CAPITAL CITY FARM: MODELING A WAY FORWARD

By

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Abstract of the Thesis

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This thesis uses an investigation into Capital City Farm, a two-acre urban farm established in 2015 in the City of Trenton, New Jersey to explore the multifaceted challenges urban agriculture faces in urban post-industrial spaces and communities. Despite 2019 being its most successful year in terms of production and programming, the project struggles with sustainable funding, staffing and community engagement. Part One contextualizes Capital City Farm with the concepts of sustainability; resilience; urban issues such as redlining, urban renewal, and gentrification; environmental justice; citizen participation; and urban agriculture in order to understand how urban agriculture may be a means to address the environmental, social, economic, and justice issues in communities like East Trenton.

Part two interrogates Capital City Farm’s recent past and current situation according to Land, Labor, Liquidity, and Leadership strategies. Interviews with Farm stakeholders, regular visits to the Farm property, and a visit to the Trentoniana collection at the Trenton Free Public Library provide the material for this investigation. This section finishes with an
evaluation of Capital City Farm and the recent Garden State Agrihood proposal for the community that frames the Farm as in a new community development model. This analysis suggests that, while many facets of the concept of the Farm and the Agrihood are valuable and worth pursuing, the Farm is unsustainable without an adjustment of the Agrihood Board’s commitment to address participation, maintenance, and management.

The final section projects different organizational models the Farm could take: Garden State Agrihood managed cooperative, Garden State Agrihood managed Farm, Non-Profit managed agriculture program, Mercer County managed agriculture park, or just city managed open space. It concludes with a discussion of what could be possible with more study and general lessons learned throughout the investigation that can be applied to the practice of landscape architecture and design of public spaces. Best practices like good communication, community participation, multiple site visits, and intention are even more crucial in communities such as East Trenton. Otherwise, landscape architects and other design professionals risk perpetuating the injustices of the past.
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Chapter 1: Introduction

This thesis explores Capital City Farm, a two-acre urban farm in the City of Trenton, New Jersey (fig. 1), as an experimental project that expresses the multifaceted challenge to urban agriculture in urban post-industrial spaces and communities. This work looked to investigate
urban agriculture as a method to answer the questions surrounding environmental, social, economic, and justice issues. However, because of the “real time” nature of the project, this exploration also discusses what sustainable urban agriculture needs to be successful from the standpoints of land, labor, liquidity, and leadership. Landscape architecture typically considers urban agriculture a programmed activity on a site in the urban context and focuses on design strategies that address the aesthetics and realities of growing food in small, often contaminated spaces in cities. Because of to the community’s historic traumas as well as Capital City Farm’s instability due current organizational concerns around finances, labor, and leadership, this study analyzed different structural models typically used to sustain urban agriculture as well as two proposed models that include or could include Capital City Farm.

When I started conducting research, the Farm was entering its 4th season of cultivation. The site’s third farmer, hired over the winter of 2018 –2019, was beginning field work. Other stakeholders were in ongoing discussions about unmet financial needs and how to move the farm to the next level in terms of its role in the community. I was interested in helping with data analysis, a five-year plan, and evocative graphics to help the project raise funds and possibly achieve some level of financial sustainability. The Farm was formed by efforts of the Delaware & Raritan Greenway Land Trust and Trenton Area Soup Kitchen. Before Capital City Farm, the property was undeveloped and neglected which attracted illegal dumping, served as a gathering space for the homeless, and was set to be converted into an impound lot for the police department. Several social services are located next to the
property including the police department, Trenton Area Soup Kitchen (TASK), dog pound, and Escher Street Single Room Occupancy project (fig. 3).

![Figure 3: Capital City Farm Site Context, graphic by author, 2020](image)

In 2015, many stakeholders including Delaware & Raritan Greenway Land Trust, TASK, Mercer County, Isles Inc., Escher Street SRO, Rescue Mission of Trenton, and the East Trenton Collaborative organized the City of Trenton to purchase the property from its
private owner using Mercer County open space funds as well as some private funds. Because
the site was part of an old railway corridor, it needed remediation. Funded by development
tax credits, the remediation was supervised by Delaware & Raritan Greenway Land Trust
(D&R Greenway) with participation by the local advisory committee called Better
Environmental Solutions for Trenton. After the remediation, cultivation began slowly over
the next three years and, by 2019, about half the site was available for cultivation with the
majority of the produce donated to TASK. Towards the beginning of this period of
cultivation, a former employee of D&R Greenway had brought in the Watson Institute of
Public Policy of Thomas Edison State University. The Watson Institute began to develop a
comprehensive community outreach strategy. To do this, the Watson Institute brought in
Designing the We, a for-benefit design studio based out of Manhattan. Designing the We
grew out into the community to investigate its view on the Farm. They discovered that the
community did not have a good sense of the Farm and decided to have a meeting at the
Conservatory Mansion to inform the public about the farm and to get a better sense of the
community’s needs. Because of this discussion and other work Designing the We had done,
an idea for the Garden State Agrihood was formed. The Garden State Agrihood concept
looked to use Capital City Farm as a stage to have larger justice conversations about the East
Trenton Community.

In the years before my research, the farm struggled to maintain consistent Head
Farmers. A D&R Greenway employee named Allegra served as the Head Farmer for two
seasons, 2016 and 2017, before leaving to pursue an educational opportunity. A D&R
Greenway consultant named Judy served as Head Farmer for several months during the 2018 season. The Community Farm Workers named Walter and Derek were the only constants through these three years and through my observations. In April 2019, at the beginning of my observations, there was a Head Farmer named Angel and a Farm Manager named Beth. The AT&T Believe Trenton project had committed to funding a summer internship program for local high school students and Friday afternoon visits from the Trenton Boys and Girls Club. By this time, however, the original grant provided by D&R Greenway was running out, D&R Greenway announced that 2019 would be its last year as the fiduciary and fiscal sponsor of the project, and the question of sustainable funding was still unanswered. Effort to start a nonprofit called the Garden State Agrihood was underway. At the time, it was unclear what the mission of the Garden State Agrihood would be.

As I began observing the farm and interviewing stakeholders, it became clear that the project was struggling and needed something other than a five-year plan and graphics to move forward. New to community engaged work, it quickly became clear that community work is messy and complicated. Through conversations on and around the Farm, many questions came to light:

- How can the Farm become sustainably funded?
- How can the Farm and Trenton become more resilient to trauma?
- What traumas has Trenton, specifically East Trenton, been through that affects the functionality of this project?
- What trauma is East Trenton looking to avoid in the future?
• Is what is happening on Capital City Farm representative of the issues that urban agriculture faces or is it unique?

• What led to East Trenton’s traumas and how is the farm addressing or not addressing that?

• What organizational structures will work best for Capital City Farm in terms of logistics and its goals?

These questions led to a wide-ranging review of topics such as sustainability, resilience, redlining, urban renewal, gentrification, environmental justice, citizen participation, and urban agriculture. Each of these topics provided a lens with which to analyze Capital City Farm, its role in the community, and East Trenton’s capacity for change. I began with a grounding in what sustainability and resilience are as well as how they can be applied to an urban farm concept. This allowed me to begin to refashion my environmental ethic into the urban community context. From here, I needed to understand how problematic urban land issues and policies, of both the past and present, such as redlining, urban renewal, and gentrification, affected communities and continue to affect communities to better understand East Trenton, and the Farm. After developing that understanding, citizen participation and environmental justice were the logical next steps in the research as they offer methods and ways of thinking that aim to disrupt the persistent effects of these problematic policies. Lastly, as urban agriculture is often presented as a typology of urban programming that can help communities achieve sustainability, resilience, urban revitalization, and environmental justice, it was important to understand what its possibilities
and limitations are in contemporary landscapes to have a serviceable grasp on the realities of Capital City Farm.

While the idea of transforming a brownfield to an agricultural space in the city to increase food security is attractive from an environmentalist’s point of view, the practice of transformation in these spaces requires a deeper understanding of the cultural, political, and economic realities that surrounds projects like these. We as a society must begin addressing how we function and how we work as a system before we can be truly successful at addressing our environmental issues. This thesis looks to examine how the Capital City Farm project addresses resilience and environmental justice in East Trenton in both theory and practice as well as an examination of why in practice, both internally and externally, the project is struggling. This project was messy and changed from week to week, even as this paper was submitted for review. Rather than organize the paper in a completely linear manner as though the project was finished, I have organized my observations and critiques along the different avenues of exploration:

Research Goals

This was the flow of my line of inquiry and study throughout the project:

1. Understand the challenges that face Capital City Farm moving forward.
2. Understand Capital City Farm as it exists today.
3. Understand the energies that led to the formation of Capital City Farm.
4. Identify possible goals of Capital City Farm.
5. Discover possible solutions for Capital City Farm’s challenges and how they intersect with Capital City Farm’s Goals.

Methods

1. Interview Key Stakeholders in Capital City Farm

2. Develop Conceptual Lenses of Big Ideas

3. Historical analysis: exploration of The Trentonian, Trenton’s History Room

4. Contextual analysis of Trenton

5. Regular site visits and participatory engagement on Capital City Farm

Diagram of Thesis Research Flow

The diagram below (fig. 4) illustrates how the research goals informed the theories researched and which techniques were found to be most successful with regard to the subject matter.

![Diagram of Thesis Research Flow](image)

My inherent bias as a researcher must also be addressed before moving into the research. Discussions of sustainability, resilience, and social justice are inherently a privilege,
responsibility, and a necessity. Planning for the future takes capital. In capitalist societies, there are three types of capital: money, social connectivity, and time. However, possession of both social connectivity and time have become largely dependent upon the possession of money. This can lead to a conflict of interest for people who do have fiscal capital and want to plan for the future of society. They have the time and social connectivity with which to plan and therefore hold most of the power for what elements of society and culture will remain. The challenge is that sustainability and resilience both have a social justice component that is often overlooked or ineffectually executed because people naturally want to invest in things that benefit them directly or what they deem is appropriate. Social justice does not always directly benefit privileged people or fit into a perfect box of suitability. Social justice is uncomfortable and messy but necessary. In order to achieve it, some privilege and power must be yielded to make space for others.

Plans are the product of people who do not have to worry about their survival or have no other option but to plan for their survival. I recognize that I am in danger from an environmental system that is disrupted, an economic system that is extractive, and social system that is full of inequity. However, I am not in any immediate danger. I am privileged to be earning my degree from a top public university. I am privileged to have been raised in a stable family of white, middle class background that never had to worry about its next meal. I am privileged to live in a place that, when there are environmental issues, there are many services to aid me because I live in one of the wealthiest areas of the country. Understanding
one’s own privilege both as a researcher and as a member of society is paramount in working on social justice issues.

To that end, I sought to use my outsider’s perspective on Capital City Farm. I am not of Trenton. I am not of New Jersey. I have never struggled with hunger. I will admit that I found staying unbiased in this situation challenging and I am not sure I was successful. For better or worse, this seems to be the nature of this kind of work. University researchers, design professionals, government agents, etc. must acknowledge this privilege when they interact with vulnerable populations and understand how to engage with them to plan their futures.
Chapter 2: Conceptual Lenses for Shaping an Understanding of Trenton and Capital City Farm

The goal of Chapter Two is to lay out a conceptual framework that explores a wide array of concerns to evaluate and question Capital City Farm. Through a clear understanding of the conceptual framework, the motivation for the farm’s inception, reasons for its current struggles, and trajectories towards potential futures will become apparent. I come to this topic and, one day, my landscape architecture practice, with an environmental perspective.

As living organisms, humans need four things: water, food, shelter, and space. These are physical objects that have driven humanity for as long as it has been a species and, in its pursuit, humanity has potentially driven itself past the brink of the carrying capacity of the planet. Therefore, any environmental perspective must include people.

The big picture narratives that currently drive the intersection of people and the environment are sustainability and resilience. Urban issues that face postindustrial cities such as Trenton led to the examination of redlining, urban renewal, gentrification, and the urban crisis today. The effects of these programs and forces hinder sustainability and resilience for many postindustrial cities like Trenton. This understanding led to investigations into ways of thinking and methods that prevent, counteract, and ideally undo the damage from those programs and forces such as environmental justice and citizen participation. I close this chapter with a review of urban agriculture as a way to address a range of environmental, social and economic concerns as well as the barriers to achieving sustainable projects. By
understanding these topics and how they relate to Capital City Farm, the analysis of the trajectory of the farm will lead to better evaluation and therefore more coherent, realistic plans for the future.
Figure 6: Rhubarb among the Strawberries, photo by author, May 2019
A. Sustainability

According to the United States Environmental Protection Agency, sustainability is the understanding that “everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.”¹ Sustainability is a pressing issue for cities because as of today, 55% of the world’s population lives in cities. This is expected to increase to 68% by 2050.² The United Nations predicts that the global population will be 9.7 billion in 2050 which means approximately 6.6 billion people in cities.³ This presents an enormous challenge to the world’s cities in terms of providing for and the protection of their communities into the future. As Trenton is a city in New Jersey, the most densely populated state in the United States, it could be at particular risk for this human migration pressure.

Sustainability traditionally has had three facets: the environment, economics, and society.⁴ In the United Nations model, Circles of Sustainability, society is broken out into two categories: politics and culture.⁵ It is usually used in conjunction with the idea of development. Depending on perspective, one could say that the development limits of the environment, society, and the economy contain one another with the

Figure 7: Sustainability Diagram, graphic redrawn by author from the University of Maine Office of Sustainability
environment, finite, as the greatest limiting factor (fig. 7). If society thinks of the environment as the most important limiting factor, society will eventually come to the conclusion that the environment will have the final say in humanity’s survival as a species. While this may be true ecologically, this thinking can lead to society absolving itself of guilt because of the possibility that society has no control and, therefore, should not act on environmental issues.

Another way to frame sustainability is with the four concepts overlapping in Venn diagram style (fig. 8). Thinking in this way puts the vehicle of sustainability into human hands. Society sees it as relatable and drivable. The environment provides the needs of society. Culture, Politics, and Economics are the filters through which humans give, receive, and/or take these needs. It is romantic to assume humanity should go back to a simpler time where people lived off the land. Advancements in medicine are argument enough to not retreat back to an agrarian society. At the population size and culture structure of the United States, the desire to go back to an agrarian society is at best, delusional, at worst, cruel. At this population size, there is the challenge
of considering the population as a whole while still considering the individual scale and providing for the needs of both.

Environment

Sustainability is the concept that the environment has limits, a carrying capacity. Most studies place the earth’s carrying capacity between 8 billion and 16 billion people. As the earth’s population rapidly approaches this range, experts are concerned about how to provide for the species when resources are limited. Access to fresh food and clean water are imperative for health and in a developed nation like the United States it is possible for all. This concept can be used at many scales; from planet to project.

When I consider the farm and this environmental facet of sustainability, I begin to think of the farm as something that could increase Trenton’s carrying capacity. It is also important to think of the farm’s carrying capacity for its workers, stakeholders, and programs. Laura Lawson’s research in *City Bountiful: A Century of Community Gardening in America* has shown that community gardening and urban farming have manifested when there is a stress at the community scale i.e. local effects of war, economic strife, or social unrest. Capital City Farm was partially born out of the realization that Trenton is, for lack of better vocabulary, a food desert with one super market. One of the farm’s many possible goals is increase access to healthy food for Trenton’s most vulnerable citizens via donations to TASK as well provide education around growing one’s own food to Trenton residents. The
other way to examine the Farm with sustainability is to examine the project internally and evaluate whether or not, in its current or near future state, it is sustainable from year to year.

Culture

Culture is way to engage people with sustainable mind sets; environmental, economic, and political. This is only possible if the people of East Trenton have the ability to engage in the new mind set the Farm and Agrihood look to create. This preliminary understanding of culture for this paper led to a deeper study of the historic and existing culture of East Trenton. Leadership looks to prevent gentrification and empower the community through discussion around food and ownership on the Farm. This work will examine the cultural phenomena that surround East Trenton and Capital City Farm through history, current state, possible futures, and strategies for the development of the East Trenton neighborhood.

