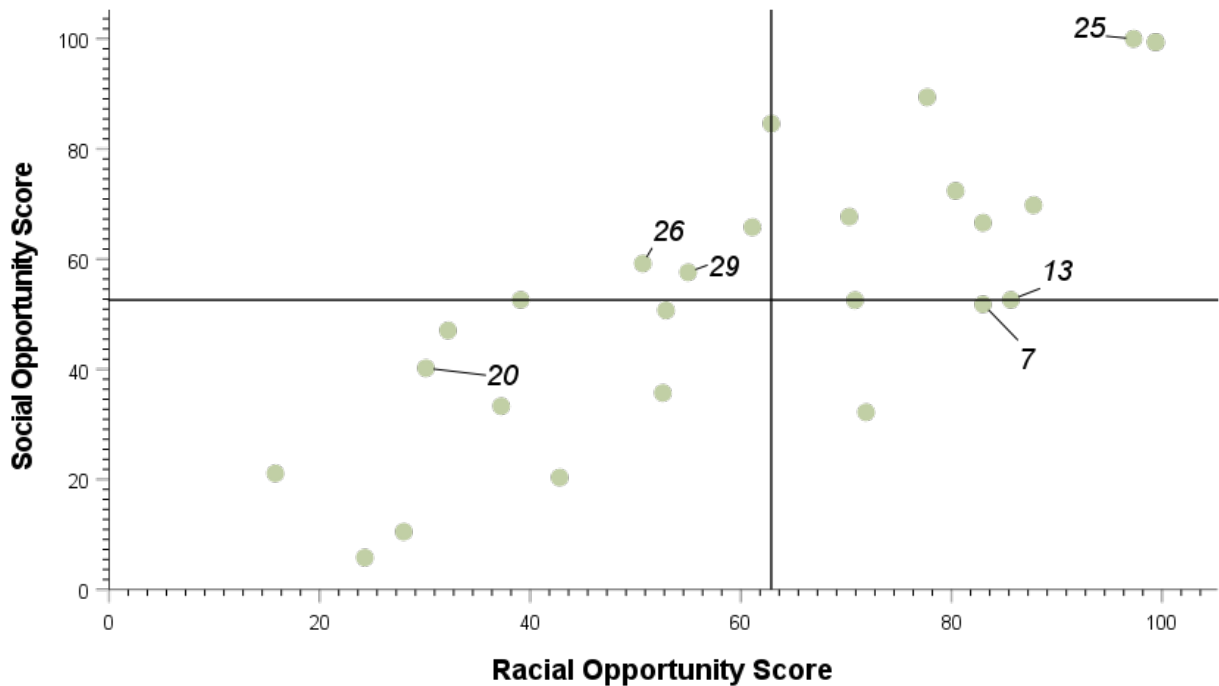
Tradeoffs in priorities.

The interviews revealed a diverse range of motivations behind their stewardship of the community gardens. Garden stewards reported environmental stewardship, neighborhood beautification, food access and education, placemaking, community building, and political organizing as reasons behind their decision to manage a community garden. While these motivations often overlapped, stewards reported trade-offs between visions depending on their primary motivations. These tradeoffs are reflected in the different approaches to the design, infrastructure, and process of the community garden spaces.

Where environmental stewardship was a principal motivation, garden stewards reported using permaculture design techniques, focusing on native plants, and thinking carefully about principles of agroecology. These stewards were willing to give up space for annual kitchen gardens (food production) to allow for perennial spaces that would nourish other species and the larger ecosystem. Other garden stewards focusing on neighborhood beautification lauded these

environmental goals but made decisions on design based on aesthetics and ease of maintenance. Planting species that were beautiful, available, and easy to maintain trumped considerations of biodiversity or maximizing ecosystem services.

Several garden stewards described food access and education as critical objectives of their gardens. Still, they noted the tension between being a full-on production space and being community facing. More intensive agricultural land-use techniques could produce more food but would

Figure 23: Powhatan Hill Park Community Garden via richmondgrowsgardens.org

also create safety hazards for children and community members visiting the site. For these stewards, ensuring that their space was accessible and attractive to members of the community took priority.

In addition, most garden sites included some level of programming but how much or how little varied depending on their goals. Some stewards took a more laidback approach to programming, wanting the community to use the space as they saw fit. Other stewards with more of a focus on education, created programming budgets and programmed extensively including workshops, training programs, and volunteer groups. The amount of time stewards had available to plan and implement the programming was also an important factor in the intensity of the programming.

Flexibility and adaptability to site constraints.

Community Gardens must contend with siting challenges that require stewards to be flexible and constantly iterate on-site. These challenges include access to fundamental resources such as water and electricity, land degradation, spatial challenges including pedestrian access and proximity to neighboring homes, and illicit activity occurring within the site.

Many of the interviewees acknowledged that access to water was a significant challenge. Water is a fundamental resource for any gardening enterprise, and stewards engage in different strategies to address a lack of water access. In the initial stages, one steward described connecting a hose to a neighbor's house until the city was able to help build a rainwater catchment system. One steward, whose partner is a woodworker, collaborated with the city to build a water tower. The tower includes rainwater catchment but is also periodically refilled by the Parks Department. One steward reported applying for a grant to allow for an engineer to install water lines throughout the site. The RGG Coordinator reported some spaces connecting to park bathrooms and also mentioned that the city managed to successfully pay for water connections at a couple of sites. However, not all gardens want to be dependent on when the City can provide

labor and resources. Some stewards described needing to make tough choices on vegetation because of a lack of water.

In some cases, RGG sites have previously been occupied by housing and other built structures. As a result, raised beds or serious soil amendments are required for anything to grow. Stewards reported trying one tactic and then pivoting when it did not work. Interviewees coalesced around the importance of trial and error in managing a garden. Importantly, garden stewards noted that vehicular traffic at high speeds and lack of pedestrian infrastructure created safety hazards at their sites. One steward acknowledged that part of their decision to use the space as a beautiful planting area rather than as a traditional community garden was the site's location at a busy intersection with no crosswalks and blind spots for incoming traffic. Another steward with similar concerns has petitioned the City to install some speed bumps to mitigate the hazard.

Proximity to neighboring homes has also forced gardens to move their infrastructure around. The interviewees emphasized the need to adapt to how people use the site and be able to negotiate with the nearby neighbors. This is important due to concerns of illicit activity, both perceived and real, that are associated with community gardens. Drug use in the gardens can create tensions with nearby neighbors and being community facing has also led to theft. Additionally, the interviewees noted that some neighbors don't like a lot of "hanging out" around their properties and are worried about vandalism when built elements are added to the garden. These are some of the real challenges that stewards need to navigate.

Community is the key deliverable.

Figure 24: Relaxing at Broad Rock Community Garden via richmondgrowsgardens.org

The interviewees emphasized the community aspect of the gardens. For all of the stewards and the RGG Coordinator, cultivating community is critical to the work of a community garden. To this end, the interviewees spoke of creating space for people, participating in the political process, expressing cultural values, and anchoring prosocial community development.

Community gardens are spaces for people to work with other people and feel part of something greater than themselves. Volunteers come because they believe in the value of the gardens and the benefits they provide to themselves and to others. Stewards mentioned people who met while volunteering becoming friends and hanging out elsewhere. Even for neighbors who do not actively garden at the sites, participating in leaf drives or bringing their compost to the space offers opportunities to bring more people into the fold. Having an attractive community garden also offers

people a space to recreate and enjoy themselves. Being a gardener or a volunteer is not a requirement. Gardens are spaces for all people. After all, most of the gardens are not just rows of plantings but include paths, shade structures, and seating so that people can come and congregate. Several gardens are close to other community assets like skateparks and playgrounds. The stewards emphasized this multi-functionality as key to bringing diverse groups together.

"The benefit of community gardens is you are not doing it alone."

– RGG Coordinator

Another important aspect to this theme is the work of community gardens to involve people in the political process. In some cases, they do so explicitly, but in others, they do so by raising awareness of important issues facing the community. Sites can be community hubs that anchor housing, environmental, or food justice movements. Often, gardens anchor multiple movements at the same time. In this way, community gardens foster deeper conversations around people's cultural values and are places that can provide a frame of reference for understanding oneself and one's relationships with others. By being shared spaces, community gardens encourage the development of prosocial values.

Demonstrating physical change and community power.

The stewards understand that community gardens will not solve food insecurity or nourish the entire ecosystem or beautify an entire neighborhood. Still, stewards were clear that the gardens are important as demonstrations of physical change and, importantly, demonstrations of the ability of communities to enact change. Fundamentally, gardens are demonstrations of community power.

Figure 25: Fonticello Food Forest Free Farm Stand via richmondgrowsgardens.org

Many stewards recognize the need for larger policy and system change to address questions of food insecurity and environmental stewardship. Nonetheless, the stewards are committed to the need for "revolution in progress." Community gardens may not solve food justice issues alone, and provide all food to all people, but they can provide some food to some people. They can teach individuals how to grow their own food and provide culinary and nutrition education. What they may not be able to produce, they can work with mutual aid groups to aggregate in their spaces. While effective ecological restoration needs to occur at regional and global scales, communities can demonstrate what that might look like by stewarding a garden.

The stewards ascribed great power to physically seeing a trash-strewn lot turn into a beautiful greenspace. In particular, stewards at gardens with higher social and racial opportunity scores noted the need to show people something beyond the realities of their neighborhood. Community gardens are important places for showing people that they can affect their lives rather than being the victim of circumstance. In tandem with demonstrating collective agency, gardens encourage self-empowerment, self-reliance, and self-efficacy.