Economics

Economics is, very broadly, the flow of goods and services in a society. When the Watson Institute of Public Policy became involved in the project, they enlisted the design firm Designing the We to work with the community on the Farm concept and to understand their needs. The community responded on a survey that, after education and youth development, the main things they needed were jobs. This is not unexpected given the lack of employment opportunities in the area. This lack of economic opportunity is inherently tied to America’s history of institutional racism and economic policies that extract wealth
from communities, particularly communities of color. Trenton’s community, 50% Black, is very indicative of the effects of these policies. The median household income of Trenton in 2020 is $35,500 compared to Mercer County, 21.5% Black, at $88,200 and New Jersey, 15% Black at $81,700. It is worth noting that Mercer County includes towns like Princeton, approximately a 20 minute drive away from Trenton, with a median household income of $125,500. Another indication of the disparity facing Trenton is owner occupied housing. In Trenton, it is 36.6% while in both Mercer County and New Jersey, it is approximately 64%. Studies have shown that building intergenerational wealth with any capital be it cash or land, is not usually possible without education. These past and present wealth extractive policies make it nearly impossible to build intergenerational wealth through property ownership. This is only exacerbated by the fact that, often, the quality of education is determined by local property values. The residents that Designing the We surveyed for the Farm project seemed aware of these forces as the community identified education and youth development as its most pressing need.

Sustainability is about systems continuing on for future generations. In this sense, some of the farm’s stakeholders seek to challenge the current financial system and implement one that will stabilize and grow in a previously resource-starved community using the farm as a catalyst. There is also the basic need for year to year financial sustainability of the Farm itself. Capital City Farm has staff and its stakeholders want to offer programming on the site. These require sustainable forms of funding to maintain them from year to year. In this
paper, I will discuss typical fiscal models for urban agriculture, the current state of finances of the project, and possible fiscal models for the future.

**Politics**

Politics is a system of governance; usually of a geographic area. It can also be a way of managing an organization. Formal forms include laws, bylaws, codes, ordinances, etc. Informal forms include precedent, social norms, relationships, alliances, etc. Both of these forms come into play in everyday life from the traffic lights on the street to the understanding between next-door neighbors to the way people communicate on social media. Politics has an economic aspect as well. Politicians, celebrities, and organizations can be said to have political capital and they can invest their political capital in something they believe will gain them more political or fiscal capital. For example, the political capital possessed by select leaders in the Capital City Farm project helped to leverage the funding opportunity with AT&T’s Believe Trenton Program.

If sustainability is important to a culture, it would be logical to see it reflected in that culture’s formal and informal politics. In the United States, often race and class issues stymie this happening in an equitable way. In practice, politics reflect the cultural values of those in power; not the whole spectrum of culture that is actually present. Capital City Farm is at the nexus of both formal and informal politics that govern Trenton. In many ways, it looks to address this lack of equitable representation of Trenton residents in the past and current, formal and informal politics surrounding the Farm. This work will discuss external politics
and policies of the past as well as the Farm’s internal politics that continue to affect the success of the Capital City Farm project.
Figure 9: *Chickens in the Coop*, photo by author, May 2019
B. Resilience and Scale

Resilience as practice often takes the form of identifying infrastructure vulnerabilities in the event of environmental catastrophe. Addressing infrastructure vulnerabilities is important but it is only one aspect of achieving resilience. The section looks at resilience as a concept and how it might or might not apply to East Trenton and Capital City Farm. Christophe Bene et al. characterize resilience as a ‘capacity’ versus an ‘outcome’ because “resilience is about agency and about the ability of people to make decisions that have positive (or negative) consequences on their own lives”.16 This ‘actively participating’ nature of resilience is important in understanding the case of Trenton, the Farm, and the Garden State Agrihood. Another reason to consider resilience and scale with regard to Trenton is the upcoming migration of people into cities that could increase stress in the community. Resilience will be used to analyze Capital City Farm’s and the Garden State Agrihood’s efforts in Trenton in Chapter Three.
Resilience

Resilience relates directly to Capital City Farm and the Agrihood because the Agrihood looks to increase East Trenton’s resilience using the farm; perhaps even becoming a model for others doing justice focused, community-based work. Christophe Bene et al. consider resilience a response to trauma (fig. 10). As the intensity of the trauma increases, the degree of response necessary for survival increases. There are two types of trauma: shock and chronic stress. Events with an acute time frame and high trauma are considered shock.

![Resilience diagram](https://via.placeholder.com/150)

Figure 10: Resilience, graphic redrawn by Author, Bene et al (2016)

Events with a longer time frame and low trauma are considered chronic stress. These are both relative to scale and depend on the total number of affected people versus the total number of evaluated people. Generally, these responses happen chronologically for communities. Absorptive responses allow communities to buffer the impacts of acute shock on livelihoods or chronic stress in a community and provide basic needs. Adaptive responses
allow communities to make incremental changes to continue functioning “without making major qualitative changes”, usually in response to acute shock or growing cumulative chronic stress. Transformative responses allow communities to “permanently and drastically” change the system to “ensure immediate survival” in the face of large-scale trauma.18

A third dimension to be considered when discussing resilience is length of time required to execute a response (fig. 11). Understanding the time dimension allows stakeholders in communities to effectively plan for the type of response needed to address the community’s stress as well as the root causes of the vulnerability that led to the trauma. Responses that take the shortest amount of time and demonstrates a community’s absorptive capacity would be ‘humanitarian intervention’ such as food or monetary aid. The type of

Figure 11: Resilience Diagram with Time and Intervention, Graphic Redrawn by Author, Bene et al (2016)
responses that take the longest amounts of time and demonstrate a community’s transformative capacity are development projects with goals such as increasing gender equality or increasing standard of living.19

Bearing this framework in mind, it is important to understand that not all responses are positive, appropriate to the amount of stress, or bring positive results. Some responses to stress, like reducing amount spent on healthcare, switching to less lucrative but more stable products, or switching markets entirely, can have quite negative long-term consequences. Even in some cases seemingly intuitive resilience strategies, such as a strong sense of community or organizational identity, have led to less overall welfare for a community. This is because their strong identity prevents them from employing other resilience responses.20

The final results of a community or organization’s welfare are determined by both the amount of trauma and the response to the trauma including unforeseen outcomes. This work will consider if and how Capital City Farm is resilient or increases resilience in East Trenton in Chapter Four.

The Issue of Scale

James Worstell’s, Coordinator of The Resilience Project, and John Green’s, Director of the Center for Population Studies at University Mississippi method of examining resilience is different than others as they address the concept of scales. Resilience needs to be examined at multiple scales to ensure that the system maintains its redundancy and modular connectivity;
two qualities of resilient systems. Worstell and Green recommend examining the following scales from largest to smallest:

1. Federal Policy System  
   Judicial, Congressional, and Executive Branches
2. Regional Network  
   New Jersey, The Tri-State Area or The Mid-Atlantic for New Jersey, NOFA, etc.
3. Community  
   Trenton, East Trenton Neighborhood, Local Non-Profits
4. Group of Farmers  
   Fernbrook Farms, Free Haven Farms
5. Farm and Farm Family  
   Angel, Walter, etc. and their families
6. Soils  
   The fill from the capping, Soil from Fernbrook Farms
7. Water  
   Water from the city, rain, drainage issues on the property
8. Person  
   The consumer of the produce

Decisions at any of these levels have had and continue to have profound impact on communities and their individuals. For this paper, the issue of scale is a constant thread woven throughout, especially the urban challenges and discussion of the ‘community’ scale of Capital City Farm itself. Redlining and Urban Renewal were federally scaled programs that had major effects on the community scale of East Trenton. Gentrification and the New Urban Crisis are community scale problems that are happening nationally. In this way, policy effects radiate down through and back up the system scales. It is important to understand that decisions made at the ‘person’ scale can have vast implications. This paper will continue to explore these implications for the property, the Capital City Farm Project, and those who interact with the project into the future throughout this work.
Figure 12: Farm Worker Watering Lettuce Row, photo by author, May 2019
C. Urban Issues

This section discusses the urban processes that are currently defining and could define East Trenton including redlining, urban renewal, and gentrification. Trenton, like many postindustrial and capital cities, was subjected to redlining. Redlining targeted both immigrant communities and communities of color. This either decimated or weakened their hold on their spaces, leaving their communities vulnerable to block busting. Urban Renewal such as the Coalport Redevelopment Project, a slum clearance project in East Trenton, caused a suite of issues that have yet to be resolved. This section will also examine Coalport as a trauma for East Trenton’s community. Gentrification has often followed the failed urban renewal projects because communities did not control their space anymore and speculative real estate markets pushed vulnerable residents out of their space. Urban agriculture is often found in areas like this; as a disenfranchised community’s strategy to control physical space. In this way, these topics are relevant to Capital City Farm and the Garden State Agrihood.

Redlining

In 1933, the Homeowner’s Loan Corporation (HOLC) was established by the Homeowner’s Refinancing Act penned by President Franklin Delano Roosevelt as part of his attempt to create stability during the Great Depression. This allowed (some) Americans to buy houses at a relatively low price with a very stable, government backed, thirty-year mortgage and this thirty-year mortgage is still the standard today. The Federal Housing Administration was
created by the National Housing Act of 1934, also penned by President Roosevelt, to
administer these government loans.24 This too lent stability to the American home owner in
a time when the banks were foreclosing many homes after the economic devastation of the
Great Depression.25 The HOLC worked with local realtors and lenders to survey and
produce security maps for over 200 American cities. Areas were given grades of A (Green)
considered “minimal risk”, B (Blue) considered “still desirable”, C (Yellow) considered
“definitely declining”, and D (Red) considered “hazardous”. Most HOLC Agents doing the
assessments were using a “white, elitist perspective” when evaluating the state of
neighborhoods and their potential for investment.26 Frederick Babcock wrote in the
underwriting manual: “The infiltration of inharmonious racial groups will produce the same
effects as those which follow the introduction of nonconforming land uses which tend to
lower the levels of land values and to lessen the desirability of residential areas.”27

‘Inharmonious’ and ‘nonconforming’ are subjective words that could be understood to mean
different than what the ruling (white) class perceived as appropriate and therefore, again
from their perspective, lessen property values for those who wanted to use land in what
would be considered a ‘conforming’ manner.

Mapping Inequality: Redlining in New Deal America is a collaborative project between
University of Richmond, Virginia Tech, University of Maryland, and Johns Hopkins
University. With a team of professors and students, the project has been digitizing the
HOLC maps of the over two hundred cities redlined in the United States. What they found
was, at the time, ‘inharmonious’ was frequently used to describe Black, Asian, Italian, Irish,
Jewish, Polish, Hungarian, Czech, Greek, Mexican, Russian, Slavic, Syrian etc. communities. By describing these communities in this way and declaring that their presence has a detrimental effect on land and home values, these maps became a tool to keep these communities from accessing or maintaining land and homeownership. Because homeownership is one of the best ways to build intergenerational wealth, especially when paired with higher education, it meant that these communities could not change their economic status. In terms of resilience and understanding the relatively short time scale, redlining was a shock to hundreds of communities in hundreds of cities in the United States.

Figure 13: Redlining Map of Trenton, Graphic from Mapping Inequality Project, 1937
Capital City Farm is adjacent to an area that was labeled ‘D3’ on a Homeowner’s Loan Corporation (HOLC) map in 1937 (fig. 13). ‘Mr. McHenry, HOLC Appraiser’ is listed as the person who filled out the form. As HOLC worked through local agents, it is possible that Mr. McHenry lived in Trenton. D3 was qualified as an older section of the city near both industrial and business areas with Land sloping towards the Delaware River. Favorable Influences were listed as “City improvements. Good churches and bus transportation. Accessible.” Detrimental Influences were listed as “Obsolescence of structures and poorness of surroundings.” Instructions to HOLC Agents on how to answer infiltration were as follows: “Any threat of infiltration of foreign-born, negro or lower grade population? If so, indicate these by nationality and rate of infiltration like this: ”Negro-rapid.” D3’s infiltration was described as “Negro” without a rate. Mr. McHenry stated that the population was decreasing, the buildings were in poor condition, property values and rent were declining, the demand for the area was non-existent, and the trend of desirability of the area was down.

There is some debate about whether the HOLC maps caused the geo spatial inequalities that still follow these types of descriptions to this day or were just another symptom of racism. What is clear is that the maps, through redlining, reinforced inequality and robbed people of color and poor whites the ability to build intergenerational wealth through land ownership. By declaring the center swaths of Trenton as ‘hazardous’, the government effectively prevented investment in those areas. The East Trenton Area is one of the many neighborhoods that is still dealing with the consequences of redlining today.
Urban Renewal and the Coalport Redevelopment Project

As people of the communities affected by redlining tried to leave these areas of disinvestment, they found multiple challenges. There were clauses that forbade home owners from selling to people of color, people of color were made to leave their new homes and apartments due to violence on their property or persons, etc. They often had little choice but to stay in these neighborhoods of disinvestment which stayed economically depressed. From there, these economically depressed neighborhoods would be called ‘slums’. Through slum clearance, a set of policies created by the Federal Housing Administration, these neighborhoods would then be razed. The National Housing Act of 1949, part of President Harry Truman’s ‘Fair Deal’, provided federal loans to cities to purchase these ‘slum’ areas to be redeveloped, usually but not always, into housing.\textsuperscript{36} The city was required to have a plan in place before they were eligible for the loans but it is unclear what standards the plans had to meet and what if any recourse would be granted if the plan did not work.

Much of this section is comprised from information found through the Trentoniana, a local history and genealogy collection at Trenton Free Public Library, and Tom Glover, Hamilton Library’s Historian and archivist. The Coalport file was comprised of newspaper articles and a few pamphlets about the redevelopment project but not the neighborhoods that were removed. It is of particular interest because the Farm exists on a property adjacent to Goosetown and Coalport; historically redlined neighborhoods that were affected by this redevelopment project. One of the Farm’s workers, Derek, was even displaced by this project and, to this day, struggles with stability. The account that follows is not a complete history.
It is meant to illustrate a shock that East Trenton Residents went through because of badly conceived and executed policy at the federal scale, lack of care of what happens to families at the community scale, how residents were excluded from the process at the city scale, and bad faith interactions with the business community.

Trenton’s notable urban renewal projects were Coalport and John Fitch Way I, II, and III. The Coalport project, one of the first redevelopment efforts in the country, started in 1955. The property was 17.8 acres with 450 sub-standard homes to be demolished (fig. 14). Capital City Farm’s property borders the Coalport Redevelopment Project. Theoretically, the Housing Act of 1954, created by President Dwight Eisenhower’s administration, provided loans for the creation of public housing units with preferential

Figure 14: Plan of Survey for the Trenton Housing Authority on the Coalport Project, The Trentoniana
treatment to be given to families affected by slum clearance. However, neither Coalport nor John Fitch Way had any low-income housing as part of the plan. This was most likely because they already had momentum before President Eisenhower’s addition.

Goosetown, one of Trenton’s redlined neighborhoods, was the colloquial way to refer to one section of modern-day East Trenton. Unfortunately, not much documentation of this neighborhood is to be readily found in the public realm. Goosetown’s homes and businesses, left vulnerable by the New Deal’s redlining through the 1930s – 50s, were mostly torn down in 1956 and 1957 to make way for the redevelopment. In this way, the Coalport Redevelopment Project acted like a shock to Trenton’s system as the upheaval lasted for only a few years.

A pamphlet was available to residents to explain the new project (fig. 15). This document defined the Coalport Redevelopment Program, redevelopment in general, and how Trenton would afford the project. The program does say all substandard houses will be torn down and will be replaced by light industry. It makes the argument that “Only the United States and City Government, acting together, have the financial means and the legal authority to accomplish this large-scale redevelopment” as opposed to allowing private industry to drive the development. The pamphlet is the only evidence of the City of Trenton’s interaction with its residents; through its redevelopment agency. There is no easily accessible record of public meetings where any complaints were raised or discussed. This does were very difficult to find. While blocking private enterprise from driving development in
East Trenton is a goal of the Agrihood, excluding residents from the decision-making process is not.
This pamphlet made it clear that the residents were required to sell to the
Redevelopment Authority. It is also made clear that residents would receive market value for
their homes and but no compensation for furniture etc. The Redevelopment Agency would
set up a field office to help “site families” find new residences. It did not outline what help
they would receive beyond that low-income site families would be given first priority in
public housing vacancies, something the federal government required. Again, this was
questionable in intent as no new housing was included in the Coalport or original John Fitch
Way Redevelopment plans.

More than 500 families had to relocate as demolitions occurred between 1956 to
1960. It’s important to note that tenants for the new lots were not settled until 1968; twelve
years after the first demolitions. By 1957, 284 families had already been relocated. Of the
284 already relocated, 108 of the families applied for low income housing. Of those 108,
only 42 were accepted, 11 were approved but hadn’t moved in, 30 families were rejected,
and 25 were still pending. Reasons for rejection included incomes that were too high and
families that were too large. Properties that were still held by owners and not the Trenton
Housing Authority were refusing to sell at the authority’s price. Property owners were
frustrated with the low dollar amount they were offered for their properties. The Trenton
Chapter NAACP filed a lawsuit against the Trenton Redevelopment Agency charging that
relocation was creating new slums with false figures saying that only a small proportion of
families had moved into stressed areas. Though there is information to be found about
numbers of families that moved into different neighborhoods, it is unclear what the
condition of all these neighborhoods were before or after the migration. Further discussion of the concentration of vulnerable and disenfranchised citizens will take place later in this chapter.

Most residents moved to areas just outside the Coalport neighborhood as the residents in these areas were less likely to be antagonistic to their new neighbors. One large group of displaced residents moved to a neighborhood made up of first- and second-generation European immigrants. The European immigrants reportedly left by the hundreds after the displaced Coalport residents moved in; a conflict of newly won status of ‘citizen’ by the recent immigrants and the attempts to gain status through reintegration by the Coalport community.42

As the program progressed, it became clear that some information about the state of the displaced residents should be gathered. In 1963, Mayor Holland tried to conduct a community survey to follow up with the relocated families. It is unclear what motive he had or what action he would take in response to the information gathered. His administration reached out to 83 families (approximately 20% of the number of families they knew had been relocated at the time) but only 89% of the 83 were found.43 The few respondents liked their new homes but missed their Coalport community and refused to talk about the way the finances had played out for them. Only four families, less than 1% of the displaced, responded that they had received help from the Relocation Authority.44

It wasn’t until the 1965 Federal Housing Act, signed by President Lyndon B. Johnson, that providing public housing was considered for displaced Trenton Residents. The
Mayor at the time, Carmen J. Armenti, with assistance from a federal Urban Renewal Agency aid began to work on a plan where some combination of rehabilitation and leasing could be implemented to protect the Coalport project under the 1965 housing act. In this way, the houses could be renovated as public housing units for large families having to relocate from other redevelopment sites. On this walk, residents were reported to have responded in multiple ways; most ambivalent, some glad for the attention to the neighborhood and potential positive changes, some requesting trees, some stating they should just tear the houses down. Because of the timing, it was obvious that these housing options were more for the residents displaced by the later John Fitch Way Redevelopments than the Coalport Redevelopment.

The other cause of trauma besides the direct upheaval of hundreds of citizens of Trenton was the mismanagement of the project as a whole. The original cost of the Coalport Redevelopment was $3.2 million with Trenton paying a third. As the project progressed, many complications and conflicts delayed development and cost the tax payers money. The city wanted only one industry to take over but was forced to divide it into multiple tracts after a lack of interest. The developer, Lipkin-Kahn, only sold two parcels over three years. Part of what delayed construction and sale were demolition procedures that violated contract like filling in basements that were to be paved over as a road with structurally unsound brick, mortar, concrete, and wood. Lipkin-Kahn was also accused of bribing the President of the Greater Trenton Council to be named as the developers for the John Fitch Way development. The developer brought a libel suit against mayor Holland and the council for
the accusation. This lawsuit also contributed to wasted tax funds on the project.\textsuperscript{49} While buying the property back from Lipkin-Kahn proved to be a good move due to increased sales of parcels, it was an expensive venture at $195,000.\textsuperscript{50} Another particularly illustrative transaction was between Trenton and The Trentonian. The Trentonian had been operating out of a property right behind City Hall that they had purchased for $25,000 a few years earlier. When they moved to Coalport, they sold it for $250,000 to Trenton which then turned it into a parking lot. In addition to this large mark up, they were given a low interest loan and tax breaks to make the transition to their new Coalport location easier.\textsuperscript{51}

As the project dragged on, the market value of the project decreased from 1.29 million before the start of the project to $754,000 and more than 10 years had gone by with no end to the project in sight.\textsuperscript{52} The cost to Trenton was up $69,841 higher than anticipated.\textsuperscript{53} Mayor Holland declared that approval for the purchase of the final Trenton owned parcel for $34,000 had been granted by the U.S. Urban Renewal Authority in April, 1966. It was to be a new $250,000 automotive center with a “diagnostic center for autos and automotive parts sales” on a two-acre parcel.\textsuperscript{54} In the end, it was a hard sell because the property had poor soil and would have raised construction costs for any potential inhabitant.\textsuperscript{55} Instead of the automotive center, the new Mayor Armenti approved a $1 million new police administration building.

As Goosetown had already been cleared away, The Trentonian stated, at least, “no demolition, ratable loss, or family relocation problem – problems that potentially plague the other five sites” would have to be dealt with in terms of the Police Head Quarters.\textsuperscript{56} In other
words, the demolition had already happened and the residents were already displaced so there were no taxes to lose or families to rehome. The city felt pressure to close out the urban renewal venture as it was paying $30,000 dollars a year in interest on the project.\(^{57}\) When the police headquarters was finally official, it ended up saving the city $60,000 that year alone. It is unclear if this was truly a savings as the city would have to pay the redevelopment agency the $34,000 for the 2.2-acre parcel.\(^{58}\) The previous mayor, Arthur Holland, released a critical press release about the decision to put the police headquarters there. He stated that the police headquarters was a departure from the master plan of light industrial zoning and called out the lost tax revenue of $15,000 a year tax.\(^{59}\) However muddled the project, with the police headquarters underway, it was finished.

In the end, city was making $55,126 a year in taxes from the eight companies that had moved into the space. This was only $20,000 more than when it was “the site of some of Trenton’s worst slums.”\(^{60}\) The slum clearance was considered one of the few successful aspects of the project. Part of the reason for the Coalport Redevelopment Project struggle an article stated, was “too many dreams and not enough planning”.\(^{61}\) Critics remarked that everything should have made Trenton attractive to industry: a central city location with utilities, a local work force, easy access to Philadelphia and New York City by rail or highway. However, lack of developer control and lack of an aesthetic standard led to an unattractive site.\(^{62}\) In addition to a failure to achieve its goals of revival and success of shattering of social fabric, the project created a deep distrust for planners in the community.
An article titled “Coalport after 20 years: the dream’s tarnished” by Bradley Graham reflected on Coalport in June of 1975. Some business remained but two lots were again nothing but weeds and a third, the meat packing plant, had been forced to close due to sanitary reasons. The area itself was characterized as “still plagued by decay”. Relocation was called out as a contributing factor to the city’s deterioration. In addition to these critiques, the article claimed that the tax rates were too high for the amount of business Coalport could provide.

An op-ed titled “40 years after Coalport” published on May, 3rd, 1995 stated that Coalport was “a mistake – a colossal mistake that hurt the city of Trenton and hurt many of its good citizens.” The author, unknown, declared that Trenton was merely one among many cities that took advantage of,

“…‘free’ but condition-encumbered money that came from Washington…to win federal approval, and the funding that went with it, a city had to demonstrate a feasible relocation plan for the residents of the targeted area. Too often the plan existed on paper only,…many of the displaced working-class African-American families…moved into other already crowded areas of North Trenton, creating additional congestion that tended to spread the blight…meanwhile, real estate agencies, landlords, and speculators profited…Large areas of empty land and parking lots still fill the space where a living, pulsing neighborhood once stood.”

While this was a passioned-filled article, it is consistent with how the city implemented its Coalport Redevelopment plan; without regard for the residents directly and indirectly affected at the community and family scale of East Trenton.

Perhaps the most illustrative example of the effects of the Coalport Redevelopment and its management, besides Farm Worker Derek’s situation, is an article about James Vereen. He was an ex-resident of Goosetown and he gave an interview to The Trentonian in
March, 1987 when he was 49. He stated “We [Ex – Goosetown residents] kept meeting at funerals and…finally we said let’s meet sometime and enjoy ourselves”. James remembered playing baseball and riding cows meant for the slaughterhouse. The slaughterhouse predated the dog pound that exists on the property today adjacent to the Farm. He expected over 300 ex – Goosetown residents to attend a fundraiser he was hosting and was looking to raise money, hopefully at least $500, for a scholarship meant for a Goosetown descendant. It is unclear as to whether this venture was successful. Certainly, no such scholarship fund exists today.

The 1995 op-ed finished by stating:

- there was no quick fix to urban problems;
- large-scale projects were likely to be ineffective at best, destructive at worst;
- The public should be involved at all stages of development, concept to implementation;
- Urban Renewal should be a holistic process including more social services such as job training, healthcare and drug treatment.

Trenton in 1995 finally seemed to be going in this holistic direction with small scale, public focused, projects managed by non-profits. This was, the 40-year reflection stated, despite all the red tape and outmoded regulation that was hindering progress.

While the Garden State Agrihood looks to undo many of the negative effects of redlining and urban renewal. They envision using Capital City Farm, a small-scale community project, to expand into the East Trenton community and become more large
scale to achieve its mission, there is a hope that, if the community is involved, this will make the project a success. The Ladder of Citizen Participation section later in this chapter will begin to discuss why the community may not be in a position to be involved or lead a project like the Agrihood. Chapter three will discuss more fully the Agrihood’s relationship with the community and the Farm itself.

_Gentrification_

Gentrification is a controversial term as it often has negative consequences such as pricing people out of their own neighborhoods and causing displacement of communities, usually of color and low income. The residents of East Trenton are concerned that this will happen to them and the leadership of the Garden State Agrihood has expressed that the project looks to work against this force. Understanding how this force works is the first step to preventing its negative outcomes. Richard Florida, a visiting fellow at NYU’s Shack Institute of Real Estate and Director of Cities at the Martin Prosperity Institute at the University of Toronto, states that gentrification is a symptom of what he calls the ‘New Urban Crisis’. In some cases, it is merely a natural change, in others it has much more dire consequences such as concentrating poverty into already stressed neighborhoods. This section will explore gentrification’s identity as well as its consequences, relying on Florida’s work.

Florida does an in-depth critique of gentrification by addressing both the economic side of the discussion as well as the emotional. Change is inevitable and challenging so when it happens to neighborhoods where long term residents are attached to a certain character,
there is an understandably negative feeling. It is different when there was a deliberate
decision to remove certain demographics out of a neighborhood. The numeric metrics he
uses to be able to say that a neighborhood is gentrifying today are: (1) incomes in the
examined neighborhood in 1990 were below 40 percent of the median income of the city
and (2) experienced rent increases greater than the median neighborhoods did. This seems
very clinical and does not take into the account the unique-ness of neighborhoods and their
development pressure and demographics. However, he does seem to use this metric mostly
with New York City. There is an element of ground truth that needs to be explored but for
the most part, it rings true when neighborhoods like Greenpoint, Central Harlem, and
Chinatown are labelled as the top three gentrifying neighborhoods in New York City.

Florida outlines modes of gentrification through the second half of the twentieth
century. The first involves a change in inhabitants. Young, single, white men might begin
renting in an area with higher crime due to location or architectural interest. Young, single
or married women, older people, and even families would follow. This second wave of
residents would be very committed to the neighborhood which would lead to displacement,
affecting black people and the elderly to a larger extent than other demographics. The
second wave, happening in the 60s and 70s, involved artists renovating old industry
buildings into studios and performance spaces. The wave from 1990 to 2014 was a general
wave of population increase in city centers, mostly of wealthy, well-educated, white people of
the top 10% of households in the U.S. In the most recent decade (2008 – 2018),
gentrification has been led by younger gen-Xers and elder millennials who are college
educated, single, or in a couple with no children or young children. While gentrification is undoubtedly driven by affluent white people, Florida states it can also be driven by middle- and upper-class black people. He states they are less likely to move to the suburbs due to discrimination and, when priced out, more likely to move to “and thus gentrify less advantaged” black neighborhoods.77

Generally, the largest critique thrown at gentrification is displacement. However, research is proving that the link between gentrification and displacement is much less significant than it is perceived. A study done by Lance Freedman shows that a neighborhood can change from 30% poverty to 8.3% poverty without any displacement, disadvantaged households were 15% less likely to move from a gentrifying neighborhood than a non-gentrifying neighborhood, and the likelihood of displacement of any household in a gentrifying neighborhood was 1.3%.78 This shows that displacement might not actually be the best way to examine the urban problem.

The most devastating effects of gentrification are in the fall out on other neighborhoods. At every economic level of neighborhood, the most vulnerable tend to be the ones who are displaced and forced into higher poverty neighborhoods with higher crime and worse schools.79 There is also an element of culture erasure that happens as neighborhoods are renamed and borders are redefined; for example: Bushwick to East Williamsburg.80.

Working back from what gentrification looks like and its effects, causes can be more easily identified. Florida highlights several forms of public investment that can cause gentrification beyond the desires of the gentrifying demographics. Public transit, schools,
universities, and parks are all forms of public investment that can lead to gentrification. Proximity of transit into urban centers attracts “highly educated professionals and knowledge workers” which in turn drives better community amenities such as schools and parks. Universities with their access to education and, in many cases, hospitals, attract the well-educated. Parks themselves can lead to gentrification with the classic example of The Highline. New, popular restaurants are also hallmarks of gentrification. Florida also makes the comment that gentrifiers make the urban look more suburban with green roof spaces and gyms and renovations that create residences have more square footage for a family unit than was previously normal. Community investments are a challenge because these disenfranchised communities deserve the same amenities of better transit, schools, and hospitals. By labeling these things as causes of gentrification, it makes communities most in need of these amenities reject them.

Florida states that gentrification is much more likely to happen in postindustrial areas where few people were living anyway and in working class neighborhoods that benefit from the increase in home value with displaced residents able to afford housing elsewhere. It is far less likely to happen in areas of chronic poverty and other related social problems. Race also seems to be a factor when it comes to the likelihood of gentrification versus the likelihood of chronic poverty. A study found that if the population of a neighborhood was more than 40% black, it tended to have no economic development, with a few exceptions in New York City, even if it was next to other gentrifying neighborhoods. The map below
(fig. 16) shows Trenton’s census tracts as of 2017. Most of the city has an over 40% black population. By the previously mentioned study, this correlates with the lack of development that has happened in Trenton. However, eventually, development pressure will increase to the point where this 40% threshold will not matter.

Trenton’s population peaked in 1950 at approximately 128,000 residents and, for reasons surrounding the Coalport Redevelopment, had a negative population growth rate...
until 2017 (fig. 17). This shows that Trenton has not seen a return of population the way other small cities in New Jersey have.

The map below (fig. 18) shows population growth rate in the areas with 40% Black population or more. The area showing the most growth is around the Capitol/Downtown region. This population growth chart and the map of relatively current growth rate show that Trenton could be ripe for gentrification because of its (until 2017) shrinking population and East Trenton areas that continue to shrink or show minimal growth.
Another study examining neighborhoods with high poverty within ten miles of urban cores with a population of 1 million or more found that if a neighborhood was poor in 1970 it was likely to have remained poor in 2000. This same study found that “For every neighborhood that gentrified, 10 remained poor and 12 became economically disadvantaged”. These statistics demonstrate the concentration of stress that follows gentrification. While Trenton’s
population is not in the millions nor is it clear, neighborhood by neighborhood, if East Trenton’s median household income stayed low from 1970 to 2000 (fig. 19) due to difficulty finding that census information, it is clear that Trenton as a whole did not see the same nineties boom that New Jersey as a whole did. It is also clear that Trenton has trended positively despite the great recession in 2008 but census tract 20 (the one capital city in which capital city is located) reflected New Jersey’s overall economic downturn; albeit starting at a much lower threshold. This graph does show that, in 1960, Trenton and New Jersey were in step economically and then Trenton began to fall behind. While this is not enough to say that the East Trenton neighborhood meets this study’s threshold of poverty from 1970 – 2000, it does show that Trenton did not keep up economically with New
Jersey. Seeking to improve neighborhoods that are not gentrifying because of concentrated stress and poverty seems like the most logical step. This is a general goal of the Garden State Agrihood.