"You can go through the cut and see all the brothers' slinging drugs and doing what they do, and you can see all the police…doing what they do, but between the drug dealers and the police, there is a damn farmer."

– Garden Steward

Importance of educating the youth.

Figure 26: Fonticello Food Forest Sign via verdantrichmond.org

A common theme amongst interviewees was the importance of involving younger people in the gardens. Gardens are spaces for youth to play that are also educational. This combination is critical to instilling prosocial values, nutrition education, and the importance of environmental stewardship in youth. Many stewards described programming aimed at kids and younger people. These included volunteer school trips, alternative to youth incarnation programs, teen workforce, youth days, and designated play areas. Stewards described specific events for kids around community engagement, education, and identifying leadership. Furthermore, the interviewees recounted individuals bringing their children to help garden and creating areas such as a "Log Land" and "Mulch Kitchen" for kids to help get them familiar with natural materials.

Complicated relationship with City Government.

The interviewees described a complicated picture of the relationship between the community gardens and the City. While there are benefits to stewarding gardens within the RGG, the stewards noted important frictions that challenge the gardens as well. On the benefits side, the support the RGG coordinator can offer by way of resource connecting is useful to gardens when they are first starting. The RGG coordinator can connect stewards with grants to build infrastructure and provide physical materials for use by the garden. Furthermore, the RGG program network can help provide labor as well.

However, land tenure and security are not guaranteed by participation in the RGG program. Historically, stewards described the threat of having their garden taken away for unclear violations. While rules have since been implemented to provide greater transparency for when the City can and cannot take gardens away, RRG permits are only valid for one year (with special exceptions) and must be consistently renewed. The lack of multi-year permits worries stewards with significant investments in the site. Previously available garden sites have been removed from the program for alternative uses. Councilmembers, with whom ultimate authority resides, have shown support, apathy, and opposition to gardens. Therefore, gardens within the program remain subject to political whims. Nonetheless, gardeners did band together as the "Coalition of Richmond Community Gardeners" and with the support of the Virginia Department of Health successfully petitioned City Council to change the ordinance to allow more kinds of gardens as well as the sale of produce on site.

While the relationship between the City and the gardens has improved since the early days of the program, the RGG coordinator cited challenges to the legitimacy and transparency of the program. These include working from a shadow budget and a lack of interdepartmental cooperation.

Equity requires intentionality.

Many stewards believe that equity is an important goal and that achieving equity requires spaces to be intentional about the populations they serve, the volunteers that engage with the site, and the representation of the community within the site. To be intentional about the populations they serve, stewards often go above and beyond the neighborhood outreach required in the RGG permitting process. Gardens give priority to the closest neighbors but are considerate of community members arriving from neighborhoods not serviced by a community garden. Stewards recommend observing the demographics of the volunteers to ensure that the space is inclusive. Additionally, garden stewards are explicit about the importance of art fixtures showing black faces as critical to making the spaces feel welcoming.
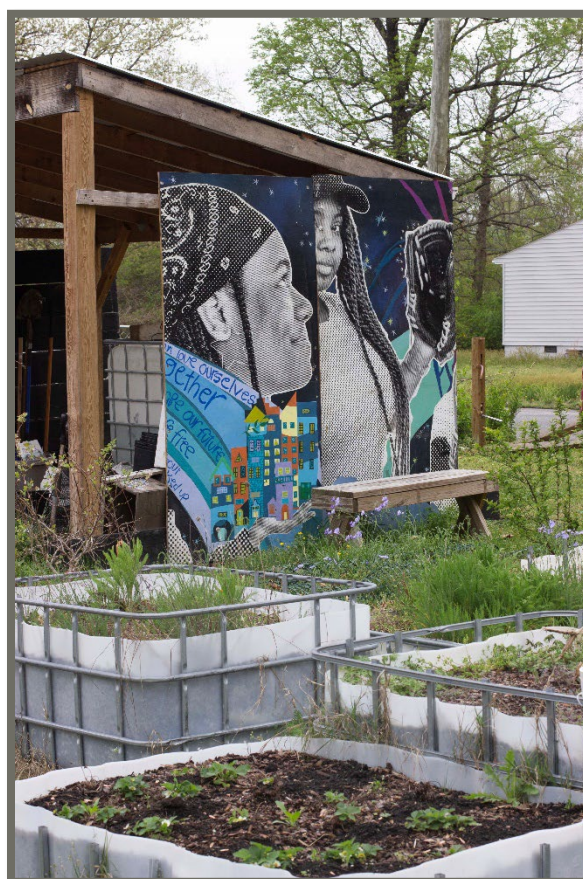
Figure 27: Murals at Sankofa Community Orchard via Jennifer VanSteenburgh

5.3 | Synthesis

Community Gardens are not panaceas for the inequitable social and racial landscape of the city of Richmond. Nonetheless, it is clear from the existing literature and the interview findings that community gardens are important opportunities to advance social equity and black self-determination. This section outlines the strengths, weaknesses, and opportunities of community gardens in the RGG to improve efforts to support social equity and black self-determination.

Strengths

The RGG community garden sites have a number of important strengths that can be built upon to support social equity and increase black self-determination. One of these strengths, the existence of established gardens with experienced stewards, is key. These stewards have strong social justice motivations and the know-how to create and manage community garden sites. Furthermore, these stewards are part of larger community networks and are well connected with mutual aid, community development, environmental, and food justice organizations throughout the city. These connections have been successful in advocating for policy change to improve the RGG program and, in concert with the City, in applying for and receiving grant monies.

Another strength is the variety of different garden sites and the many typologies of community garden structures permissible in the RGG program. As a result, stewards have flexibility in the design of their gardens. This flexibility allows for the development of garden sites tailored to their local communities.

Lastly, in the post-pandemic era, there has been significant enthusiasm surrounding community gardens. People are volunteering in larger numbers than before, with a perceived greater urgency to enjoy the benefits of community gardens. This is reflected by City leadership which touts the role of community gardens in meeting its sustainability goals.

Weaknesses

There are also important weaknesses of the RGG community garden sites that limit the possibilities of advancing social equity and racial liberation. In primus, site constraints threaten the ability of community gardens to grow and develop. These constraints include lack of water access, vehicle-related safety concerns, and maintenance challenges that can prevent the utilization of community garden sites in ways that support social equity and promote black self-determination.

Another key weakness of community gardens within the RRG program is a lack of land security. The community stewards do not own the land on which they manage the gardens. The land is owned by the city and garden stewards are leased the land through permits that require annual renewal. The properties are thus subject to the political whims of the current Council. The possibility of gardens having to leave spaces where they were building trust can cause real harm to the community members who were relying on the gardens.

Even more harmful is the lack of RGG sites in many communities with high opportunity scores, particularly in the southeast. The lack of existing and available sites in these areas denies access to communities that could stand to benefit from community gardens.

Importantly, the RGG program suffers from a lack of transparency and public awareness. Currently the gardens are funded through the budget set aside for the James River Park System. This obfuscates the funding process of the gardens from the general public. Additionally, information on the gardens is not updated regularly on the website and online information often does not match the on-the-ground conditions.

Opportunities

Leveraging the strengths and addressing the weaknesses of Richmond's community garden program presents opportunities for advancing social equity and promoting black self-determination. Community gardens represent important initiatives to improve educational and employment opportunities through workforce training and experiential learning programs. Additionally, community gardens serve populations that may not have the space or stability to grow at home. Community gardens are also important hubs in larger food justice networks that work to address food insecurity and access to nutritious foods. Importantly, community gardens can build community power and resilience and, when intentionally designed, provide inclusive spaces to demonstrate black self-determination through self-empowerment, self-reliance, and self-efficacy.

In Richmond, the community garden program should prioritize communities with higher social and racial opportunity scores. Currently, RGG sites range in low opportunity to high opportunity for both CGSOS and CGROS. Of the available sites, the sites above the median for both social and racial opportunity should be investigated for feasibility first. Figure 11 and Figure 12 demonstrate, however, that there are significant swaths of the southeast and northeast regions of the city with high scores but no RGG existing or available garden sites. Identifying sites to be made available in those block groups should likewise be a priority of the RGG program. In these communities, stewards should focus the design, infrastructure, and process of the gardens towards collective prosocial action to advance social equity in food access, education, and eradicating poverty. Where racial opportunity scores are high, stewards should be intentional about positive representations of the community within the space.

More generally, from the interviews, it is evident that increasing transparency, legitimacy, and interdepartmental cooperation are important actions to improve the RGG program writ large and would support the ability for gardens to navigate challenging site constraints. Furthermore, enhancing links amongst urban gardens and social and environmental justice organizations would offer greater possibilities for prosocial collective action. This may require the development of a larger umbrella organization that can leverage post-covid enthusiasm for community gardens and increasing environmental awareness to strengthen the RGG program as well as direct commitment to just causes across the city. Lastly, getting younger people involved in community gardening and educated on environmental issues, social equity, and black self-determination is

essential. This will ensure these ideas are taken forward into the future and what can only be imagined today can become real tomorrow.

Figure 28: Planting at Sankofa Community Orchard via Jennifer VanSteenburgh

Figure 29: Sankofa Community Orchard via Jennifer VanSteenburgh

6.0 | Recommendations

After synthesizing the relevant literature and research findings, the following vision statement was developed regarding Happily Natural Day and the opportunity for community gardens to advance social equity and promote black self-determination.

"Happily Natural Day is a leading organization in a prominent urban agriculture network, where community gardens are anchors of community power; advancing social equity and promoting black self-determination."

The subsequent recommendations outline the process of achieving this envisioned state.