It is obvious that there is much work to be done in terms of pulling Trenton out of its predicament. Florida’s research on what gentrification looks like by the numbers and demographics does not analyze the community scale decisions that were made to change these neighborhoods. With redlining, it is obvious in the under-writing manual that the program was racist and xenophobic. While gentrification is not so blatantly racist as the under-writing manual, redlining tied wealth, class, race and location together more firmly making any classicist decisions that price residents out of their homes, inherently racist. This removal of residents who do not contribute to a city’s tax base is the aspect of gentrification that needs to be addressed if the Agrihood wants to eventually be successful at providing amenities to the neighborhood while protecting longtime residents. The Agrihood looks to have an answer in the form of Capital City Farm to the challenging question of: what can be done to break East Trenton out of systemic poverty and, eventually, into gentrification for the residents in such a way that does not concentrate poverty in racially correlated ways?

While the Agrihood’s looks to address gentrification’s historical precedent, how it will achieve its intended new vision for East Trenton remains unclear. What has been defined will be discussed more in Chapter Three and Four.
The New Urban Crisis

The New Urban Crisis is a theory developed by Richard Florida based on his urban research. In Florida’s evaluation of U.S. cities in crisis using his New Urban Crisis indicators, the Trenton – Ewing metro area ranks 13th out of 360 metro areas in the United States in Florida’s overall New Urban Crisis. This alarming statistic warranted investigation. The New Urban Crisis has five features:

Firstly, there is an increasing economic gap between cities due to globalization. Florida uses the term ‘Winner Take All’ Urbanism to describe how economic super stars are concentrating in only a few cities. From 1978 to 2015, CEO salaries increased 940% and typical worker wages increased only 10%. CEO pay increase was mostly attributed to stock options with the assumption being that a better paid CEO would perform better and that the company in turn would perform better. This is not the case according to a study of 800 CEOs at 429 companies. The twenty top paid CEOs’ companies performed the worst from 2004 to 2014.

Cities engage in this behavior as well by offering tax breaks and other deals to attract superstar companies. However, by trying their best to attract these economic superstar companies, performers, industries, etc. with these tax breaks and other deals, they cause their land and other real estate costs to sky rocket without necessarily reaping the economic benefits of housing these superstars. In cities with more than a million people, the average cost of an acre is $64,800 as compared to cities with less than a million people the average cost of an acre is $16,600. In this way, cities like Trenton become an attractive option for
companies looking to expand into affordable land markets. This assumes that they have attractive land options or land at all. While this could be a boon for Trenton, it is unclear if the development that would follow would be for the residents of Trenton or more wealthy outsiders.

The second aspect of the New Urban Crisis is rising housing prices in economically successful cities. Neighborhoods that show a sign of liveliness or invention become prizes and are bought up by the ultra-rich. They do not live there. They buy up the space and keep the prices high because they do not need to sell. This forces the people who were creating the vibrancy, the local artists, musicians, and small business owners, out of the space. Florida goes on to talk about how ‘Not In My Back Yard’ (NIMBY) sentiment has stifled growth as well. By keeping all perceived bad things out of a city to preserve rent prices, NIMBY minded landlords stifle growth and development. While this presence of this phenomenon in Trenton has not been explored in this paper, it is worth noting that some of the larger general goals of the Agrihood are to prevent this phenomenon of wealthy absentee landlords amassing housing from happening.

The third indicator of the New Urban Crisis is increasing inequality and segregation within cities themselves. This is driven by many factors including gentrification. Trenton-Ewing metro area ranks 8th in segregation – inequality and 2nd in overall economic segregation according to Florida’s assessment of all metro areas. Because of this increase in inequality and segregation, there has also been a shrinking of the middle class. From 1970 to 2012, the middle class has shrunk from 65% to 40%. The last effect this has had is
changing the dynamic from poor cities and rich suburbs to “a patchwork metropolis in suburb alike.” Trenton, in some ways, is exhibiting with only one census tract whose median income is above $60,000 but a city-wide median income of $35,500 (fig. 20). When the redlining map is held up to this income map as well as where the current concentration of Trenton’s black residents is (fig. 21), it’s easy to see the connections between politics, the environment, economics, and people.
The fourth indicator of the New Urban Crisis is increasing poverty, income and racial segregation, and crime in suburbs.\textsuperscript{96} The some of the evidence that indicates this is happening is that, from 2000 to 2013, the number of the suburban poor grew 66% compared to the 29% of urban poor.\textsuperscript{97} The last indicator of the New Urban Crisis is increased urbanization in the developing world without increased standard of living. Generally speaking, Florida says that, in the past, cities have contributed to growing economies and therefore increased standards of living. However, this is no longer the case.\textsuperscript{98} While Trenton is not suburban its population has begun to increase slowly, especially around the capital district. This will most likely accelerate as people move towards cities in the future especially with New Jersey’s density. It will be important for Trenton to prepare for this influx and understand that its infrastructure will be more burdened.
A quick word must be spoken on Richard Florida’s solutions. While his big picture research and analysis do make sense at the country scale, the solutions he provides do not make sense at the Trenton or Farm scale. This is due to a lack of specificity, a belief that money is the answer, and a lack of awareness of the human scale. He speaks about updating planning and zoning laws with deregulation of land use to allow for cities to grow as they need and a tax on lack of usefulness.99 The understanding that modern planning and zoning regulations still use outdated methods and therefore the regulations need to be updated is valuable. However, deregulation is not a viable answer, especially in highly urbanized areas with many people. This could lead to lack of care with regard to brownfields and super fund sites. A tax on lack of usefulness is also suspect. Who is determining the usefulness? What is the value of community strength? These value judgements are often the reason community gardens and farms are converted to housing: because apartments are considered a higher and better use of space. In addition to these critiques, his solutions do not address the different land and resources challenges facing capital cities versus other cities. So, while this work relied on his research to examine problems that are universal to cities, it will not be relying on his proposed solutions to those problems.
Figure 22: Drainage and Weed Issues Between Rows, photo by author, May 2019
D. Environmental Justice and Participation

This next section discusses the concept of Environmental Justice at the federal, state, and organizational (American Society of Landscape Architecture, ASLA) scale both as measuring sticks for later in the paper as well as potential allies in the Garden State Agrihood’s work. Understanding the way different governmental and professional organizations are understanding and acting on this topic is important to Capital City Farm and the Garden State Agrihood because they look to act on environmental justice. While the Farm, the Agrihood, and other stakeholder organizations could partner with these governmental and professional organizations in the future on the topic of environmental justice, it is important to understand that goals for the project moving forward have not been defined and therefore this is not being considered. Chapter Three will evaluate whether the Farm is truly achieving environmental justice by evaluating its programming based on the issues that ASLA’s Environmental Justice Professional Practice Network works to address. Citizen participation is also discussed in this section because the Agrihood looks to increase East Trenton’s participation in the civic process. Ideally this would increase its residents’ control over their space and lives and undo past damage while preventing future stress.

_Environmental Justice Definition from E.P.A._

The United States Environmental Protection Agency (EPA) provides the most widely accepted and employed definition of Environmental Justice:
“Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

1. the same degree of protection from environmental and health hazards, and
2. equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”

To manage this goal, the EPA has an Office of Environmental Justice (OEJ). For the EPA, New Jersey falls in Region 2 which includes New York, New Jersey, Puerto Rico, and The U.S. Virgin Islands. They have completed two projects in New Jersey; both in Camden. One, a ‘2018 Collaborative Problem Solving Project’, worked to prevent illegal dumping in the city of Camden with multiple community partners such as Center for Family Services, Inc. (the grantee), Camden County Municipal Utilities Authority, Camden County Police Department, Camden Lutheran Housing (Non-Profit Community Organization), The City of Camden, and the Cooper’s Ferry Partnership/Camden Collaborative Initiative (Non-Profit Economic Development Corporation). The Second was a ‘2017 Small Grants Project’ that looked to address stormwater management with Green Infrastructure as well as youth education. The project partners were the Cooper’s Ferry Partnership (the grantee), New Jersey Tree Foundation, Delaware River Keeper Network, and Urban Promise. Both projects were interdisciplinary in terms of project partner types and goals. So far, in terms of equitable distribution of projects, OEJ has a lot of work to go.

For the EPA’s region 2, the OEJ has an action plan. Of particular interest to this paper is the ‘Cross-Agency Focus Area’ of ‘Foster Administration-Wide Action on
Environmental Justice” Strategy 3 and the ‘Special Initiative’ of ‘Promote Urban Agriculture’.

Strategy Three, “Foster Healthy and Sustainable Communities with an Emphasis on Equitable Development and Place-Based Initiatives”, looks to build sustainable communities by fostering better collaboration of governmental agencies on sustainability goals. It also looks to promote Green Building and Green Jobs by supporting green jobs training and better community dialogue to identify skill sets that will be needed in the future. While specifics are not listed in the action plan, the OEJ does look to move towards specifics in the future. Most of what is mentioned in this section has a focus on disaster relief or enhanced infrastructure such as flooding mitigation or greener transportation methods. Both New Jersey and New York are mentioned, with Paterson, NJ called out specifically. While building better relationships between governmental agencies is part of the plan, it is only to improve current functioning; not a consideration of other strategies. This demonstrates a focus on the Environment and Economics aspects of sustainability; not Culture or Politics.

When the special initiative of ‘Promote Urban Agriculture Efforts’ is examined, it is with a focus on educating the stakeholders on soil contamination issues in the urban context with its primary partner outside of the federal government being Cornell University. This has even more limited focus on ‘Environment’ and no mention of New Jersey; just New York City. It is also worth noting that Puerto Rico and the U.S. Virgin Islands were not mentioned at all in the action plan. While it is promising that environmental justice as a
topic has some infrastructure at the governmental level, it has a long way to go to achieve it on the ground level.

While the Farm is, in some ways, eligible for grant assistance through the EOJ, grant programs that are available only offer one-time investments and look to spread the grants to as many programs as possible. This means that providing sustained salaries and support programs is not possible. Competition for funds make the likelihood of being selected for a grant small even if a program is demonstrating consistency. Capital City Farm still has yet to achieve consistency and is therefore unlikely to even be considered for grant allocation.

Environmental Justice According to New Jersey Department of Environmental Protection

The New Jersey Department of Environmental Protection (NJDEP) uses the EPA’s definition of Environmental Justice. Many environmental justice issues such as brownfields and combined sewer outputs (CSOs) are being addressed in New Jersey and fairness and equitability are official goals of the Murphy Administration. There is even an Environmental Justice Advisory Council (EJAC) to guide the NJDEP commissioner on projects. The EJAC does well by looking for people of all different fields, backgrounds, and positions in their community to fill its seats. Urban Agriculture is one of the areas of expertise desired on the EJAC. However, despite these positives, at the end of the day, it is an advisory council and does not have official decision-making power. This means that, as an advocate for environmental justice and urban agriculture, it does not have decision making power to assist Capital City Farm or projects like it in New Jersey moving forward.
Environmental Justice According to ASLA

As this work created from the perspective of a Landscape Architecture student, it was important to see how the American Society of Landscape Architects (ASLA) has framed and acted on environmental justice. ASLA has Professional Practice Networks (PPNs). These PPNs are meant to provide support to practicing landscape architects and “represent the major practice areas within the profession of landscape architecture”. The issues the Environmental Justice PPN looks to address through landscape architecture are:

1. “Unequal distribution of resources such as clean air and water, healthy food, homes, parks, places to walk and sit in public, etc.
2. Inaccessibility of public goods and resources because of transportation, cost or discrimination.
3. Exclusion from facilities and full participation in decisions about one’s community largely because of poverty, prejudice, race, income, recent immigration, or other marginal status.”

The below are the goals stated for the Environmental Justice PPN as of March, 2020:

1. “Create a network of knowledgeable landscape architecture professionals involved in, inspired by, and interested in pursuing environmental justice through education, research, and practice.
2. Collect, compile, advance, and disseminate state-of-the-art information and research related to environmental justice practices.
3. Provide assistance as needed to support and inform ASLA programs and policies on issues related to environmental justice.
4. Support initiatives, programs, and mentoring opportunities that expose underserved student populations to landscape architecture career options and help achieve full representation of perspectives in the profession’s work.
5. Encourage members to develop online learning presentations, submit proposals for ASLA Conference on Landscape Architecture education sessions, submit projects for design awards, and post content through The Field.
6. Encourage members to work with allied professionals to develop resources for environmental justice.112

The goals do not include specific modes of best practice with regard to environmental justice and the issues that the PPN lists that it would like to address, though expressed clearly and concisely, lack specificity. However, it is meant to provide a way of thinking more than solutions and increase connection between interested landscape architecture professionals who can develop solutions. The website for the PPN includes webinars for training and a blog to keep PPN members informed. There is also a guide called “A Student’s Guide to Environmental Justice.” It includes a timeline of environmental justice, statements of how landscape architecture and environmental justice connect, design principles, engagement principles, and references for further information. This is not available to the general public as it is still being tested for functionality. This is relevant to the Farm and projects like it because it is important to understand how professionals in this field, other design fields, or other construction fields can both hurt or help their missions. The three issues the ASLA Environmental Justice PPN looks to address will be used in evaluating Capital City Farm and the Agrihood in Chapter Three.

*The Ladder of Citizen Participation*

The Ladder of Citizen Participation was put forth in 1969 by Sherry Arnstein in the Journal of the American Institute of Planners. At the time, she was Director of Community Development Studies for The Commons. The Commons was a non-profit research institute based in both Chicago and Washington D.C. Before that, she was Chief Advisor on Citizen
Participation in the Housing and Urban Development’s Model Cities Administration. The Model Cities program was part of Lyndon B. Johnson’s ‘War on Poverty’.\textsuperscript{113} It was authorized in 1966, just after the National Housing Act of 1965 expanded funding for existing federal housing programs to care for the most vulnerable.\textsuperscript{114} This was the same housing act that allowed Mayor Armenti to begin planning for increasing public housing through rehabilitation of existing structures in the Coalport Redevelopment area. This research came about during a federal administration that looked to, at the federal scale, solve some of the problems the U.S. government had created at the community and family scale.

The Ladder idea was meant to be provocative and inspire community organizations to increase their power and achieve equal ground with their local governments. At the time, federal government thought of citizen participation in three rankings which are indicated on the side of Arnstein’s Ladder (fig. 23). Nonparticipation was considered officials only listening to their constituents. Tokenism was the next step up which was a little more inclusive but Arnstein noted that it ultimately had the same result as nonparticipation.

![Figure 23: Ladder of Citizen Participation, Graphic Redrawn by Author, Arnstein 1969](image-url)
Arnstein considered Citizen Power the most positive relationship type between community groups and local government. After studying local community group and local government relationships through the U.S. Housing and Urban Development, Arnstein refined these three categories into eight (Fig. 23):

1. **Nonparticipation – Manipulation** – citizen participation as a mode of public relations for those in power. Examples include: citizen advisory committees where citizens are brought in by those in power to ‘rubberstamp’ the actions that those in power take even though the citizen was not involved in the planning of the action or program.\(^{115}\)

2. **Nonparticipation – Therapy** – this is a form of government program where citizens are enrolled and are considered the cause of their own struggles instead of addressing the systemic causes of those struggles. Examples include: anxiety diagnoses in college students being treated with individual therapy rather than addressing the astronomical cost of college.\(^{116}\)

3. **Degrees of Tokenism – Informing** – Arnstein considered this the first legitimate step toward citizen participation. It includes a one-way flow of information from those in power to citizens so that the citizens have little to no opportunity to influence planning with feedback. Examples: informational meetings, legal jargon that citizens cannot understand, and responses to inquiries rather than a conversation.\(^{117}\)

4. **Degrees of Tokenism – Consultation** – This is characterized by engaging citizens and asking for feedback or opinions. However, there is still no guarantee that action will be taken on this information. Public participation is seen as checking a box and
another mode of rubber stamping. Example: unpaid community surveys that mine residents for information and do not lead to any action.\textsuperscript{118}

5. Degrees of Tokenism – \textit{Placation} – This takes the form of having a few stakeholders deemed worthy to be part of the power structure. In this way, citizens are part of the power structure but do not make up enough of it to enact change. Example: HUD’s Model City Program’s City Demonstration Agencies (CDAs) creating “citizen policy boards” that had advisory roles but no actual policy making function or power.\textsuperscript{119}

6. Degrees of Citizen Participation – \textit{Partnership} – power is a negotiation between the powerful and citizens. Arnstein mentions that this is most effective when citizen groups have enough to pay leaders for their time, the power structure is beholden to the citizen groups, and decisions cannot be made unilaterally. Example: Philadelphia’s CDA gave five of its eleven seats to a community organization that was paid for their time through the Model Cities grant which allowed them pay their own staff of organizers, planners, etc. \textsuperscript{120}

7. Degrees of Citizen Participation – \textit{Delegated Power} – in the negotiation for power, the scales tip toward the citizen group. The citizens hold the majority of the positions in the power structure. Example: In 1969, The Hill Neighborhood Corporation received $110,000 out of a $117,000 Model Cities planning grant from the HUD to hire their own planning staff and come up with their own plans. Despite this freedom and control, because of stipulations in place from the HUD for the Model
Cities programs, the plans still had to be approved by the city council before the project could move forward.121

8. Degrees of Citizen Power – *Citizen Control* – At this stage, citizens are fully in charge of management and policy; able to decide how and if people from outside the community can change them. Example: In 1967, The new Southwest Alabama Farmers Cooperative Association (SWAFCA) received approximately $1 million for equipment and staffing. This bypassed the local power structure and, despite intimidation and blockades, allowed the SWAFCA to grow its membership to 1,150 and turn a profit. The Co-Op board consisted of 20 farmers, 2 from each of the 10 counties involved in the cooperative.122

Arnstein herself considered this ladder a simplification of the truth. Both ‘haves’ and ‘have-nots’ are quite diverse in their points of view and interests. However, by creating this framework, Arnstein fashioned a tool that furthers understanding of power dynamics. She declares the general obstructions to true citizen participation are “racism, paternalism, and resistance to power distribution” from one side and “inadequacies of the poor community’s political socioeconomic infrastructure and knowledge-base”, “difficulties of organizing” due to “futility, alienation, and distrust”.123 While Arnstein’s work was written fifty years ago, it holds true today. By refining the understanding of relationships between citizens and those in power and what causes them to be dysfunctional, communities can begin to navigate the path forward.
In this navigation forward, one should not assume that the community can “climb” this ladder. For many general reasons already discussed in this paper, communities such as East Trenton cannot just climb this ladder: inability to achieve sustainability and resiliency at multiple scales due to practices like redlining and environmental justice issues, etc. It is the responsibility of people and organizations in power while working with individuals and communities affected by these urban issues to understand that they come from a place of privilege and power. Therefore, those in power must support these individuals and communities while they climb the ladder; not just clear the way and wait for these individuals and communities to be able to do it on their own. This ladder concept and framing of the ladder concept will be used in Chapter Three to analyze how Capital City Farm, the idea of an Agrihood, and the operational dynamics came to be.
Figure 24: A Promise of Peppers, photo by author, June 2019
E. Food Systems and Urban Agriculture

This section will briefly cover James Worstell’s and John Green’s research on resilient food systems. It is important to have an understanding of the facets of resilient food systems because it builds an understanding of how the Farm could support movement toward a hardier food system as well as become more resilient in and of itself. It will then shift focus to discuss East Trenton and Trenton as a whole as food deserts. This will better clarify why a farm concept made sense to the stakeholders involved in the creation of Capital City Farm. From there, this section briefly explores the history of urban agriculture’s reasons for manifestation and expectations moving into Daftary-Steel et al.’s concept of the Trifecta of Urban Agriculture. Understanding this history and current challenges clarifies that many of the struggles that urban agriculture deals with come from unmet expectations: namely that it should meet certain goals in disenfranchised communities without outside funding. All of this will lead to a more wholistic understanding of Capital City Farm’s goals, the expectations past and present leadership have for the project, and the struggles it continues to face moving forward.

Food System Resilience

James Worstell, Coordinator of The Resilience Project, and John Green, Director of the Center for Population Studies at University Mississippi, defined eight qualities of resilient food systems after examining successful food systems in Arkansas, Tennessee, and
Mississippi. Despite this framework being built around a study on rural food systems, the components are still relevant for the Farm and the Agrihood. Social systems would have more prevalence in urban food systems. The eight components below are listed with hypothetical examples using Capital City Farm:

1. Modular connectivity - A resilient system has pieces of the system are independent but highly connected and therefore sensitive to change and able to respond to that change.
   Example: Capital City Farm in a network of connected farms.

2. Local self-organization - A resilient system has structures dedicated to creating more order in the group. Example: The Garden State Agrihood organizing a community and its households.

3. Infrastructure (e.g., soil, water, increasing) - A resilient system delays consumption and profit-taking to build infrastructure and reserves. Example: investing in natural capital such as Fernbrook Farm bringing top soil to the Farm for better crops in the following season.

4. Responsive redundancy - A resilient system has back-ups to replenish lost components.
   Example: Angel, the Farm’s farmer, teaching Walter and Derek, the Farm’s workers, skills, abilities, and functions to ensure that the farm survives and grows in its capacity to support the workers and others.

5. Complementary diversity - A resilient system turns wastes of one system into valuable inputs to other system. Example: The Farm producing a variety of crops, selling or donating in multiple markets, multiple sources and types of capital and supply chain, and spatial heterogeneity amongst the farms in the Farm’s network.
6. Conservative innovation - Resilient systems are open to new ideas while retaining ideas that work from the past. Example: the Agrihood focusing on maintaining its current programming on the Farm while slowly adding on other programming to address its mission.

7. Integration of natural ecological systems - Resilient systems are complementary not just to each other, but to unmanaged ecosystem services. Example: Angel, the farmer, reducing tillage and using cover crops as well as composting all clean, weed seed free organic matter to invest in the top soil in later seasons.

8. Periodic transformation - Resilient systems are continually reforming themselves. Example: Capital City Farm moving from donations and sales at a local farmer’s market to donations and contributions to a bag share program with other local farmers. These components all provide modes of response to potential shocks to the Farm and, if they were achieved, could increase the Farm’s resilience. If the Farm were successful, it would increase the strength of Trenton’s food system as whole. As of 2015, Trenton was considered a food desert.

_Trenton as Food Desert_

In 2015, the Wagner School of Public Service prepared a report for Isles, Inc., an original partner in Capital City Farm’s naissance, and Rutgers Center for Urban Environmental Sustainability on food assets in Trenton. They found that Mercer County had one supermarket for every 11,450 residents and one grocery store or supermarket for every
14,500 residents. In Trenton, one supermarket served 84,500 people, while the supermarket and two grocery stores on average served 28,150 people each (fig. 25). This is consistent with the interest in starting a farm in this neighborhood on the newly acquired open space right next to the Trenton Area Soup Kitchen. East Trenton residents lack access to healthy food. One of the ways that people are addressing the need for healthy food systems in cities is urban agriculture. Urban agriculture has many modes. Some of these are community gardens, urban farms, animal husbandry, aquaculture, agroforestry, urban beekeeping, or horticulture. These modes are expressed through varied business models that suit different priorities. A further discussion of urban agriculture business models is in chapter four.
History of Urban Agriculture Manifestation and Expectation

Besides being attractive environmentally, urban agriculture has a history of appearing during times of strife manifested at the community scale, helping people meet a basic need from their habitat: food. Since the late 1800s, there has been a desire to address environmental and social concerns with urban agriculture. Some examples of this are Pingree’s Potato Patches in Detroit 1894, the New York Association for Improving the Condition of the Poor in 1898, Subsistence gardens of the Great Depression, and Victory gardens from World War I and II. These all looked to address perceived crises and increase self-reliance in some way. However, the framing changed from crisis to crisis. In the 1890s and during World Wars I and II, urban agriculture was seen as a way to strengthen agricultural economy and the food system. In the Great Depression, the food system was in fact over stocked meaning that anything perceived as emergency food stores was acceptable but any surplus was considered a threat to the agricultural economy.

The expectations on the gardener and gardens shifted as well. In the 1890s, growing food was meant to help economically through reduction of welfare need and job training. This was paradoxical as there was no discussion of the barriers to access land that hindered lasting economic benefit. During the Great Depression, the expectation was that this was temporary. Things would get better, the land would be developed as something else, and workers would return to their jobs. Victory gardens were part of patriotic duty during the World Wars and support for this practice decreased significantly after the Wars were over.
During recent history and today, community gardening and urban agriculture are kaleidoscopes of participants and forms. It is becoming more acknowledged in the urban landscape as cities, states, and the federal government continue to build policy and space for it into the discourse. While the projects are not always sustainable, spaces to engage in these practices are, in general, becoming more numerous. While there are still challenges with regard to disenfranchised communities and bandwidth, it has gained a foothold as a legitimate land use in the urban fabric and continues to find new purpose.

The Unattainable Trifecta of Urban Agriculture

This is a theory proposed by Sarita Daftary-Steel, Hank Herrera, and Christine M. Porter; a collaboration between Food Dignity, The University of Wyoming, and The Center for Popular Research, Education, and Policy, Inc. It is the idea that urban agriculture is unable to achieve the following three things without outside funding:

![Figure 26: Three urban agriculture goals, graphic by author, Daftary-Steel et al (2015)](image)
In terms of affordable food, the researchers find dissonance in the U.S. federal government. The USDA guidelines state that consumers should be eating a half plate of fruits and veggies every meal but the USDA dedicates less than a percent of its budget on production of fruits and vegetables. In fact, they go so far as to define fruits and vegetables as ‘specialty crops’ which implies that these crops are not part of a regular diet. Only certain products are heavily subsidized like corn receiving a total of $84.4 billion in subsidies, tobacco producers receiving $1.5 billion, and apples receiving $262 million from 1995 to 2012. These subsidies were originally created to stabilize food prices and prevent This means the majority of producers need to both earn back costs of production and turn a profit which means high prices. This leads to inaccessibility of fruits and vegetables for low income communities like East Trenton. One of the goals Capital City Farm has is to address this issue both through humanitarian efforts at Trenton Area Soup Kitchen as well as providing fresh fruits and vegetables for the East Trenton community at large.

It is important to note that the USDA does recognize urban agriculture as agriculture. They have even created a tool kit with the intent to “lay out the common operational elements that most urban farmers must consider as they start up or grow their operations”. The tool kit often provides information on how to get loans for land access or infrastructure. In terms of land access, the tool kit says that, to be eligible for a land access grant of up to $50,000, you must be considered an “agricultural producer”. It then says to
go to your local farm service agency (FSA) to figure out who is considered an agricultural producer.

While it is unclear who they consider an agricultural producer, the challenges are numerous in this process. For any loan to be disbursed, one must bring “proof of identity: driver’s license, Social Security number/card, Copy of recorder deed, survey plat, rental or lease agreement of the land” and organizations must bring “corporation, estate, or trust documents.” The requirement of identification and recommendation for travel to an FSA branch are barriers if an interested farmer has struggled with stability or access to transportation. Typically, these FSA locations are in more rural farming communities as that is who the USDA has considered legitimate farmers. Capital City Farm is located relatively near one in Hamilton Township. This FSA location is 6.3 miles (approximately 2 hours) by foot, 8.9 miles (approximately 15 minutes) by car, and 50 minutes by public transit. The fastest public transit option still includes a mile walk and thirty-one stops to reach the FSA. In addition to the barriers to access loans, these loans must be paid off which means charging enough for the produce to make a profit. This again leads to higher costs and prevents urban agriculture from meeting its first expectation.

In terms of the second goal of urban agriculture, provide job and leadership training to those often excluded, the challenge is that the skill set of the people for which urban agriculture is trying to create opportunity does not always match the skill set that is needed to be successful at urban agriculture. This can be due to many factors, such as poor-quality public schools, incarceration, and participation in the informal markets, which means that
the investment of capital into training is higher than if the workforce already had some training in urban agriculture.\textsuperscript{136} This has been a challenge on the Farm and will be discussed more in Chapters Two and Three.

The USDA, in their Urban Agriculture Tool Kit, has a grant program for projects that “provide education, mentoring, and technical assistance to people entering farming…requiring a 25 percent match”.\textsuperscript{137} Those eligible are networks of public or private organizations, nonprofits, cooperative extensions, and universities or colleges. Grant programs like these are often competitive and expect stability before they will consider a project. The 25% match implies that there is an expectation of some profit or donation in the venture. The only specific mention of challenges in the community in the document are about safety and security. Capital City Farm has struggled with this and this will be discussed in chapter two. The document provides one resource to build community buy-in to prevent damage to property: “Integrating Urban Farms into the Social Landscape of Cities: Recommendations for Strengthening the Relationships between Urban Farms and Local Communities” published by Johns Hopkins Bloomberg School of Public Health. There is no mention of the logistical struggles of working with community members who are most in need of the opportunities that urban agriculture is expected to offer.

The third goal (generate income and jobs funded by profits) in the researchers’ experience, is explicitly stated by urban agriculture workers and implicitly stated by funders. The researchers found that even when investors were impressed by strong community leadership and successful youth programs, they would not invest as the revenue accrued by
these programs was minimal. Economically viable agriculture is challenging without the additional goals of providing job training to those who have been marginalized, keeping prices affordable for low income communities, and the costs of operating at a small scale.

This expectation is where the USDA Urban Agriculture Tool Kit provides the most support. They have provided charts to help guesstimate startup costs, infrastructure costs, remediation costs, and materials cost. There is information on grants, loans, market development, and production strategies. Understanding different costs and ways to pay for those costs are vital to successful urban agriculture programs. Unfortunately, many of the grants and loans available assume that at least some money is being made which is not always the mission of urban agriculture. As discussed earlier, making an income can actually hinder healthy food access in these communities.

The researchers stated that these challenges must be acknowledged otherwise urban agriculture organizations are setting themselves up to fail. They offered some best practices for stakeholders in these organizations:

- For Practitioners:
  - Pick 2 out of the 3 goals and do them well.
  - Be honest about the challenges of urban agriculture.
  - Advocate for support of fruits and vegetable with funding streams.
  - Find and collaborate with other groups with the same goals in the community.

- For Investors and Policy Makers
  - Understand the reality of urban agriculture.
- Encourage honest answer from urban agriculture practitioners.
- Keep supporting urban agriculture.
- Support fruits and vegetables more proportionately to the U.S. Dietary guidelines and remove the ‘Specialty Crop’ label.
- Create funding streams for urban agriculture and treat it like another publicly funded social service.\textsuperscript{139}

Chapter Three will use this trifecta to examine the Farm and the Agrihood in terms of traditional urban agriculture, the expectations stakeholders had and have for the project, and understand where the road blocks were and might be.
Figure 27: *Pest Damaged, Cucumber Leaf*, photo by author, June 2019
This following section of the paper follows the journey of Capital City Farm from its beginning to its current condition. It is based on data collected through interviewees, from conversations about the farm, and observations from April 2019 and ongoing. When discussing urban agriculture, it can be helpful to think in terms of a Four “L” Framework: Land, Labor, Liquidity, and Leadership. In my observations and analysis, these four aspects clearly define what is critical to the success of projects like these. The Farm struggles with all of them. It is important to note that the word ‘stakeholder’ will be used to describe organizations or persons involved in the farm and ‘respondent’ will be used to describe a person who was interviewed as part of the research process. A list of the dates and manner of these interviews can be found in Appendix 2.
Figure 28: Raided Chicken Coop, photo by author, July 2019
A. Land

Land is always complicated for farming in terms of management, maintenance, and cost. Before the land of the Farm can be discussed, it is important to understand the general pros and cons of types of relationships with Land:

- Ownership (for the managing organization)
  - Pro Maximum control of what happens with a property and its development.
  - Challenge Expensive up front; property taxes; loans are not always possible and come with interest, on the hook for the property’s rehabilitation and infrastructure if it is a brownfield.