1. **Support, organize, and expand urban agriculture in Central Virginia.**
2. **Inspire intentionality around social equity and black self-determination.**
3. **Make youth education a priority.**

These recommendations are supported by objectives and actions orientated towards the internal decision-making of Happily Natural Day as well as collaboration with public and private stakeholders. Much of the implementation of these recommendations will rely on convening individuals and groups to build relationships and advocate for policy change.

Recommendation 1: Support, organize, and expand urban agriculture in Central Virginia

Objective 1.1: Support the development of a comprehensive database of urban and peri-urban agricultural assets and activity in the Richmond region.

> **Action 1.1.1:** Identify and document the full range of urban agriculture assets and activity within the city of Richmond and surrounding counties of Henrico and Chesterfield. Consider expanding the scope to include Petersburg, Hopewell, and Colonial Heights.

The full range of urban agriculture assets and activity includes school and community gardens, urban farms and orchards, farmers markets, culinary spaces, and food hubs. Having this information is critical to a full understanding of the existing network and will be helpful for future planning efforts.

> **Action 1.1.2:** Establish a partnership with VCU GeoCore to create an ArcGIS Online interactive web mapping application to display basic information and relevant attributes of locally operated urban and peri-urban agricultural sites.

The VCU Center for Environmental Studies runs a collaborative partnership of students and researchers who integrate "geospatial technologies, methods, and personnel to advance a wide range of spatial research applications."[61] Existing connections between Happily Natural Day and faculty at VCU could be leveraged to advance a collaborative effort to create a public-facing online web mapping application. Importantly, this mapping application should include the social and racial opportunity score or similar equity measurement for each garden.

> **Action 1.1.3:** Establish a timeframe to ensure the web map is consistently updated to reflect conditions on the ground.

Databases are only useful if their information is accurate. Monitoring existing urban agricultural sites and staying appraised of new sites is necessary to ensure the web map is helpful to researchers, planners, and other stakeholders.

Objective 1.2: Increase the visibility and accessibility of the Richmond Grows Gardens program.

> **Action 1.2.1:** Recommend that the City of Richmond/Parks & Recreation website's Community Garden tab include a link to the Richmond Grows Gardens website and vice versa.

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[61] "VCU GeoCore."

Given that https://www.rva.gov/parks-recreation/community-gardens and https://www.richmondgrowsgardens.org include different information about the gardens, it is important that the public can find one when browsing the other. To assist the webpage viewer, the links should be displayed prominently.

> **Action 1.2.2:** Collaborate with the Community Garden Coordinator to establish a yearly Richmond Grows Gardens Fair, where community gardens and other relevant organizations can set up booths demonstrating and promoting their work.

The Richmond Grows Gardens Fair would be an opportunity for community garden stewards to network and for the program to highlight its work to the public. This fair could happen at Bryan Park near the Keeper's Cottage which is the current headquarters of the Richmond Grows Gardens program or even at Fonticello Park which currently hosts a community garden. Whatever the location, there should be enough open space to support heavy foot traffic. Additionally, food vendors and live music should be included to create a festival atmosphere and encourage attendance.

> **Action 1.2.3:** Convene the Community Garden Coordinator, The Office of Sustainability, and the Department of Public Works to expand the Richmond Grows Gardens program to permit beneficial plantings in City Right-of-Way.

Using the Richmond Grows Gardens framework, consider the creation of a permitting process whereby community members can adopt sections of Right-of-Way to garden and maintain. These can include the strips of land between the curb and the sidewalk, medians, and edge spaces around public facilities. Encourage the plantings to include native species and carefully consider request to plant food given proximity to automobile traffic.

> **Action 1.2.4**: Work with the Parks & Recreation Department to identify surplus city-owned real estate parcels to be considered for community garden sites.

Often when the city repossesses tax-delinquent properties it contracts with Motley's Auction Inc. to sell these surplus properties. Before the properties go to auction, there should be a careful review of the parcels for possible community garden locations. Notably, this review should be mindful of the need for more housing in the city.

Objective 1.3: Advocate for increased investment in community agriculture.

> **Action 1.3.1:** Orchestrate a grassroots advocacy campaign to urge City Council to allocate funds to the Parks and Recreation Department budget in order to waive water connection and operation fees for community gardens.

While some community garden sites already have their water fees paid for by the Parks and Recreation Department, all gardens should be able to access City water for free. Happily Natural Day can encourage community stakeholders to email their Council person and speak up at public comment during Council meetings to raise awareness of the need

for equal water access for all gardens. At a minimum, community members should demand the city waive portable water meter application fees.

> **Action 1.3.2:** Investigate the possibility of establishing a Memorandum of Understanding (MOU) with the Richmond Regional Planning District Commission (PlanRVA) to provide technical support in the form of a grant writing specialist who can identify and apply for grants on behalf of urban agriculture projects in the Richmond region.

There are competitive grants for planning and implementation projects regarding urban agriculture, including Federal money from the United States Department of Agriculture's (USDA) Office of Urban Agriculture and Innovation Production (OUAIP) and Housing and Urban Development's (HUD) Sustainable Communities Initiative (SCI). Additionally, private and non-profit groups offer microgrants that can be won to support garden infrastructure and activity. Having a dedicated individual to review and apply for applicable grants would maximize opportunities for funding. This partnership could also be used to disseminate funds to urban agriculture groups with less capacity. Critically, supporting urban agriculture aligns with PlanRVA's goals to improve the region's environmental health and resilience planning.

Objective 1.4: Explore alternative land tenure strategies for urban gardens.

> **Action 1.4.1:** Look into the formation of a City-funded nonprofit urban land trust to secure garden sites on behalf of community groups.

In 1996, the City of Chicago established NeighborSpace, an urban land trust tasked with acquiring properties and providing permanent protection against potential development. Today, NeighborSpace stewards 109 community garden sites across the City of Chicago.[62] Further research into their partnership structure is required to see if the city of Richmond should fund a similar organization and move community gardens into a long-term trust.

> **Action 1.4.2:** Assemble public and private stakeholders to review the possibility of establishing a conservation easement on community garden sites.

Conservation easements are voluntary legal agreements between property owners and government agencies that permanently protect land for conservation purposes. In Virginia, conservation easements held by the City of Richmond must meet the requirements outlined in the Open Space Lands Act. Any easements held by Happily Natural Day would have to meet the requirements of the Virginia Conservation Easement Act. Further research is needed to investigate the Land Preservation Tax Credit program and the

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[62] "NeighborSpace."

Virginia Land Conservation Foundation criteria to determine if a conservation easement is a viable strategy for securing community gardens in perpetuity.

Recommendation 2: Inspire intentionality around social equity and black self-determination.

Objective 2.1: Encourage community garden stewards to faithfully represent the communities they serve.

Action 2.1.1: Urge the Parks and Recreation Department to prepare a community garden equity information sheet to clearly communicate the importance of being mindful of neighborhood demographics.

The creation of a clear document delineating the relationship between community gardens and equity could help stewards think intentionally about their design, infrastructure, and process. This document could include information on the social and racial opportunity scores or similar equity measurement for each garden site.

Action 2.1.3: Propose that the steward for the 6 Points Community Garden collaborate with a local artist to add a small but prominent public art fixture at their site that is representative of the demographics of the surrounding neighborhood.

Installing a small mural or similar art fixture would contribute to the 6 Points Community Garden steward's expressed goals of neighborhood beautification and getting the surrounding community more involved in the garden. Since the garden has a racial opportunity score of 83, this art fixture should engage a local artist and be intentional about representing black people. By seeing themselves in the space, the community may feel inspired to come out and volunteer at the garden.

Objective 2.2: Prioritize community garden sites in communities with higher social and racial opportunity scores.

Action 2.2.1: Establish a new community garden at 2700 Fairfield Avenue.

2700 Fairfield Avenue is the Richmond Grows Gardens site with the highest social and racial opportunity score. Plans for another community garden should prioritize this location.

Action 2.2.2: Advise the Community Garden Coordinator to target outreach, programing, funding, and infrastructure to garden sites with social and racial opportunity scores above the median.

In order to maximize the benefits of community gardens to advance social equity and promote black self-determination, Richmond should highlight sites with higher opportunity

scores for focused policies and programs. Happily Natural Day can encourage the Community Garden Coordinator to prioritize available resources to these sites.

Objective 2.3: Coordinate collaborative efforts between private sector, public sector, and non-profit organizations to strengthen a common commitment to social equity and black self-determination.

> **Action 2.3.1**: Convene community stakeholders and establish a Food Equity Council.

Happily Natural Day should partner with the public and private stakeholders to create a taskforce charged with developing guidelines for a food policy council committed to equity through food system change. This council would bring together stakeholders from diverse food-related sectors and examine the existing food system for opportunities to promote food sovereignty, improve health outcomes, and bolster regenerative practices.

> **Action 2.3.2**: Collaborate with an artist or artists on the creation of a photography exhibit highlighting physical change and community power centered around the work of community gardens.

Art is a powerful tool for bringing people together emotionally and for expressing abstract concepts. A photography exhibit of the work of community gardens over time would highlight the physical changes of these spaces and evoke the power of everyday people to affect the built environment.

> **Action 2.3.3:** Connect with Africana studies programs at local universities to host a series of lectures on Africana philosophy and history at Sankofa Community Orchard.

Sankofa Community Orchard is full of murals of important black leaders and intellectuals like Audre Lorde, George Washington Carver, and Amilcar Cabral. In addition, Sankofa includes several free libraries with radical and revolutionary books on the topics of community building and sociology. Sankofa could extend its contribution as a space for Africana political education by hosting lectures and talks with professors in these fields.

Objective 2.4: Demand that city planners confront and counter urban agriculture's contributions to displacement.

> **Action 2.4.1:** Support and collaborate with affordable housing organizations to advocate for stronger affordable housing protections and creative policies to address Richmond's housing crisis.

By connecting with a larger network of affordable housing organizations and similar groups, Happily Natural Day can situate urban agriculture planning within a variety of other anti-displacement efforts. As community hubs, community gardens can organize

community members to advocate for stronger housing policy and better protections for long-term community members.

> **Action 2.4.2:** Request that city planners' study potential zoning changes to incentivize space for urban agriculture in commercial development projects.

The city of Richmond is in the process of considering three significant zoning changes as staff prepare to rewrite the zoning ordinance in the next few years. This presents a window of opportunity for urban agriculture advocates to request that the Planning Department study zoning changes to incentivize space for urban agriculture in commercial development projects.

Recommendation 3: Make youth education a priority.

Objective 3.1: Connect with youth organizations and schools to improve community garden programming and outreach targeted for kids.

> **Action 3.1.1:** Partner with Fit4Kids and endorse the expansion of the RGG program or the creation of a similar program to implement learning gardens at every public school in the city. Prioritize learning gardens at schools in communities with high social or racial opportunity.

Public school campuses are accessible spaces where children can get engaged in the planting, growing, harvesting, and tasting of fruits and vegetables. Greater Richmond Fit4Kids is already implementing programming to create edible gardens at dozens of partner schools. However, they are not at every school. Combining the RGG model with the Fit4Kids Learning Gardens, Parks and Rec could establish potential garden sites for every school and advertise for Garden Educators to lead lessons and engage students in after-school garden clubs.

> **Action 3.1.2:** Petition Richmond Public Schools (RPS) to create an environmental stewardship program where students are encouraged to visit and volunteer at community gardens around the city.

Fairfax County Public Schools in Virginia have an environmental stewardship program called "Get2Green," which encourages student eco-teams to engage in hands-on environmental action including tending to edible gardens.[63] A similar program with RPS could support youth engagement with urban agriculture.

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[63] "Home | FCPS Get2Green."

Objective 3.2: Encourage community gardening programing targeted at kids of all ages.

Action 3.2.1: Continue to collaborate with Groundwork RVA to expand the reach of their Green Team programming.

Groundwork RVA is an organization dedicated to creating opportunities for Richmond's youth to get involved in green infrastructure development. Happily Natural Day should continue to collaborate with Groundwork RVA's Green Team program to engage students on neighborhood climate resilience and healthier lifestyles.

Action 3.2.2: Create a summer leadership program targeted at rising high school seniors centered around urban agriculture and food justice that incorporates lessons on social equity and black self-determination.

Happily Natural Day could consider establishing a summer leadership program that brings together students from diverse public and private schools in the region. This program could be around 3-4 weeks with some classroom element, community service aspect, and educational field trip component.

Action 3.2.3: Hire a social media and marketing intern to create interactive social media videos for Tik Tok, YouTube Shorts, and Instagram Reels.

Social media engagement is a critical strategy to engage with today's youth. However, not all social media is equal in this respect and short-form video content is especially influential among younger generations.

Action 3.2.4: Maintain operations at the Brook Road Youth Farm and encourage similar gardens at available RGG program sites.

The Brook Road Youth farm is a community garden centered on youth engagement. Happily Natural Day should continue to operate this garden and encourage others to develop similar models at available RGG program sites, with priorities to those with higher opportunity scores.

7.0 | Implementation

Recommendation 1: Support, organize, and expand urban agriculture in Central Virginia		
Action	Timeline	Potential Partners
Objective 1.1: Support the development of a comprehensive database of urban and peri-urban agricultural assets and activity in the Richmond region.		
Action 1.1.1: Identify and document the full range of urban agriculture assets and activity within the city of Richmond and surrounding counties of Henrico and Chesterfield. Consider expanding the scope to include Petersburg, Hopewell, and Colonial Heights.	Short- to medium-term	Department of Parks and Recreation, VCU Center for Environmental Studies
Action 1.1.2: Establish a partnership with VCU GeoCore to create an ArcGIS Online interactive web mapping application to display basic information and relevant attributes of locally operated urban and peri-urban agricultural sites.	Short- to medium-term	Department of Parks and Recreation, VCU Center for Environmental Studies
Action 1.1.3: Establish a timeframe to ensure the web map is consistently updated to reflect conditions on the ground.	Short- to medium-term	Department of Parks and Recreation, VCU Center for Environmental Studies
Objective 1.2: Increase the visibility and accessibility of the Richmond Grows Gardens program.		
Action 1.2.1: Recommend that the City of Richmond/Parks & Recreation website's Community Garden tab include a link to the Richmond Grows Gardens website and vice versa.	Short-term	Department of Parks and Recreation

Action 1.2.2: Collaborate with the Community Garden Coordinator to establish a yearly Richmond Grows Gardens Fair, where community gardens and other relevant organizations can set up booths demonstrating and promoting their work.	Short- to medium-term	Department of Parks and Recreation, Community Garden Stewards
Action 1.2.3: Convene the Community Garden Coordinator, The Office of Sustainability, and the Department of Public Works to expand the Richmond Grows Gardens program to permit beneficial plantings in City Right-of-Way.	Short- to medium-term	Department of Parks and Recreation, Office of Sustainability, Department of Public Works
Action 1.2.4: Work with the Parks & Recreation Department to identify surplus city-owned real estate parcels to be considered for community garden sites.	Ongoing	Richmond Real Estate Assessor's Office, Department of Parks and Recreation
Objective 1.3: Advocate for increased investment in community agriculture.		
Action 1.3.1: Orchestrate a grassroots advocacy campaign to urge City Council to allocate funds to the Parks and Recreation Department budget in order to waive water connection and operation fees for community gardens.	Short- to medium-term	City Council, Department of Public Utilities, Department of Parks and Recreation, Office of Equitable Development
Action 1.3.2: Investigate the possibility of establishing a Memorandum of Understanding (MOU) with the Richmond Regional Planning District Commission (PlanRVA) to provide technical support in the form of a grant writing specialist who can identify and apply for grants on behalf of urban agriculture projects in the Richmond region.	Medium-term	PlanRVA
Objective 1.4: Explore alternative land tenure strategies for urban gardens.		
Action 1.4.1: Look into the formation of a City-funded nonprofit urban land trust to secure garden sites on behalf of community groups.	Short-term	Maggie Walker Community Land Trust

Action 1.4.2: Assemble public and private stakeholders to review the possibility of establishing a conservation easement on community garden sites.	Ongoing	Virginia Department of Conservation and Recreation, City Council, Department of Parks and Recreation

Recommendation 2: Inspire intentionality around social equity and black self-determination.

Action	Timeline	Potential Partners
Objective 2.1: Encourage community garden stewards to faithfully represent the communities they serve.		
Action 2.1.1: Urge the Parks and Recreation Department to prepare a community garden equity information sheet to clearly communicate the importance of being mindful of neighborhood demographics.	Short-term	Department of Parks and Recreation
Action 2.1.3: Propose that the steward for the 6 Points Community Garden collaborate with a local artist to add a small but prominent public art fixture at their site that's representative of the demographics of the surrounding neighborhood.	Short-term	6 Points Community Garden Steward, Jay Bordeaux
Objective 2.2: Prioritize community garden sites in communities with higher social and racial opportunity scores.		
Action 2.2.1: Establish a new community garden at 2700 Fairfield Avenue.	Medium- to long-term	Department of Parks and Recreation
Action 2.2.2: Advise the Community Garden Coordinator to target outreach, programing, funding, and infrastructure to garden sites with social and racial opportunity scores above the median.	Short-term	Department of Parks and Recreation
Objective 2.3: Coordinate collaborative efforts between private sector, public sector, and non-profit organizations to strengthen a common commitment to social equity and black self-determination.		

Action	Timeline	Potential Partners
Action 2.3.1: Convene community stakeholders and establish a Food Equity Council.	Medium- to long-term	Richmond City Health Department, Richmond Food Justice Alliance, Richmond Black Restaurant Experience
Action 2.3.2: Collaborate with an artist or artists on the creation of a photography exhibit highlighting physical change and community power centered around the work of community gardens.	Medium-term	VCU School of Arts, the Valentine Museum, Black History Museum & Cultural Center of Virginia
Action 2.3.3: Connect with Africana studies programs at local universities to host a series of lectures on Africana philosophy and history at Sankofa Community Orchard.	Short- to medium-term	William & Mary African Studies program, Virginia State University Africana Studies program, The Carter G. Woodson Institute at the University of Virginia, Virginia Union Department of African American Studies, and VCU Department of African American Studies
Objective 2.4: Demand that city planners confront and counter urban agriculture's contributions to displacement.		
Action 2.4.1: Support and collaborate with affordable housing organizations to advocate for stronger affordable housing protections and creative policies to address Richmond's housing crisis.	Short- to medium-term	Richmond Tenants Union, Better Housing Coalition, Kinfolk Community RVA, Virginia Community Voice, The Neighborhood Resource Center
Action 2.4.2: Request that city planners' study potential zoning changes to incentivize space for urban agriculture in commercial development projects.	Short- to medium-term	Zoning Administration Office, Office of Equitable Development, Office of Sustainability, Green City Commission

Recommendation 3: Make youth education a priority.

Action	Timeline	Potential Partners
Objective 3.1: Connect with youth organizations and schools to improve community garden programming and outreach targeted for kids.		