- Rent/Lease (for the managing organization)
  - Pro do not need a loan or a large payment, not responsible for property taxes
  - Challenge Lack of control as land is ultimately controlled by owner; could have land taken away after lots of investment in infrastructure, weed control, etc.

- Land Trust/Cooperative
  - Pro Access to more capital and support networks. More people feel connected to the space and involved in the project.
  - Challenge Consensus building on management can take a long time. Takes time to build trust to form a cooperative and grow capital to buy land.
Bearing the pros and cons in mind as well as the lenses discussed in Chapter 2, ownership and management decisions for the Farm have been fairly straight forward. According to all respondents, the property that the Farm is on was slated to become an impound lot. It was, at the time, an over grown stone lot that was being used as a dumping ground and a sleeping space for homeless. The social service groups in the area, in particular the Trenton Area Soup Kitchen (TASK), reached out to Delaware and Raritan Greenway Land Trust (D&R Greenway) to see if there was something that could be done. TASK was interested in a kitchen garden to supplement the meals they provided to the community. A respondent explained that TASK’s mission is feeding first and then they work to get Trenton residents what they need in terms of healthcare, case workers, mail service, etc. Through this, the respondent continued, some patrons improve but, for most, the best TASK can do is make their quality of life a bit better. D&R Greenway is a 501(c)3 that got its start in 1987 with a donation of $10,000 from the Friends of Princeton Open Space. It typically puts together funds to protect land, perhaps install trails and some infrastructure and its typical region is the towns just outside of Trenton that have other preserved open space and green space available.

In addition to the request from TASK, the property is between Delaware and Raritan Canal State Park as well as Trenton’s Assunpink Greenway (fig. 29). The Capital City Farm property was privately owned at the time and with the organization efforts of D&R Greenway, the city of Trenton purchased it instead of being sold and converted into the
impound lot. The money to purchase came from Mercer County Open Space funds. D&R Greenway said that getting to a functioning farm was not so simple as protecting the land.

![Figure 29: Green space connection in Trenton between D&R Canal State Park, Capital City Farm, and Assunpink Greenway, Google Maps](image)

The first thing necessary after the purchase was site remediation. The site, a former railroad yard, was a brownfield. In addition to the dumping, there was creosote in the soil. A cap had to be installed (fig. 30). It is unclear who made the decision on this cap with four inches of top soil. What is obvious is that crop production is challenging in that depth of soil. There was a donation of fruit trees that had to be planted on berms to get their roots completely covered by soil above the cap. Because of the lack top soil, for this reason and to be able to build up raised beds, the cap made top soil investments, provided by Fernbrook Farm and some composting on site, necessary. After this, the farm needed water, a greenhouse, a cooler, and storage. This infrastructure investment was funded by neighborhood
revitalization credits. Site remediation and productive soils are uniquely expensive for urban agriculture sites and create large startup cost barriers to these projects.

According to respondent 5, there were many challenges to deal with in addition to the thin top soil that first season. Because of D&R Greenway’s inexperience with farming, the first farmer was hired later than was optimal for a productive season. Because of the fill used in the cap, the soil was devoid of most nutrients and full of weed seed. Weeds are still a challenge on the site as it is a young property and the Farm’s crops are produced organically. It can take several years to get weeds under control especially when the farm is working to stay as organic as possible. Weeds can be fought with tarps and plows but these solutions come with their own issues. Tarps cost money and plowing is not an option on the property because of the cap and it’s, at best, debatable whether it is a positive when it comes to soil structure and fertility. Weeding takes a huge amount of time and consideration in organic farming.
Another site consideration was that the farm needed security. The original fence around the property had been chain link with wire around the top. As the community had too often had seen this institutional fencing, decorative fencing was installed instead. I was not able to ascertain who had made this decision but it was most likely D&R greenway as they were leading the project at the time. Two respondents shared with me that a passerby told the farm staff that the new fence made it feel more like a neighborhood. Unfortunately, the decorative fencing was not buried in the ground to prevent agricultural pests. The tradeoff was trapping no less than thirteen ground hogs (fig. 31) that first season and moving them off site. The fence has not prevented a homeless man from breaking into the cooler for

Figure 31: Groundhog Hole in fruit tree berm, photo by author, spring 2019
shelter this past spring, theft of equipment this past summer, or the raid of a chicken coop by presumably a fox, also this summer. As it stands, the boundaries of the farm are in flux.

TASK expanded 900 square feet into the Farm’s property and traded 900 square feet back to the farm from the TASK property. This was tied up in open space law but was negotiated successfully as Trenton owns both properties. However, the property lines have still not been redrawn on the map. Even though the farm has become more and more productive every year, because labor has become uncertain this 2020 season, it is unclear whether the farm will continue as a farm.
Figure 32: Tomato Time, photo by author, July 2019
B. Labor

Labor is often the most expensive thing in a business for good reason as it has a huge impact on the success of any project. It is therefore important to consider what form it will take as it affects the form of the enterprise:

- None (Just the Farmer)
  - Pro No obligation to provide a living wage or insurance, no liability for employees’ wellbeing, no taxes owed to the government for employees.
  - Challenge The farmer must do all the labor and all the management, the farmer must be beholden to the growing season and sacrifice a balanced work/personal life.

- Employees (The Farmer and Workers)
  - Pro Allows the farmer to manage the business while employees take care of the labor, the owner can have a more balanced work/personal life.
  - Challenge Added expense to pay a living wage and benefits, the owner must take on liability of risk for the employee and pay the government for that risk.

- Interns
  - Pro Allows the farmer to mentor and pass on skills to future farmers. Usually a finite commitment that allows the farmer flexibility. Often unpaid or little pay supplemented by housing and extra produce.
  - Challenge Often interns are untrained and require a lot of management. Usually young and not in a position to make a long-term commitment to a farm. If the intern is paid, a monetary return on the investment of training will not manifest immediately.
• Volunteers (The Farmer and Volunteers and/or Workers)

  o Pro No need to pay for labor or provide benefits. Can allow for large projects to be accomplished very quickly that is necessary but may not translate directly to income. Can be a way to connect with donors, students, and members of the community.

  o Challenge Often very untrained labor and in some cases work will need to be redone. If the goal is to instill continued engagement with the project, one-time volunteer events can have the opposite effect of convincing volunteers that they have done their part and there is no more need to participate.

On most typical farms, the farmer lives on or very near his/her/their property, which makes responding to emergencies like flooding, pests, and drought easier. On suburban and rural farms, farmers often provide housing on the property as part of their pay, a stipend for the season, and some share of the produce. Urban farmers rarely live on their site and must pay urban prices to live close to their site. Because the East Trenton community is in need of jobs and economic development and because there is no housing on the farm, other models had to be considered or developed. For the first farmer, housing was part of the deal, albeit offsite. Later, this was no longer the case.

Capital City Farm started with a farmer who was hired through D&R Greenway. She stayed two seasons, 2016 and 2017, getting the farm set up and providing stability to the project. She worked with the two farm workers; Walter and Derek. Both men have used TASK’s services and Derek was a displaced Coalport resident. After her second season, the first farmer moved on to pursue an educational opportunity. In 2018, D&R Greenway hired
a consultant who was on the property for only several months. In 2019, the Farm’s leadership was able to secure a grant through AT&T’s Believe Trenton Initiative. While the AT&T grant and the existing D&R Greenway grants paid for hourly work, a salary was necessary to attract a skilled farmer. A private donation of undesignated funds came through to be able to secure the current farmer. In 2019, Angel was hired as the head farmer with supervision over Walter and Derek. This allowed the most successful season to date to begin. This season, the list of crops Angel, Walter, and Derek were able to produce was extensive:

- **Herbs:**
  - lavender, oregano, thyme, purple basil, dill, parsley, cilantro, sage,
  - chives, citronella

- **Vegetables:**
  - lettuces, kale, collards, habanero peppers, banana peppers, bell peppers, peas, garlic, cucumbers, several cherry tomato varieties,
  - several heirloom tomato varieties, squash, and eggplants

- **Fruit:**
  - Raspberries, blueberries, strawberries, elderberries, gooseberries,
  - peaches, pears, apples

The season, while troubled by pests and weeds, was quite successful with over 1200 pounds of cucumbers alone harvested and over 2,000 pounds total. Most of the harvests went to TASK and some to the Greenwood Avenue Farmer’s Market.
Challenges to successful crops included:

- Late start to the season due to weather dependence
- Powdery mildew on cucumbers
- Pervasive overgrown weeds
- Dry start to the season
- Cabbage worm on the brassica crops
- Cucumber beetles
- Groundhogs
- Lack of hands to harvest (arguably too diverse a crop palette to manage harvesting for two consistent workers)
- Drainage issues possibly due to the cap
- Equipment issues that included technical issues and theft.

Often, farmers need to do much more than production. This season, the farmer needed to:

- Engage with community members
- Work with the youth program (Dozens of children for 2 hours weekly)
- Go out for supplies
- Manage volunteers (Over 125 this season)
- Clean up and sort past composting area
- Removal of unsafe wooden structures that were still not completed
These additional responsibilities meant the farm workers had to do the much of the field work on crops by themselves during these periods. It was not until August that two more farm workers were hired to help on the property. The AT&T Believe Trenton Grant also paid for a group of teenagers from the Trenton Science Mentors to come onto the property and do some field work.

D&R Greenway’s usual approach to land preservation is to protect a piece of land, installs trails, and move onto the next project. However, farms need daily management by consistent workers. This adds a labor component to the success of the project. In addition to hourly expenses, workers need wages and healthcare. There were several days this season where workers were sick and had to leave early, could not come in at all, or got heat exhaustion due to summer temperatures. A few of them have children to support. Some of the farm workers were unbanked. Unbanked or underbanked means “people who either don’t have a bank account, or have an account, but still use financial services outside the banking system like payday loans to make ends meet.”141 This makes paying workers who are unbanked or under banked very challenging.

As August came to a close, the workers were beginning to transition to fall cleanup and planting. This meant doing last harvests, composting gone by plants, disposing of diseased plants, and prepping the green house for fall growing. November brought about an almost complete clearing of the fields. Cabbage, peppers, and some cherry tomato plants were left but this seemed almost due to other duties taking precedent versus intention. The
farmer was going away to visit family as it was becoming quiet on the farm and he needed a vacation. He was looking forward to eating traditional dishes made by his relatives.

In 2020, Angel had to excuse himself from the farm due to health and personal issues. This was fortuitous as the farm did not have funds to keep him on in the same way. This meant that the GSA, officially incorporated in the summer of 2019 and the farm’s new managers, needed someone to fill the role of farmer. As Walter spent the most time learning from Angel, he is the most natural fit and will be taking on the role of farmer this coming season. There is also the possibility of a farmer renting the greenhouse to grow microgreens which will keep the property active.
Figure 33: Peach Bounty, photo by author, August 2019
C. Liquidity

Urban agriculture business models vary depending on priority: social mission or income generation. Generally, key sources of funding to support these projects are donations, grants, and earned income. What follows is the pros and cons of each strategy:

- Donations
  - Pro
    Lessens the need to make an income. Not required to pay income taxes. Often there are few limitations on how the donation may be spent so there is a lot of freedom in what is possible.
  - Challenge
    Any private donations will only come if the donor believes in the cause or the person championing the cause. This means that if the organization is dependent on donations, what the private donors prioritize, the organization will have to prioritize, potentially leading to a weakening of the original vision. It can even go as far as the donor feeling entitled to control and be involved no matter the level of fiscal involvement.

- Grants
  - Pros
    Lessens the need to make an income. Often not required to pay income taxes. It is often focused on assisting those that have been disenfranchised or those that are doing acts of good will.
  - Challenge
    Often, with private and government grants, there are limitations on how grants can be spent. The farmer/organization will spend a lot of their time pursuing grants which prevents them from actually pursuing the work. For both public and private grants, there are expectations of branding and appropriateness with respect to the project that can add work streams. Often limited to certain requirements and expectations of past success. It can even go as far as the grantor feeling entitled to control and be involved no matter the level of fiscal involvement.

- Income
  - Pro
    Allows the owner to manage the business how they or the
stakeholders want. Ideally, if enough income is made, the owner can own property and support children who, through education, can leverage the wealth built into greater wealth. If the income comes in the form of a cooperative, the shareholders who could be the citizens can profit off the business as well so that the wealth is shared by all who support the business.

- **Challenge** In terms of farming, the owner has to charge enough to make enough to keep moving forward. This means that fresh produce and high-quality protein do not often find their way into communities that cannot afford them. It also can mean that, because generally these urban farm operations are small, there is not enough capacity to invest in the workers so leadership opportunities are not a guarantee.

As was previously mentioned, the land was purchased and remediated with Mercer County Open Space grants and other infrastructure installed through additional grant money. The first farmer was a D&R Greenway staff member with a full salary, benefits and housing. The second farmer was a consultant hired through D&R Greenway. Angel, the third farmer was paid partially through D&R Greenway and a private donation. Paying Walter and Derek for labor through their years of involvement was more complex because of their work history and led to an unnecessarily complicated and bureaucratic process for the Farm’s Leadership. For 2020, Walter will continue to be paid through the last of D&R Greenway’s grant and the farmer who will be growing microgreens in the greenhouse will pay rent to the Garden State Agrihood.

Grants like AT&T’s Believe Trenton Grant, TASK’s Grant, and, D&R Greenway’s grant (Set to be fully spent by April 2020) come with some challenges. They are restricted funds. This challenge became quite clear during the observations made for this study when
AT&T became a donor. AT&T, while an amazing partner to have, still needed to be convinced to allow their grant to be spent on hourly work. This grant allowed the Farm to provide all three aspects of the unattainable trifecta for the summer. The farm was able to execute its first youth development program; following through on the community’s wants and fulfilling job and leadership training to those who might otherwise be denied. This consisted of 4 days a week, 5 hours a day of local high schoolers coming to the farm as interns for 6 weeks. They did work on the farm as well as participated in educational programming provided by Meredith Taylor, AT&T at their Global Network Operations Center, Mercer County Parks Commission, Free Haven Farms in Camden, The New Jersey Department of Environmental Protection, Designing the We’s Undesign the Red Line installation at the Conservatory Mansion, Ed Butler’s urban environmental educational program, and others. Every Friday, the Trenton Boys and Girls Club or the Trenton YMCA brought younger children for two hours to the farm. The farmer would give a tour to half the children and the Youth Coordinator would do some educational activities on food to the other half and then they would switch groups. The summer interns program culminated in a presentation that included a documentary shot and designed by the interns to demonstrate what they had learned and experienced to AT&T Believe Trenton and other community partners.

Originally the AT&T grant was just meant for programming. What they absolutely could or would not do was pay for salaries or any kind of benefits that would normally be available to full time workers. This makes some sense as grants are not always available from
year to year. It would be very disruptive to set a salary and benefits up for someone and have it taken away just one year later. However, in communities where jobs are so desperately needed, this unwillingness to pay salaries and benefits seems to go directly against any goals this project might have. In addition to the labor aspect of liquidity, there is the overall operating budget to consider. With the farm’s 2019 operating budget at approximately $148,000 and labor cost of $117,000, the finances of the farm will not be solved by TASK’s $10,000-dollar yearly grant or whatever the microgreens farmer will pay in rent.142
Figure 34: *Datura and Other Weeds Taking Over the Potato Patch*, photo by author, August 2019
D. Leadership

Any business, nonprofit, or government agency needs leadership. Leadership can be thought of in two ways: single person or group. Each come with their pros and cons:

- **Single Person(ality) (farmer, celebrity, community leader, or board chair)**
  - **Pro** Charisma leads to a larger following, can lead to more funding for the farm. With a single leader, it can be much easier to make decisions because consensus is not necessary. Power structure in the organization can be much clearer.
  - **Challenge** If the success of the farm and the funding relies on the Cult of personality and work ethic of only the leader, this means that if the leader becomes no longer involved, the farm could become compromised. If one person has too much of the burden of leadership, they can control the whole project and make it difficult for others in the organization to move forward with the work.