Action 3.1.1: Partner with Fit4Kids and endorse the expansion of the RGG program or the creation of a similar program to implement learning gardens at every public school in the city. Prioritize learning gardens at schools in communities with high social or racial opportunity.	Medium- to long- term	Department of Parks and Recreation, Fit4Kids, Richmond Public Schools
Action 3.1.2: Petition Richmond Public Schools (RPS) to create an environmental stewardship program where students are encouraged to visit and volunteer at community gardens around the city.	Short- to Medium- term	Richmond Public Schools, Office of Sustainability
Objective 3.2: Encourage community gardening programing targeted at kids of all ages.		
Action 3.2.1: Continue to collaborate with Groundwork RVA to expand the reach of their Green Team programming.	Ongoing	Groundwork RVA
Action 3.2.2: Create a summer leadership program targeted at rising high school seniors centered around urban agriculture and food justice that incorporates lessons on social equity and black self-determination.	Medium- to long- term	Richmond Area High Schools
Action 3.2.3: Hire a social media and marketing intern to create interactive social media videos for Tik Tok, YouTube Shorts, and Instagram Reels.	Short-term	
Action 3.2.4: Maintain operations at the Brook Road Youth Farm and encourage similar gardens at available RGG program sites.	Ongoing	Community Garden Stewards

8.0 | Conclusion

Richmond has a strong community gardening program with established garden stewards and committed leadership. At their best, community gardens in the city demonstrate community power and collective agency. They serve as learning centers and community hubs and give people the tools they need to define themselves.

This plan, while identifying these benefits, illuminates the need for thoughtfulness and intentionality in design, infrastructure, and process to bolster social equity and black self-determination. There is a need to prioritize community agriculture in communities with high opportunity scores, to create spaces that are inclusive and culturally informed, and to center youth education.

The recommendations outlined in this document address these needs and outline viable strategies for achieving a prominent urban agriculture network, where community gardens are anchors of community power, advancing social equity and promoting black self-determination.

This plan, however, is just that. It is now imperative that action is taken to implement this plan. To do so we must support each other and love each other.

Figure 30: Mural of John Lewis via Jennifer VanSteenburgh

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Appendix A: Interview Questions

Interview Questions - Garden Steward

How long have you been coordinating the community garden?

What brought you to doing this work? Did you have experience elsewhere?

How did you hear about the Richmond grows garden site? What were you doing?

What are some of the challenges of the permit process and the siting?

What infrastructure have you installed on site?

Can you describe how the decisions were made on the design of the site?

How does the surrounding community feel about the garden? Are you well integrated?

Have you worked with or are familiar with other community garden sites?

What is the main way people interact with the site? How do people interact within the site?

Where are the people who frequent the garden from? The surrounding neighborhood or elsewhere?

What would you need to further the goals of your garden?

Interview Questions - City Community Garden Coordinator

How long have you been in charge of the Richmond Grows Gardens Program?

How did the program come about? What is its purpose?

How did you get involved?

Have you had to turn down applications for permits? How come?

What is your sense of the opportunity of the program?

What are some of the biggest challenges for community gardens in the city?

What has been the reaction of the community? Do you hear complaints?

What's the mechanism for changing the existing regulations? Is that the prerogative of the City Council?

What kind of resources does the city provide for the gardens?

Appendix B: Opportunity Scores of Garden Sites of Stewards Interviewed

	Steward Interviewees		
Garden Name	Address	Social Opportunity Score	Racial Opportunity Score
Broad Rock Community Garden	404 E Broad Rock Road	53	86
Fonticello Food Forest	2813-A Bainbridge Street	40	30
Maymont Community Garden	1907 Texas Avenue	58	55
6 Points Community Garden	3001 3rd Avenue	52	83
Sankofa Community Orchard	313 Covington Road	60	51
Charles S. Gilpin Community Garden	1420 St. Peter Street	100	97

Appendix C: Interview Memorandums

Memorandum of Interview #1

Date: February 22nd, 2023

Time: 2:15pm – 2:45pm

Interviewer: Alessandro U. Ragazzi

Participant: Garden Steward for Maymont Community Garden

Location: In-person at 1907 Texas Avenue, Richmond, VA 23220

On the above date and time, I interviewed the community garden steward for Maymont Community Garden. This individual moved into the Maymont neighborhood in November of 2020 and began stewarding the site in January of 2021. The interviewee noted the designation of the parcel as a Richmond Grows Gardens site as a factor in their decision to move to the neighborhood. Previous experience in community gardens in the city included operating a bed at the Brookland Park Community Garden. The Maymont site is located right next to a community skate park which provides additional vibrancy to the area. The interviewee noted that the multifunctionality of the site, including the adjacent skatepark and the nearby James River Park System, serves to bring more people together. Water was an initial challenge in the site and at the beginning, community gardeners would run a hose from one of the neighbor's houses. They've since installed a rainwater catchment system to improve water accessibility. The permitting process was straightforward in his view. He appreciated the requirement to gain signatures from the nearby neighbors and to talk with the neighborhood association. This forces gardeners to engage in some canvassing, although, the interviewee noted they went beyond the minimum requirement and would have done the outreach regardless. The interviewee noted that it's a 50/50 split between local gardeners and gardeners from outside the neighborhood. He noted that many neighbors gardened in their own lawns as well. The steward explained that they encourage neighbors to get involved with leaf drives – it doesn't have to be actual gardening. They have an email list and Instagram account that they use to post flyers for workdays and note meetings, which occur once a month to discuss issues and share ideas.

In terms of infrastructure, the garden includes raised beds donated from other gardens as well as a deer fence and shade structure installed by the City. Furthermore, the gardeners have laid paths with mulch and logs and planted 20 trees, a mix of natives and fruit-bearing trees. Environmental stewardship is an important motivation for the design of the space. Additionally, they've planted a line of maples to provide shade for the parking lot and the skate park. In the edge spaces, they grow flowers. They have even used the backs of the skate park to grow herbs. There have been plans for a community playground on part of the site, so that area has been left alone for the moment.

Decisions are made in a variety of ways. The interviewee outlined some written structural guidelines that include tiers of engagement. These include supporter, gardener (commit to 2 workdays a season), and organizer (comes to meetings). Additionally, they run ideas by the skaters since they share space. The installation of infrastructure is also motivated by the ability of the city to assist, for example, in the construction of the shade structure. The interview noted that the decisions, thus far, have felt obvious and natural. No disagreements have occurred but they have a five-finger consensus structure in place for disagreements should they arise in the future. At the moment the group is small and like-minded.

The Garden is very much a community space and people interact in all kinds of ways. They have capped the number of raised beds that people can garden individually due to the limited space within the deer fence. The interviewee noted that new gardeners need support to have a good experience. If too hands off, plants may die from lack of water. In the future, there are hopes of creating a path to connect the site with Texas Beach and using the fence on the eastern side of the property as a trellis. More beautification is another important goal. In closing, the interviewee acknowledged that the neighborhood is at risk of gentrification, although that risk is tempered by the presence of the Maggie Walker Community Land Trust in the area. The Steward did suggest that intentionality is required to ensure there is diverse participation in the garden.

Memorandum of Interview #2

Date: February 23rd, 2023

Time: 2:10pm – 2:35pm

Interviewer: Alessandro U. Ragazzi

Participant: Garden Steward for Charles S. Gilpin Community Farm

Location: In-person at 1420 St. Peter Street, Richmond, VA 23220

On the above date and time, I interviewed the community garden steward for the Charles S. Gilpin Community Farm. The interviewee described himself as a political activist rather than a gardener. The goal of the site is to show how urban agriculture can be used to address racial, economic, and health inequality. The site is one pillar of a larger food justice corridor that includes four other gardens anchored by public housing. Each garden is programmed differently with community and housing organizing, alternative to youth incarceration, black church organizing, and history, culture and food justice programs. The Gilpin community garden site provides space for organization and planning so that the community can fight back against displacement. It also serves as a demonstration of community change. The interviewee noted the importance of the site being within Gilpin, as Gilpin is the last remaining black neighborhood within the historic Jackson Ward community. He described the surrounding residents as "checked out" regarding some of the challenges facing their community but argued that the garden is there to change the narrative.

The Community Garden site is programmed with weekly Kitchen Table conversations and events for kids. All of the programming is around community engagement, education, and identifying leadership. The garden is the most talked about space in the community as it can be seen by all. The site provides a space for children to play and food for anyone who wants it. While the interviewee acknowledged that younger people in the social justice movement claim he exerts too much ownership of the site, the interviewee noted the realities of stewarding the site include holding the insurance policy and being responsible for injuries and the like. The interviewee rhetorically asked how we can show organic transformation of our communities. The answer is to show up with a shovel. Not because anyone gave him permission but because that's what it takes. He is here to demonstrate that food policy, health policy and urban agriculture is not something that just young, professional white people are doing, deciding, and controlling the spaces of. "You can go through the cut and see all the brothers' slinging drugs and doing what they do, and you can see all the police…doing what they do but between the drug dealers and the police, there is a damn farmer." In addition to demonstrating that black people do this too, the conversations that take place in the garden include how to build a food system to aggregate food and create systems for encouraging self-empowerment, self-reliance, and self-efficacy.

The interviewee added that "you harm black people when you come into these communities with six months' worth of budget, one year worth of budget, long enough for Jaheim to trust you, to think you care about him, think you love him, and then you run out of money, and your ass is gone for six months trying to get some money, and you come back and where is Jaheim? Jaheim is in jail, Jaheim has been shot, Jaheim is dead, Jaheim is out of school, Jaheim look at you and say fuck you man I'm in a gang now cause the gang don't leave me." The interviewee also questioned the narrative that black community organizations are not fiscally responsible or well organized. Instead, he noted that the passion and excitement of their programs is so large it strips the resources very quickly. In fact, it's the success of these programs that can be the downfall. Thinking of future work, the interviewee noted that more work is needed not only in poor black communities but also working-class black communities. Finally, if you lose the public housing communities in Richmond then you lose the foundation of black political power in the city. In his view, the city needs to be intentional about housing to avoid displacement.

Memorandum of Interview #3

Date: March 4th, 2023

Time: 12:05pm -12:25pm

Interviewer: Alessandro U. Ragazzi

Participant: Garden Steward for 6 Points Community Garden

Location: In-person at 3001 3rd Avenue, Richmond, VA 23222

On the above date and time, I interviewed the community garden steward for the 6 Points Community Garden. The interviewee explained that the triangularly shaped parcel had been vacant for a long time, and their effort to beautify the space began in earnest in Spring 2022. Importantly, the interviewee explained that this site is not a traditional community garden. This site was seen as an opportunity to beautify a vacant lot for not a lot of money and to make it nicer for nearby residents. For the steward, "aesthetics have a significant impact on people's lives." Notably, the steward's organization, Verdant Richmond, was created as a response to the lack of City budget to take care of all their park space. The organization is also the fiscal agent for some of the other community gardens in the city, helping to hold their insurance policy after the implosion of the Enrichmond foundation. The interviewee expressed aversion to knocking on people's doors and acknowledged that community engagement has been a shortcoming of the site. Nonetheless, overall support for the garden is fantastic with people, ranging from old ladies to teenagers, often stopping by and saying good job or asking about the plants. The steward does not live in the area and having volunteers come out has been difficult. As a result, he does much of the work establishing the space. The steward did not have any prior professional experience gardening, but it has been a hobby of his for some time.

There is no water on the premises, which has proved the greatest obstacle. It deters gardeners thinking of planting food and requires important considerations of what the long-term maintenance will look like. This motivated some of his choices in plants for the site. For example, once established, the elms and magnolias will not need to be continually watered. Another challenge is the antagonistic relationship with city maintenance operators. On several occasions, they have mowed down daffodils. The problem seems to be the lack of a Richmond Grows Garden sign and confusion on the part of City contractors as to the nature of the site. In the future, the steward hopes to add some more general community projects such as small potted plants and pumpkins for people to pick up. Additionally, he is thinking of making raised beds for flowers, like gladiolus, that people can cut for themselves. Of course, the steward would like benches and a trashcan so that people can occupy the site. However, there is no safe pedestrian crossing which would need to be fixed. In the long run, the steward hopes to turn the parcel into one of the nicest parks in the city and would like more community involvement so he is not the only one maintaining the space long-term.

Memorandum of Interview #4

Date: March 7th, 2023

Time: 2:05pm – 3:05pm

Interviewer: Alessandro U. Ragazzi

Participant: Community Garden Coordinator

Location: In-person at Bryan Park Keeper's Cottage, Richmond, VA 23227

On the above date and time, I interviewed the City of Richmond's Community Garden Coordinator. She has been in the role since 2020. She recounted her experience community gardening with Renew Richmond, Shalom Farms, and having her own plot while a student at VCU. Furthermore, in 2017, she was part of the first cohort of students in the Ginter Urban Gardening program. Afterwards she became a volunteer leader at McDonough Community Garden. There she focused on making it kid friendly and hosted volunteers with Hands on Greater Richmond. She decided to leave teaching after seven years in order to do more with connecting people with plants. A former elementary school teacher, she taught a nature camp and took a permaculture design class before moving into her current position.

Her predecessor worked as a Draft Technician for the Department of Public Works and was an avid gardener. She laid the groundwork of the Richmond Grows Gardens program based on a similar program in Baltimore. The ordinance for the program passed in 2011. Some sites predate the program and were brought into the fold afterwards. When the program moved to the Parks Department some sites were added and others eliminated. The parcels that were eliminated were the result of neighborhood opposition and former council members who were not supportive. Additionally, she was clear that just because a previous council designates a parcel as community garden doesn't mean it will remain so. Recently, some parcels have been given to the Maggie Walker Land trust for affordable housing, including 207 E Ladies Mile. Some of these parcels have been returned, however, because they are not buildable. Many of the vacant parcel sites pose maintenance challenges and aren't near park amenities. In addition to these challenges and land use conflicts, some neighbors are concerned "with a lot of hanging out" and do not want that too close to them. The interviewee also reported hearing concerns of vandalism and elicit activity with the installation of built elements to a garden. There had been opposition to community gardens in the Randolph neighborhood, although the newest community garden being proposed by the Birdhouse Farmers market as a demonstration garden in Petronius Park is moving forward. They were able to convince the association president to approve the idea because it is small, highly programmed, and run by a known community organization with a board and staff there every week at the farmer's market overseeing it.

The interviewee noted that running the gardens is a big level of commitment and recommended that stewards build a team to avoid burnout. She acknowledged that permits for commercial gardens were not possible because the Parks Department does not have the authority to grant them. The passing of the ordinance that allows the selling of produce from the gardens is a work around in this instance. Now, if a garden wants to fundraise by selling their sunflowers, they can get a special event permit through Parks and are able to do it. An alternative, in the future, is to pilot a market garden where food is grown at a production level. This would require a special designation and some extra agreements above and beyond the normal community garden. This information is not clearly explained on the website and the interviewee admitted to not being a webmaster and updating the website as consistently as possible.

Some additional rule changes included the ability for an organization to hold multiple permits. It was already occurring and changing the rules to reflect reality helps people respect the rules

more. As far as working with other community gardens beyond the Richmond Grows Gardens program, she oversees a teen workforce training program that goes to Shalom Farms. She's also taken kids to Real Roots, which is just outside the city. The leader of that site is also the composting consultant for the city. Additionally, there is not a lot of clarity on what is a city garden and what is not. She receives inquiries about different gardens all the time. Currently, there have been discussions with Fit for Kids to create a comprehensive directory of gardens. The interviewee notes that people are more likely to go to a community garden if it's close by. She's worked with Groundwork RVA's hillside garden to apply for grants from the Virginia Outdoor Foundation. She introduced the USDA to their operation as well as to Kinfolk RVA, which manages several urban gardens. She described her work as a lot of resource connecting. Recently, she mentioned that the USDA has started an urban agriculture office in the city to disburse People's Garden Initiative money. She's dropped hay off at the Richmond Alternative school's garden and others not in the Richmond Grows Garden program. Importantly, she noted that these gardens are not getting together regularly which is a gap in their network.

When she arrived at her position, she did not have an accurate contact list and the program was very disorganized. Now she has regular communication with every garden. She has managed to get two water lines installed at McDonough and Uptown. She's reached out to the Council to get more money in the parks budget to install water at all the sites. Not every community has the same number of resources which raises an important equity concern. Notably, there have been big improvements in getting water from park facilities. Another challenge was getting insurance for the garden but the ability to list a bunch of locations under one policy has been very helpful.

Another important consideration of her job is that she began as provisional but is finally permanent. The provisional position was less secure, and it took seven months to fill the vacant position left by her predecessor. She had to justify her job repeatedly, which was frustrating. Now, however, her commitment is matched by the city as she is a permanent employee. The city has a bad habit of relying on temporary workers. Some of the composting grants helped legitimize her role. It's also improved because the Deputy Director of Parks position was filled. Initially nobody wanted to take responsibility for the gardens, and she felt like the "stepchild." This proved difficult as other departments were unwilling to share their staff at the beginning. Furthermore, there are geographic divisions in the Parks Department but her work and that of Trails goes throughout the city. However, the office of Sustainability and the Department of Public Works Solid Waste and Recycling team were helpful, and she's built a good relationship there which unlocked a lot of doors. She no longer needs to justify the existence of her program, "Gardens are here now" She has more legitimacy.

She helps gardens get volunteers and pay water connection fees at times. She will also pick up lumber using their truck and trailer to help get things to the garden. This way she can stage it nicely to keep it off the sidewalk and nice and tidy. Additionally, she has AmeriCorps volunteers that work with her and help grow seedlings in the greenhouse to provide for gardens. They also offer up space for the gardens to use the greenhouse. She helps write up the budgets and proposals for grants from entities such as the Virginia Outdoor Foundation and Altria.

In the future, she would like to standardize the infrastructure to some degree. This means all the gardens have access to water, a tool shed, and a shade structure. She would like to see an increase in programming to create more public opportunity and lead to more people being in those spaces more often." The benefit of community gardens is you are not doing it alone." She acknowledges that the City has community centers all over and many of those spaces have micro gardens or the dreams of gardens. Ideally, the Parks department can take more of a garden education role where they can provide high quality professional staff to lead programs and assist with stewarding these gardens all over. Especially involving kids because a common refrain she hears is that "People want our youth to be educated on the natural world and gardening." She respects the work of Fit for Kids in creating a cultural shift in this respect but they are not in every school. There needs to be more done to ensure equity so that everybody gets this opportunity. Additionally, she wants to make it clearer that the gardens are city owned so that people know its public and feel more welcome and for people to feel proud that the city is investing in this program. Another piece is more conservation landscaping on small parcels, medians, etc... to create beneficial planting areas based on the community garden structure. "People want to be activated." Considering the City's goals around community engagement and sustainability, community gardens provide an important implementation tool.

The interviewee would like to see the program resourced more. Simple things like having her own service code, for example, can add additional legitimacy and increase transparency. They work all over the city, but their money comes out of the James River Park System budget, so they operate a little like a shadow budget. Work is happening everywhere. She did note this is not a quick fix. Lastly, she wants the program to have a larger website and social media presence.