- **A group of individuals**
  - **Pro** There is no one person managing the farm, looking for funding, or performing labor, the decision-making chain is linear and the burden of leadership is shared. This leaves other members of the leadership group able to focus on other things instead of just management of the farm.
  - **Challenge** It can be challenging to come to an agreement on management and goals of the farm. If decision making pathways are not clear, it can be hard for employees or members of the organization to know who to reach out to when a decision needs to be made making addressing issues slow.

The farm started off as a collaboration to answer a question about land next to TASK and the D&R Greenway. The project initially involved many partners: Mercer County, Trenton
City, Isles Inc., Escher Street Single Room Occupancy (Escher Street SRO), Rescue Mission of Trenton, and the East Trenton Collaborative. Because of its physical location near TASK, the reentry program Helping Arms Inc., and the Escher Street SRO that serves Mercer County’s homeless population, the farm opened up the conversation to the much larger, broader discussion of involving and reinvesting in the community. They came together around a series of broad goals: protect the land from development, make a green space in East Trenton, and serve the community,

The Watson Institute for Public Policy (WIPP) out of the Thomas Edison State University (TESU) was brought in through a connection at D&R Greenway as a respected local institution that works with a ‘Community Comes First’ mentality. Respondent 9 considered TESU and WIPP an anchor institution in Trenton focused on building policy solutions by engaging multiple entities with multiple roles in the community: political, private, non-profits, policy makers, and community members. In this way, WIPP strives to be a Think AND Do Tank; believing it to be important to get out into the world to actually execute the solutions developed.

When WIPP was brought in, they wanted to make sure the community was consulted as the property developed. Through some connections, WIPP brought in Designing the We (DTW), a self-described ‘for-benefit’ design studio, to work with the local community to make sure the community was a true partner in the creation of this project. DTW found that the community had little knowledge of the project so they decided to have community meetings in conjunction with their traveling exhibit: Undesign the Redline. This
exhibition, on display at the Conservatory Manor, looked to make clearer the history of disinvestment in the community and communities of color in general, both intentional and unintentional. Through work like this, DTW looks to break the cycle of “poverty-pimping” they felt that many disenfranchised communities go through. From here, they asked the residents what their needs were. The most important needs of the neighborhood were found to be:

1. Education and youth development
2. Jobs and Economic development along with affordable housing were tied for second; and

Programming desires were:

1. Youth Programs (51% of respondents)
2. Job Programs (43% of respondents)

Besides uncovering the poignant fact that most important need of the community was providing opportunity for the next generation, an idea formed out of this work with the community and DTW’s previous work. The Garden State Agrihood. Thinking of the farm as another anchor in the community, DTW envisioned the farm as a place to start pulling land off the speculative market and create a pipeline for development of that land that the community could control. WIPP has come to see the farm as an epicenter of thought; a venue on which to have the discussion health and wealth issues. Both organizations look to move a cooperative off the ground in the next two years to manage and finance the farm.
The form the cooperative has to take has yet to be determined. Both WIPP and DTW stated that obtaining buy-in will be hard as the community is not familiar with cooperative ownership. However, with more community engagement they are confident that the Agrihood idea could take off in the next five years. The Garden State Agrihood became an official 501(c)(3) in late summer 2019, which was celebrated as it had been a struggle to get everyone together on the matter.

At this point, while the farm is not providing an income for a farmer, Walter’s efforts on the farm this spring could be considered achieving leadership opportunity for those who have been denied. He is someone who, up until this spring, has been looked over by anyone managing Capital City Farm for a leadership position or a Garden State Agrihood board position. With regard to the board, TASK, an organization who works with many disenfranchised residents, is not one the nonprofits involved. While they might not have been interested or capable of having a seat on the board, they have not been involved in the decision making that has happened since the formation of the Agrihood board beyond their usual $10,000 grant and the Family Day held in October 2019. As the stakeholder physically closest to the property, interacting with it day to day, their lack of involvement in decision making does not make sense.

At this point in the farm’s development, if Walter is successful in his new position, the farm will both be ‘providing good food at prices residents can afford’ via donations to TASK and a ‘leadership opportunity for someone who has systematically been denied’. Walter’s and other members of disenfranchised communities’ exclusion is not without
Systemic logistical challenges such as health problems, lack of ID, and lack of bank accounts etc. make achieving this aspect of the urban agriculture trifecta more difficult than just finding an opportunity for training or leadership and funding it. There is a need for multi-modal support of people engaged in these programs.

The board hosted the Family Day lunch in October on the property with vegetables provided by the farm, and food prepared by TASK. The goal of this day had been to begin the conversation of a cooperative meant to finance and manage the farm. Many partners of the project attended in addition to more children from the YMCA and some of the high school interns from the summer program. The Farm workers provided music while the high school interns acted as ushers at the street entrance. The fence was open and TASK’s doors were unlocked with tables for face painting, arts and crafts, and healthy cooking education on the outside. Videos played inside on TASK’s TVs to frame the cooperative discussion: the documentary made by the high school interns and a documentary about Derek and his experience as a child with Coalport. There were two armed guards hired as precaution to keep watch should anything go wrong. Despite this set up, the cooperative discussion did not happen and the attendees from the community not directly associated with the farm were sparse.

Currently, the board members of the GSA seem to be at an impasse. One board member feels that there is a disconnect between what the board believes the farm should be and what it is. They believe this to be part of why funding for the farm and farmer were not pursued more diligently. Even though TASK does not have a seat on the board, they are
unsure of the future of the farm as well and expressed concerns that the GSA was thinking too big. Several respondents made the point that if the GSA can’t even keep the farm afloat, how can it even begin to scale up? Additionally, the GSA has not allowed another organization to form that focuses only on management and fundraising for the farm. In general, there is also a lack of specific, unified goals. This was cited by several respondents. All board members and stakeholders have the same big and small goals. However, there is indecision on which goal vehicle takes precedent: the Farm or the Agrihood.
Figure 35: *Kale Rows*, photo by author, September 2019
Chapter 4: Modeling a Way Forward into the Farm’s Sustainable Future

Now that the economic, societal, environmental, and political aspects of the farm as a property and through recent history have been discussed, it is possible to discuss the farm’s future. Part of knowing or predicting the future of the farm is knowing what success looks like for the project. This still unclear. For some, it’s just keeping the farmer and community farm workers employed with benefits and TASK supplied with food. For others, it looks like a cooperative run for and by the residents of the neighborhood as the neighborhood grows into an agrihood. Still others see a modified community supported agriculture model where Capital City Farm could supply the neighborhood with fresh vegetables and fruit.

Unfortunately, there is no consensus amongst the leadership at this time. This means that the following section of this paper will discuss options of the future with their pros and cons. The involved parties will eventually have to make a decision on what the goals of the project are and how to proceed to best achieve those goals.
Figure 36: Marigolds for Organic Pest Management, photo by author, September 2019
A. Typical Urban Agriculture Economic Models

Models

Agriculture, specifically urban agriculture, exists on a spectrum of modes, methods, and intent (fig. 37). The following section will discuss three economic models that farms usually take. In understanding these, the GSA’s model will become clearer.

Figure 37: Farm Modes of Operation, Graphic by Author
MODEL ONE: The Limited Liability Corporation

The purpose of limited liability corporations is to earn a return on owner investment. This is a for profit model that works best with retail or wholesale methods. The farmer could sell to restaurants, could sell at farmer’s markets, or could sell shares through a C.S.A. (community supported agriculture). It requires enough land to grow enough produce to sell at a profit. This model assumes that the farmer owns the land and therefore pays property taxes. In this way, the farm contributes ratables, not just healthy food. In many cases, it is too much to purchase the land in addition to the labor to prepare the land for crops. This model also assumes that the bank would be willing to give a small business loan to a farm and that the community has money to spend on fresh fruits and vegetables. Because the
farmer has to rely on profitable sales to be able to pay him/her/their selves and their staff, it
most lends itself to the intents of farm autonomy or partnership.

A study was done on Somerton Tanks Farm that showed it is possible to make $120,000 annually on less than an acre of land with two workers after five years of experience. However, in practice Somerton Tanks Farm made only $68,000 in its most profitable year after operating costs of $69,800. This number was based on part time labor and did not factor in startup costs which are usually a significant investment, i.e. Capital City Farm’s site remediation. The study also noted that maximizing production made it hard to focus on other goals such as education and experiments. In addition, for profit means the farm would need to make money which means engaging customers who can afford to buy the produce at a profit. Somerton Farms mostly relied on more upscale niche markets in Philadelphia and charged premium prices for its shares. It does not seem to be possible to achieve both social and financial goals with this model.
MODEL TWO: The Non-Profit

The purpose of a non-profit is to provide services or information.\textsuperscript{147}

Figure 39: Diagram of a Non-Profit model, Graphic by Author

Figure 40: Diagram of a Farmer/Non-Profit Partnership model, Graphic by Author
The first model in figure 39, the nonprofit with a hired farmer, is the current set up of Capital City Farm. In this model, there is no farm owner. The first model assumes that the city owns the land, which it does, and that the non-profit is leasing the land. In this model, the lease payments are going to the city. Currently neither the Farm nor the Agrihood pay to lease the land from the city. The second model in figure 40, the non-profit/farmer partnership, assumes that the land is owned by the non-profit and the non-profit would therefore pay property taxes to the city. Again, this assumes that the non-profit has enough money to purchase the land and wants to own the land. With regard to the Farm, it is worth restating that, originally, the non-profit manager was Delaware & Raritan Greenway Land Trust. Their original idea was that they would be able to hand off the farm to the community once they got it running. They organized things so that the city owns the property. This means that the only way to make money for the city is through lease payments to use the farm however, generally, leases for land are not very substantial. There are the more local benefits such as the support for TASK and the existence of greenspace in a neglected area. However, taxes help the city care for the community in larger ways such as better maintenance of infrastructures and services. Again, this model assumes that the farm would be selling goods and services to the community and that the community can afford them. A non-profit’s intents are more likely to lean towards community resource or partnerships with other organizations working towards similar goals. A non-profit has more flexibility in terms of methodology and can land anywhere on the method spectrum from retail to donations to achieve their intent.
Non-profits are legally only allowed to make profits that are directly related to the
core of the business operations and those profits must be put directly back into the business.
Profits cannot go back to staff or management inside the 501c3. This means non-profits rely
on existing capital; either from the board itself or through grant application to foundations,
private corporations such as AT&T, or the government. In these models, the money to run
the farm is overseen by the non-profit board which generally comes from outside the
community through donations, grants, and contracts. The farmer in a non-profit situation
could still sell to restaurants, sell at farmer’s markets, or sell shares through a C.S.A.
However, the focus is not on making money with a for-profit mind set. It is on the services
provided to the community and the ability to raise money for programming. This model
often relies on good story telling and a natural job for the ‘Charismatic Leader’ approach. For
example, Growing Power (GP) in Milwaukee used the charismatic leader approach.
Will Allen, CEO, was a former professional basketball player. He purchased a vacant
greenhouse in 1993 and converted it into a farm.148 In 2008, he was able to win the
MacArthur Genius grant of $500,000.149 By 2009, GP was “selling food online, at farmers’
markets, schools, restaurants, and via below-market-cost CSA boxes, reaching more than
10,000 people.”150 GP provided food as well as jobs and education to residents. In particular,
Will focused on engaging youths from the local juvenile detention center to vegetate vacant
lots to make them unattractive for drug sales.151 In addition to an international conceptual
reach, GP had a physical reach demonstrated by the chapter of Growing Power that popped
up in Chicago led by Will Allen’s daughter.
In 2011, GP secured $1 million grant from Walmart and a large grant in 2012 from the Kellogg Foundation. Kellogg, whose intent was “to support racial equity and community engagement” was viewed as a more legitimate partner than Walmart. By being on the international stage, GP was put under a lot of scrutiny. It seemed as though GP was being “purchased” by Walmart as a way to fast track their community engagement. Money began leaving faster than it was coming in and GP faced a lawsuit brought by an investor that felt she had been misled. By November of 2017, the board voted to shut the organization down due to debt of $500,000.

Andy Fisher, one of the founders of the Community Food Security Coalition, an organization that Will served as a board member, surmised that Allen concentrated too much power in himself and therefore made it a challenge to run the organization if he was not around to make decisions. GP did try to have a manager to run day to day operations which would allow Will to have more of a public figure role but there was a lot of turnover so inevitably it landed back in Will’s hands.

Messaging is important when it comes to urban agriculture with a social focus. It is easy to go with a big idea and allow organizations, governments, and corporations to connect with the narrative in whatever way works to keep funds flowing. This was the case with the “Million Trees” campaign in New York City that Lindsay Campbell chronicles in her book City of Forests, City of Farms. Garrett Broad, a professor at Fordham University who spent many years working with Community Services Unlimited (CSU) in Los Angeles, theorizes about the branding issues community based urban agriculture organizations face. He speaks
about how the messaging around CSU is messy and confusing because the history around CSU is messy and confusing. CSU has been affiliated with The Black Panther Party since its founding in the 1970s and the Black Panther Party remains a controversial organization to this day. CSU struggles with engagement because of this complicated narrative. Despite these challenges, it is important to prevent the narrative from distortion as this can cause communities to lose faith in these organizations as was the case with Growing Power and its partnership with Walmart.

**MODEL THREE: The Cooperative**

The purpose of a cooperative is to meet member needs for goods or services and earn a return on member investment.
Cooperatives seem like a fitting idea for East Trenton as there is both historical and modern precedent. In the past, black communities like Trenton’s were able to protect themselves against discriminatory practices by using cooperatives in the typical forms of credit unions, worker cooperatives, cooperative stores, and housing cooperatives (fig. 42). The idea is that residents, workers, producers, or purchasing groups from the community with the same or similar goals pool capital to start and run a business. This business owns the property, the
farm enterprise, and any profits from the farm’s production to be distributed back to the cooperative’s membership. As the community-based cooperative owns the land and the profits, the community can gain more independence. By using a retail method of pricing and returning profits to the community, the cooperative becomes a community resource and maintains its autonomy.

Ownership of the land is key in cooperatives. The Chesapeake Marine Railway bought a shipyard using $5 collections that amounted to $40,000. They paid off their mortgage in 5 years, hiring about 150 black and white workers as caulkers and stevedores. The company was profitable for about six years but went under at year 18 because the owners of the land would no longer allow the black workers onsite unless the rent was doubled. The shipyard cooperative had to disband.\textsuperscript{159} Not only does property ownership protect the enterprise from predation, it actually gives money to the cooperative and its investors twice in the form of profits and increased investment in the community in the form of property taxes. While a developer could also provide the increase in taxes, they do not always have the community’s best interests at heart. The cooperative can provide both the increase in tax base and protection for the community. This what makes it an attractive option for East Trenton.
Figure 43: Day-of Harvesting Kale for Fall Family Day Lunch, photo by author, October 2019
B. Two Possible Ways Forward

Understanding the challenges of Capital City Farm requires an understanding of the Garden State Agrihood vision. The following two models explain the Agrihood’s vision and New Roots, a food supply structure that the Farm could use to move towards the Agrihood vision. From there, an analysis of these two models will further illustrate the challenges with the Farm.

The Cooperative

The Garden State Agrihood vision is a cooperative organization managing the farm while a nonprofit land trust begins to buy up land in the greater East Trenton area to take it off the speculative market. Again, this concept came about through WIPP and DTW individual work and their work with the property. To restate, they view the farm as a stage on which
have the complicated conversation about all the closely related issues that affect East Trenton: resilience, sustainability, the effects of redlining and the Coalport redevelopment, environmental justice, food justice, the potential for gentrification, etc. Ideally, the conversation would lead to funding for the land trust and the Agrihood could begin to scale up to its full vision (fig. 45). After that the land trust, would incubate the cooperative that manages the farm until it is successful.

New Roots

New Roots got its start in Louisville, Kentucky. It addresses food accessibility issues in both rural and urban areas by connecting farmers in need of customers with residents in need of healthy food. They worked with farmers to sell to the residents of Louisville who have many economic issues by offering wholesale pricing on bag shares at $19 dollars a bag. The
participants pay anywhere from $6 a bag to $45 a bag based on their ability to pay. This model works well with anchoring, community-based institutions such as churches because of the readymade market and physical site. It worked best with an anchoring employer who purchased bag shares as a benefit for all of his employees at 80% and his employees pay the other 20% out of their paychecks. This is a hybrid between a nonprofit and an LLC. The nonprofit provides administration, distribution, and advertising and is funded through grants. The LLC aspect of the model, made up of the farmers and consumers, pays for itself.