Memorandum of Interview #5

Date: March 7th, 2023

Time: 4:30pm – 5:10pm

Interviewer: Alessandro U. Ragazzi

Participant: Garden Steward for Sankofa Community Orchard

Location: In-person at Sankofa Community Orchard

On the above date and time, I interviewed the community garden steward for the Sankofa Community Orchard. He has been stewarding the space since December 2021. He started a pop-up farmer's market in 2008 in the Churchill neighborhood to address issues of food desert and food access in the City. This raised his awareness of agriculture and eventually in 2012 he started his first garden which was the McDonough community garden. The impetus of the Sankofa garden site was a recent Black Space matters demonstration he conducted with the Institute of Contemporary Art at VCU. After the completion of that event, he had a number of

raised beds and trees that needed a home. He applied for the permit at Sankofa, as he was already an experienced garden operator in the city. After the initial 20 trees were planted, they fundraised and planted twenty more. Then Groundwater RVA received a grant and provided additional trees for the site.

Sankofa has an electricity connection to the grid and solar powered lights. However, the biggest challenge at the site was the lack of access to water. This required him to pay $1000 for a portable water meter to connect to the fire hydrant. Since then, he has established a rainwater catchment that provides just about all the water that is needed. Currently, he is working on a grant from the USDA to pay an engineer to dig trenches and install water lines throughout the site so there can be spigots throughout the site. Another big challenge is that the site is community facing, meaning people walking in and out any time of day. This has led to equipment being stolen and requires him to be flexible in how the garden operates. It cannot be a production space; it has to be more of a demonstration space. He noted that there has been no vandalism or destruction. Importantly, community assets are only such if you design them to be accessed and used. That's why they put up the shade structure for a gathering space and have the grill for farm to table demonstrations, dinners, and culinary instruction. He likes that people can just come over here and kick it, which is exactly what he intended for the space to be used for. Thus, he has very loose programming and sees no need to micromanage. Of course, as his organization insures the space, he does have to be somewhat mindful. People also use the space to volunteer, and he does his urban gardening program training in the space. Additionally, he has dinners in the space and hosts school trips and other groups that come out. In having volunteers out, the community helps to increase access to healthy foods, do stormwater management, and place making. He wanted to have street art in the space, so he paid artists to paint murals with inheritance money in remembrance of his mother who passed away. Many of these murals have important black leaders like Fannie Lou Heimer, George Washington Carver, and Amilcar Cabral. The murals serve as a form of political education where people can have conversations about social justice. Similarly, the installation of free libraries with not just any books but books that are about topics in community building and sociology and that are radical and revolutionary. Additionally, he's collaborated with RVA Community Fridges to provide free food. This he describes as a revolution in progress, where until you change the dominant system there is need for immediate relief. It also attracts people from the hunger relief space to a space where they're building a food system to "boss up economically."

Another key facet is the collaboration with other gardens. His organization helped to get the Swansboro and Powhatan Hill gardens started even though he is no longer involved. Today, he's busy working to push policies. He was successful in getting the ordinance to allow community gardens to sell their produce passed. His main worry still, however, is land tenure. He has to renew the permit every year but would prefer a multi-year permit. Eventually, he wants to get the site out of the City's hands and place a conservation easement on it. He believes the city is a great starting place but the garden program does not challenge the system. Community gardens are not enough to give access to healthy foods. He's after community power and land tenure to shift the balance of power for black and brown communities. Not all

gardens have these same motivations and there's nothing wrong with that. In his view, the end game defines how you should engage with the city.

So far, he has had a great relationship with the neighbors. He told the story of an old neighbor in his 90s who is happy they moved into the space after so many years of it being vacant. Other neighbors enjoy the garden too. The interviewee recounted the experience of a man with bipolar who visits the site to help them stay calm. The civic association members are happy as well and occasionally come over. One neighbor was irritated with the parking but that was not indicative of their opinions towards the site. He's asked the city for a speed bump to deal with some of the high speeds of drivers coming around the corner in front of the site.

In five years', time, wants to build a tiny house on the property for people to gather inside, hopes the site will be lusher, and deeded and titled in their organization's name. He really wants the space to be a center for training and teaching about food justice and agroecology. The interviewee wants it to be a shining example that catalyzes more spaces and serves as a hub for a community food system.

Memorandum of Interview #6

Date: March 15th, 2023

Time: 2:00pm – 2:35pm

Interviewer: Alessandro U. Ragazzi

Participant: Garden Steward of Fonticello Food Forest

Location: Via Zoom

On the above date and time, I interviewed the community garden steward for the Fonticello Food Forest. She is the administrative director and co-founded the space with her partner seven years ago and planted the first trees in January or February of 2016. The focus was to ensure it stayed public and that the older growth trees were not cut down by a more commercial outfit. The goal is to create a beautiful natural space and accentuate the biodiversity already in place. The site was created using permaculture techniques to study the ways the natural elements such as water, air, and sun moved through the space. Before starting the garden, she and her partner had been traveling the world working on organic farms. They bought a house across from the park and have been doing a lot of the same natural stewarding at their home. Her and her partner tour in a band that talks about how human beings need to reassess their relationship with nature and value the natural world more. She's opposed to the dominating, extractive relationship that is killing humanity. While on tour they met the creators of the Florida Gulf State University Food Forest, where they first got the idea of a food forest.

A former council member told her about the availability of the space and they were concerned that if a more commercial agriculture group (with more intensive practices) got the land then

they would fence it off, as required by the ordinance at that time and it would not be as good for the land. But the community wanted the parkland to remain parkland, so they created a fancy schematic to make their idea of a food forest look legitimate. This helped in the permitting process and convincing City officials about the site. The councilmember being on their side helped and they obtained the permit but still almost had their garden taken away because it was a non-traditional model and outside the purview of the ordinance. There was friction with the city often as a result. At the time the city could take back the parcel without warning leaving the stewards without recourse. To deal with this and other language in the ordinance that was not friendly, she got together with other gardeners to form the Coalition of Richmond Community Gardeners to write recommendations for the rewrite of the ordinance. When new leadership came in and with the help of the Virginia Health Department some of the language was scraped and the new ordinance includes more accessibility. Additionally, there is more communication around what is permissible and not and more trust and support with the city.

The space is totally de-commodified with no renting of plots available. Volunteers maintain a perennial garden and kitchen garden together. They've worked with the city to install picnic benches and a boardwalk in the wetlands portion. They've used their own money to buy a shed and turned it into a farmstand with shelving and pantry. They also used their own money to provide the tent over the picnic area. In the space, they've designed a log kitchen and are in the process of getting electric to run in the space. It costs $6800 but the City has gotten a grant to fund $5000, so they are working to fill the gap. Additionally, they've paid for all their own mulch and compost but the city has provided a little free library and seeds too. There was no water on the site, but her partner, who is a woodworker, collaborated with the city to build a water tower that has rainwater catchment and that the city comes to refill periodically as well.

The interviewee shared an anecdote about the need to clearly communicate with neighbors about the design and infrastructure in the space. She had identified a beautiful part of the site with high sun where she made annual beds with tomatoes and eggplant in ground rows next to a fence. The neighbor on the other side of the fence, however, drew up a list of reasons why she did not want that near her house. These included parking and privacy issues. So, the Steward moved it to the other side of the garden near the access road more to the center of the site. As the garden grew, the steward realized how important that decision was. Now when they get so many volunteers on a random Wednesday for classes, parking would have been much more problematic in the original area. So, they've been able to grow much more sustainably as a result. This is why she feels "it's really important that people that are managing community gardens, if possible, live in the communities that their community gardens are in."

The site is open to the public and people are always on site. They have regular programming. 3-4 programs a month and have a budget allocated for this purpose. Some examples include paying instructors to teach fairy house building, or do invasive plant removal, or build a willow tunnel and similar workshops.

Relatedly, she feels extremely well-integrated into the community. A lot of the volunteers come from houses along the perimeter of the site as well as within the neighborhood. Many elders in the government housing across the road come to get food at the free farmstand. She noticed

that especially with covid and people not being able to gather inside, the Wednesday volunteer days really brought people together and created a really big sense of community. She added that no volunteers are coming from deeper in the southside to get food. They distribute over 3,00 pounds of food every week which they source from mutual aid partners and food reuse. This part has grown far beyond what they've imagined. It's important that they've destigmatized participating. The food is for everyone and core to the community at this point. The steward noted that it would be impossible to distribute this amount of food even using intensive agricultural practices. It really touches on how to approach food access. There is not enough land in the city to grow all the food, have the park space, and nourish the ecosystem all at once.

She does feel like the community garden stewards are all friends and share resources, naming Broad Rock, Sankofa, and McDonough, Bellmeade, Maymont, Owl Orchard in particular. They've also had mixers in the past. Policy wise, she is very concerned about the overdevelopment of Manchester and worries about significantly increasing density without a commensurate increase in greenspace. She would like to see more laws protecting impervious surfaces and recommends that when City's obtain tax delinquent parcels, they should reserve a number of those for community gardens rather than sell them all at auction. Lastly, she doesn't want Fonticello to be a national destination but wants to create a copyable model for other spaces to use tailored to what their local community needs.

Memorandum of Interview #7

Date: March 17th, 2023

Time: 2:05pm – 2:35pm

Interviewer: Alessandro U. Ragazzi

Participant: Garden Steward for the Broad Rock Community Garden

Location: In-person at Broad Rock Community Garden

On the above date and time, I interviewed the community garden steward for the Broad Rock Community Garden. He has been the steward for around 2 years and the space is about four to five years old. He saw the post on Facebook that there was a workday, and he came out. It was fun, so he kept coming out. His predecessor left because she had another job opportunity. The garden needed a new steward and since he did a lot of gardening and farming outside of just volunteering, the organization responsible for the garden thought he could handle it. He really likes gardening because it connects him with his grandmother, who doesn't live in the city and he misses her. He got into urban gardening in Richmond first at Tricycle Gardens where he met the founder of Real Roots. He worked there for two years first. He has a great relationship with the Community Garden Coordinator. He can text her and asks for mulch and the city comes out. The City also built the shade structure on Property. He noted that the city is more focused on

their parks but some money trickles down. They were able to get a water line installed, although it gets turned off in the winter.

The biggest challenge on the site is the homeless population. They use the spot the most and eat most of what's grown in the garden. Although the garden rents beds to individuals, the steward advises that it is likely that they will not see any of what they plant. The steward was quick to point out that the garden is a food source and they are in a food desert. Additionally, homeless individuals have broken branches off of the fruit trees to use to light a fire in the fire pit and keep warm during the winter. Originally, they had a patio underneath the shade structure with shelving but homeless people were using them to store drugs so the city removed it. The steward has had no issues with the neighbor, who he described as very nice, although one neighbor has issues with the homeless people who use the site and see the site as attracting them.

The steward acknowledged that the neighborhood is getting gentrified but many of the older residents support the site and even let him borrow tools such as a lawnmower. Not all the beds are rented out and every Sunday are volunteer workdays where people can help out with weeding, the herb garden, and fixing the unused beds. There is usually a fire at the end. Most people come from the neighborhood or from neighborhoods without a garden. There are some regulars forming a "cool community." On that they have trellises which were established with help for the City and bamboo foraged from a nearby forest. The steward would like to do another trellis system and plant grapes. They have composting on site and a mural on site which draws people. The mural has a black face which represents the surrounding population and makes people more comfortable. Almost like saying, "Hey, this is us." More to this point, the steward described that he only went to volunteer at Tricycle Garden when he saw someone that looked like him, saying "I only went to the space over there and introduced myself when I saw Mark right, and he's black and has locks. And I'm like woah that's a black dude."

Currently, he's planning a youth day to get kids more involved in the site. It's important to teach people where food comes from and for a garden to sustain you in some capacity. The interviewee spoke of a kid coming out who did not know where a carrot came from. Other programming included a lady running a mediation class at the space, but she organized that on her own, unrelated from the steward really. In the future he would like the garden to have more beds and produce more food. He believes a food pantry is commendable but too time consuming for him to commit to such an endeavor. He mentioned that RVAgreen2050 had a press conference at the site and talked about how the gardens are key to the vision of Richmond going net neutral. Lastly, he made note that having a non-profit as a boss can be constraining at times. He's unsure why it's necessary to go through the non-profit before he makes infrastructure decisions, since he's the one there all the time.
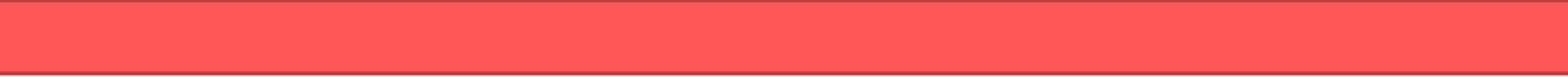
Appendix D: Richmond Block Group Scores by GeoID

GEOID	SocialOpp	RacialOpp	GEOID	SocialOpp	RacialOpp
517600102011	0.70	0.46	517600204001	0.84	0.96
517600102012	0.31	0.09	517600204002	0.96	0.93
517600102021	0.27	0.35	517600204003	0.92	0.98
517600102022	0.19	0.16	517600204004	0.83	0.99
517600103001	0.91	0.95	517600204005	0.88	0.97
517600104011	0.07	0.11	517600205011	0.58	0.61
517600104012	0.56	0.68	517600205012	0.39	0.31
517600104021	0.36	0.15	517600205021	0.22	0.42
517600104022	0.16	0.48	517600205022	0.07	0.34
517600104023	0.77	0.65	517600205023	0.11	0.28
517600105001	0.48	0.83	517600206001	0.33	0.31
517600105002	0.38	0.59	517600206002	0.43	0.33
517600106001	0.37	0.59	517600207001	0.65	0.63
517600107001	0.67	0.83	517600207002	0.60	0.60
517600107002	0.33	0.62	517600208001	0.55	0.32
517600107003	0.75	0.64	517600208002	0.06	0.24
517600108001	0.79	0.87	517600209001	0.42	0.56
517600108002	0.86	0.88	517600209002	0.54	0.52
517600108003	0.15	0.87	517600209003	0.70	0.88
517600109001	0.80	0.90	517600209004	0.25	0.76
517600109002	0.24	0.76	517600210001	0.87	0.84
517600109003	0.86	0.78	517600210002	0.69	0.69
517600109004	0.73	0.82	517600211001	0.32	0.72
517600110001	0.90	0.95	517600212001	0.89	0.78
517600110002	0.54	0.75	517600301001	0.99	0.94
517600110003	0.50	0.66	517600301002	1.00	0.97
517600111001	0.47	0.54	517600302001	0.30	0.44
517600111002	0.40	0.60	517600302002	0.97	0.43
517600111003	0.69	0.67	517600302003	0.56	0.42
517600111004	0.72	0.96	517600302004	0.80	0.41
517600201001	0.98	0.98	517600305011	0.64	0.33
517600202001	0.99	0.99	517600305012	0.62	0.23
517600202002	0.97	1.00	517600305013	0.98	0.37
517600203001	0.32	0.79	517600305021	0.23	0.28
517600203002	0.53	0.75	517600305022	0.14	0.27

GEOID	SocialOpp	RacialOpp	GEOID	SocialOpp	RacialOpp
517600402011	0.83	0.41	517600505001	0.08	0.07
517600402012	0.84	0.50	517600505002	0.12	0.01
517600402021	0.21	0.17	517600505003	0.38	0.21
517600402022	0.18	0.35	517600506001	0.01	0.03
517600403001	0.57	0.19	517600506002	0.10	0.01
517600403002	0.63	0.38	517600602001	0.82	0.80
517600404001	0.46	0.13	517600602002	0.94	0.90
517600404002	0.74	0.32	517600602003	0.66	0.89
517600404003	0.20	0.34	517600604001	0.35	0.77
517600405001	0.17	0.14	517600604002	0.49	0.79
517600405002	0.14	0.24	517600604003	0.95	0.92
517600405003	0.26	0.02	517600604004	0.75	0.81
517600405004	0.52	0.12	517600604005	0.62	0.53
517600406001	0.35	0.10	517600605011	0.65	0.48
517600406002	0.46	0.11	517600605012	0.40	0.30
517600407001	0.26	0.08	517600605013	0.05	0.21
517600407002	0.21	0.16	517600605021	0.13	0.26
517600408001	0.29	0.08	517600605022	0.47	0.73
517600409001	0.12	0.06	517600605023	0.85	0.49
517600409002	0.29	0.15	517600606001	0.04	0.20
517600410001	0.09	0.03	517600606002	0.41	0.29
517600410002	0.20	0.06	517600606003	0.00	0.04
517600411001	0.17	0.20	517600607001	0.57	0.93
517600411002	0.63	0.25	517600607002	0.94	0.89
517600411003	0.15	0.19	517600607003	0.71	0.94
517600411004	0.67	0.17	517600607004	0.89	0.84
517600412001	0.30	0.12	517600607005	0.77	0.92
517600413001	0.44	0.58	517600608001	0.88	0.62
517600413002	0.58	0.55	517600608002	0.41	0.85
517600414001	0.78	0.46	517600608003	0.95	0.40
517600414002	0.28	0.47	517600608004	0.52	0.85
517600416001	0.19	0.39	517600609001	0.90	0.38
517600501001	0.31	0.30	517600610011	0.16	0.47
517600501002	0.04	0.10	517600610012	0.42	0.86
517600501003	0.08	0.05	517600610013	0.78	0.86
517600502001	0.03	0.07	517600610021	0.24	0.39
517600502002	0.01	0.02	517600610022	0.23	0.57
517600502003	0.13	0.04	517600610023	0.44	0.45
517600503001	0.39	0.05	517600701001	0.45	0.18
517600504001	0.03	0.22	517600701002	0.22	0.37
517600504002	0.06	0.00	517600701003	0.34	0.23

GEOID	SocialOpp	RacialOpp
517600701004	0.02	0.29
517600703001	0.49	0.49
517600703002	0.02	0.25
517600704001	0.28	0.36
517600704002	0.43	0.22
517600704003	0.11	0.13
517600706011	0.68	0.50
517600706012	0.81	0.54
517600706013	0.93	0.26
517600706014	0.93	0.14
517600706021	0.72	0.80
517600706022	0.74	0.52
517600707001	0.81	0.40
517600707002	0.76	0.69
517600707003	0.50	0.72
517600708021	0.51	0.53
517600708022	0.61	0.51
517600708031	0.85	0.63
517600708032	0.66	0.61
517600708041	0.34	0.74
517600708042	0.10	0.68
517600708043	0.25	0.58
517600709011	0.92	0.70
517600709012	0.61	0.71
517600709013	0.87	0.74
517600709021	0.05	0.65
517600709022	0.59	0.71
517600709023	0.60	0.91
517600710021	0.59	0.51
517600710022	0.68	0.70
517600710031	0.53	0.77
517600710032	0.71	0.67
517600710041	0.96	0.81
517600710042	0.48	0.66
517600711001	0.51	0.43
517600711002	0.76	0.44
517600711003	0.79	0.57
517600711004	0.36	0.56