There is some momentum to put this model together in New Jersey. One proposal is for Capital City Farm to serve as a one of the suppliers for the bag share and New Roots would be the distributor. The potential market to engage would be the families that use the YMCA and the Boys & Girls club who are already familiar with the Farm (fig. 46). From there the Farm could expand its market and the Agrihood could increase its broadcast of the vision in a manageable way.

Figure 46: New Roots model and Capital City Farm, graphic by author
Figure 47: Cap Warning Barrier Surfacing, photo by author, October 2019
C. Analysis of Capital City Farm with Conceptual Framework

After having studied the evolution of the project in greater detail and outlined the two possible futures that have been discussed, I now return to the concepts framed in chapter two in order to evaluate Capital City Farm and the Garden State Agrihood. Some broad goals the farm could have with respect to the lenses discussed at the beginning of the paper are achieving environmental justice, movement up ladder of civic participation, and increasing resilience. Evaluating the Farm and the Agrihood with these lenses will lead to a better understand how they may or may not be meeting these potential goals.

Analysis of Capital City Farm according to the goal of Environmental Justice (ASLA & EPA)

When examining the Farm from the perspective of ASLA’s Environmental Justice PPN, it is clear that there is work to be done. The farm did achieve some of the goals around social and environmental justice by providing food to TASK; increasing access to healthy for those most vulnerable as well as removing the barrier of cost. By keeping the property maintained, the farm provided visual access to green space for the residents and people at the soup kitchen or using TASK’s services. Through programming, particularly the AT&T Believe Trenton Grant, the Farm provided access to the space for many children and teens through its programming. It did not provide access to the space for the community beyond the two farm workers. The few times the gates were left open to public, the farmer found himself engaging with residents for extended periods of time. This could be a positive opportunity to
build relationships between the public and the property. However, it meant that the farmer was then unable to farm and production suffered. When the gates were open to the public for the family day, the lack of recent engagement led to minimal public participation and it was only people who were already affiliated with the project in attendance.

The construction of the space also had missed opportunities. This part of the process is something that a landscape architect would most certainly be involved with if they were involved at all. The challenges with the thin cap including drainage, weed seed, and production bandwidth could have been avoided. This landscape architect would also be involved in the fence decision. While the fence choice of something more friendly to the community was admirable it came with the cost of pest management and security issues. The decision about which environmental justice goal was taking precedent, food production or greenspace access, was not clear.

In terms of examining the EPA’s environmental justice program as a potential partner for Capital City Farm, the EPA has a lot of work to do to move towards success. The Farm could be considered in line with the Small Grants program to address environmental justice which currently offers up to $30,000 for one-year projects with a focus on emergency preparedness and resilience that include the needs of homeless populations and US military vets.\textsuperscript{164} The EPA also provides a $120,000 grant for two-year, collaborative projects to organizations that “seek to address environmental and public health concerns in local underserved communities through collaboration with other stakeholders, such as local businesses and industry, local government, medical service providers, and academia.”\textsuperscript{165}
Neither of these grants are meant for “routine program implementation” or “duplication of work performed under a prior EPA grant.”\textsuperscript{166} The Farm is right next to an economic opportunity zone and can be pitched as a resiliency project.\textsuperscript{167} While the operating budget for the farm was approximately $148,000 in 2019, this $30,000 and $120,000 could address any infrastructure project the farm or one time large expenditure the Agrihood might need; assuming the project would be accepted for the grant program. It likely would not be accepted due to the struggle to demonstrate stability. However, the grants are not ideal anyway because they do not address the challenge of sustainable staffing or programming which can be crucial to actually achieving environmental justice.

Overall, the Agrihood had some success with what it was able to achieve through programming funded by the AT&T grant in the Summer of 2019. Because of the missed opportunity during construction, the project will have to continually invest in the soil and pest management moving forward thereby creating a drain on resources away from other programming goals. While urban agriculture is accepted at many levels of government and many resources exist on the production and infrastructure side, the grants that are available are competitive and do not provide salaries. Furthermore, the resources for working with the community provided by both the private sector through ASLA only acknowledge that there are challenges and do not offer best practices. The public sector through the USDA only discusses security and business mentorship. The opportunities to achieve environmental justice through partnering with these organizations is limited.
Analysis of Capital City Farm according to the Ladder of Civic Participation

To restate, the Ladder of Civic Participation is a description tool for relationships (fig. 48). Using this framework reveals a sizable concern about the process up to this point by the Agrihood supporters. I believe that while a major goal of the Agrihood is citizen control, there are signs that this is not how they themselves operate. As a non-profit, the Agrihood has a board that oversees its programming and use of resources. The board consists mostly of members that are not of the community most likely for reasons of bandwidth. While there is one member of the community on the board, they would need to be majority to assert community concerns were central to board decisions. Instead, with the board only having one community member, it can be described as ‘Placation’ rather than ‘Control’. There has been some ‘Consultation’ of the community with regard to DTW’s work of exploring awareness of the Farm as well as some ‘Informing’ of the community at the Conservatory Mansion of the Undesign the Redline installation and how the Farm fit into that work. Angel was ‘Consulted’ consistently by the farm manager/board member about conditions, production, and general state on the farm. With Walter as farmer, he is now moving into this space of ‘Consultation’. However, because of the way he is being paid, with the rest of the D&R
Greenway grant until it is finished instead of a full salary, this could also be interpreted as a form of ‘Therapy’.

The barriers to achieving the urban agriculture trifecta, are the same barriers that prevent community members from achieving ‘Citizen Control’ of themselves and their spaces. In this way, it is important to understand that, if a person or any sort of organization, is in a place of power, they should do their best to support the community members they are engaging so that the community members can achieve ‘Citizen Control’ of themselves or their spaces.

*Analysis of Capital City Farm according to Resilience*

To restate, resilience is the combination of shock or long-term stress to a community and that community’s response to the shock or long-term stress. In the Farm’s case, the Coalport Redevelopment was a shock to the community that created long-term stress. In this way, the Agrihood Board hopes the farm can increase the community’s capacity so much that it can transform itself and become sustainable economically, politically, and environmentally. New Roots is a realistic and achievable way Capital City Farm could begin to work towards this; assuming a successful season and the Farm could contribute to the bag share program. New Roots would help both the Farm and the community to adapt their behaviors and begin to build resilience. In the 2019 season, the Farm was still in ‘persistance’ mode; both for itself and the community. In terms of the community, it was providing food to TASK. This
would be considered a humanitarian intervention. The AT&T Grant allowed the Farm to youth program, and the internship program. However, because the Agrihood has been unable to secure funding for a farmer’s salary and are switching farmers again, even this status of ‘persistance’ shrinks in impact. Walter will still receive pay in his new position and TASK will still receive some donations as well as have a maintained green space next door.

Another barrier to the farm’s sustainability is currently is the Agrihood vision, especially of a cooperative. The challenge with cooperatives is that there needs to be capital already somewhere in the community the cooperative looks to engage as well as unified purpose amongst the participants. The current cooperative idea is not following the usual modes of cooperatives and this will make it a challenging to engage those who are familiar
with the idea of a cooperative and even more so to those who are not. In addition to that, the cooperative idea has not been brought to the community to be discussed. Even if it was and the idea for the cooperative was solidified into something understandable and actionable, the community is fiscally challenged. The median income for households in the Farm’s census tract is $25,156 with 60% of the families living with an income below the poverty line for the last 12 months according to the 2017 American Community Survey’s 5-year estimates. There is not much money in the system to prime the economic engine of a cooperative.

One respondent made the point that the farm is related to all of the Agrihood board members’ organizations’ missions but not at the heart of them. This could be why none of the involved organizations through the Board have taken it on as a long-term goal in any real way. The board member who served as the farm manager continues to have some presence on the property but is unable to provide the same management as last season due to her location in New York City and decreasing bandwidth to make the journey from New York City to Trenton. The other challenge is that the Agrihood board has not allowed the formation of an additional, more focused organization to manage and fundraise for only the Farm. This inflexibility has perpetuated the ideological conflict of whether the Farm or the Agrihood takes precedent. During observation, the stakeholder organizations, board members, and respondents that were involved in the day to day physical operations of the space such as construction, staffing, maintenance, etc. were much more conservative about their views of the farm. To these respondents, continued donations to TASK or a greenspace maintained by Isles, Inc. (another urban agriculture group working in the city the was an
original stakeholder in the project) would still be a positive for the East Trenton neighborhood.
Figure 50: Protecting Last Crops from Freezing Temperatures, photo by author, November 2019
Chapter 5: Conclusion

This last chapter will firstly discuss the guidance provided by the interview respondents. These include advice, observations and recommendations respondents had about doing food justice work in general and on this project to offer other organizations doing similar kinds of urban agriculture work. It will also summarize the reasons that Capital City Farm struggles and recommended priorities for the Garden State Agrihood Board and other stakeholders moving forward. From there, I will discuss my final thoughts about this work and how the research could move forward.
Advice, observations, and recommendations from respondents

One of the questions I posed to the interviewees was “What advice do you have for other organizations looking to do this kind of work?” The respondents’ answers ranged from practical to inspirational. Here is a list of their suggestions:

1. Protect the land in perpetuity with whatever means necessary
2. Generally, some remediation will be necessary
3. Raise the call! This work needs to be funded!
4. If you are from outside the community,
   a. build relationships with respected local organizations
   b. Have a third-party consultant to figure out how you are perceived in the community
   c. Then figure out if you are the organization to do the work
5. Be open to change
6. Talk WITH the community
7. Focus on one piece at a time
8. The work takes time, dedicated staff, and dedicated donors
9. Keep consistent communication with partners
10. Have unified goals
11. Have local leadership
While all of these practices come from a place of optimism and good intention and are aligned with environmental justice, citizen participation, and resilience as concepts, they are not manifesting with regard to the farm.

**Capital City Farm Struggle Summarization**

Despite good advice from respondents, the stakeholders of Capital City Farm in power have demonstrated how good intentions, power, and vision can still struggle to run a two-acre farm. During observation, the reasons for struggle found were:

- Lack of awareness of the immediate needs of urban farms
  - Some of the board members for the GSA had not spent any time actually working the farm
- Lack of awareness of how much it costs to run a farm
  - One board member who was more involved with the direct day to day running of the farm, volunteered their time, and understood the needs of the farm; did not understand the grant cycle and therefore did not pursue grant funding soon enough.
- Lack of agreement on what the specific goals are and what success looks like
  - The goal of setting up a cooperative for the farm and setting up the GSA are not measurable or time constrained at the moment
  - Without clear plans and demonstrable success at some of those plans, the GSA will have a hard time attracting donors.
• Very slow movement on incorporating the GSA as a non-profit
  
  o This meant that the farm was unable to pursue its own grants while the GSA worked on incorporating and the GSA, once formed, had missed many funding opportunities.

• Lack of local leadership
  
  o Only one of the board members are local
  
  o Neither of the farm workers who had been involved since the beginning were invited to be on the board

• The farm is not at the center of any of the board members’ organizations or stakeholders’ organizations philanthropy, leaving the GSA top heavy
  
  o These organizations do not have the farm as the center of their mission.

  Therefore, it is easy to decide to pull back when the farm gets too messy or involved.

Priorities for the Agrihood Board and other Capital City Farm Stakeholders

It is important to know that the recommendations in this section are from the author. They inevitably include assumptions about the goals of Capital City Farm and the Garden State Agrihood and ideas that still need to be fleshed out and discussed with the Farm and Garden State Agrihood stakeholder community before any decisions are made. The ‘Best Case’
moves the Farm towards the Agrihood vision of a cooperative. The ‘Better Case’ maintains the Farm at its 2019 peak. The ‘Good Case’ moves the Farm towards another nonprofit still able to maintain the activity of the space as agricultural. The ‘Acceptable Case’ has the Farm as an active Mercer County Park with agricultural programming. Lastly, the ‘Worst Case’ would be that the Farm is taken back by the City of Trenton due to lack of management.

Next is a chart that uses the Four “ls” to explore the scenarios (fig. 52). Through 2021 the Garden State Agrihood should focus all of its effort on the farm as it is so key to their larger ideas, building trust in the community, and building the confidence of donors and grantors in the future.
<table>
<thead>
<tr>
<th>Case</th>
<th>Land</th>
<th>Labor</th>
<th>Liquidity</th>
<th>Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>Support Walter on the farm so that he is able to grow food for TASK with the help of Derek and demonstrate his and the farm's ability to participate in the New Roots model. Develop and implement a plan to increase soil depth and provide more animal control fencing.</td>
<td>Walter is the farmer with regular on-site management and involvement in the GSA Board's function. Derek continues to be a farm worker. The teen internship program remains from year to year with teens coming back to work on the farm and in the community as they age out.</td>
<td>Find a sustainable source of funding that provides both Derek and Walter with the resources they need to be successful including a full salary with benefits as well as housing. This should also include other services that will help Walter and Derek with their personal issues.</td>
<td>The GSA involves Walter, Derek, and TASK in their activity with the intent of eventually adding Walter and Derek to the board. An actionable plan is developed by interacting with the community to move the property towards the cooperative (assuming the community wants the GSA and the cooperative)</td>
</tr>
<tr>
<td>Better</td>
<td>Support Walter on the farm just to maintain the property and allow for renting of the green house for microgreens. Work towards more soil depth and more security to protect material investments.</td>
<td>Walter is the farmer and Derek as farm worker with sporadic on-site management and consultation in the GSA Board's function. The teen internship program remains from year to year.</td>
<td>Find a sustainable source of funding that provides Walter and Derek with the resources they need to be successful including hourly wages and services that will help them with their personal issues.</td>
<td>The GSA maintains Walter and Derek in the space with 2019 programming and develops an actionable plan to keep them employed and TASK fed.</td>
</tr>
<tr>
<td>Good</td>
<td>Another nonprofit continues production and maintenance on the site and therefore continue the justice conversation.</td>
<td>Walter is the farmer with sporadic on-site management by another nonprofit that does urban agriculture work in Trenton</td>
<td>Find another nonprofit that has a sustainable source of funding to provide Walter and Derek with the resources they need to be successful including hourly wages and services that will help them with their personal issues.</td>
<td>Another nonprofit comes in to take over management and develops an actionable plan around food justice issues.</td>
</tr>
<tr>
<td>Acceptable</td>
<td>Reach out to Mercer County Parks and Open Space to see if there is any possibility of maintenance of the site</td>
<td>Mercer County could provide a staff member to manage the site with urban agriculture programming and hire seasonal workers from Trenton.</td>
<td>Mercer County adds a Park Interpreter and two seasonal workers to their budget for the park.</td>
<td>Mercer County takes over management and runs agricultural programming on site.</td>
</tr>
<tr>
<td>Worst</td>
<td>The City of Trenton mows the site to keep back growth</td>
<td>The City of Trenton mows the site once or twice a season to manage the weeds.</td>
<td>The City of Trenton adds Capital City Farm to its mowing fuel budget.</td>
<td>Trenton City takes over management with no long-term plan for programming.</td>
</tr>
</tbody>
</table>
In the end, without day to day management, Capital City Farm will not continue as a Farm. Graphics can sell a site concept to donors, the community, the government, etc. but nothing is quite so illustrative as an effectively run project and site. As the Farm enter Spring, a normally highly productive time, the project faces the reality of no new funding beyond the potential for greenhouse rent. With this growing season most likely an overall loss, the project is put back a year in terms of development. Whether or not the concepts underlying the project are groundbreaking and the intentions good, this probable loss is unfortunately indicative of the dysfunction of the Garden State Agrihood board.

The worst outcome is a loss of faith that will break the relationships that, up until this point, have been supporting this concept and created this greenspace. The most important partners to maintain going forward for the Agrihood Board are Walter, Derek, TASK, AT&T’s Believe Trenton, D&R Greenway, and Trenton itself. Walter and Derek are important because they have been with the site since the beginning of Capital City Farm and are most indicative of the success of the project. TASK is important as they have been involved since the beginning, provide some funding, and are most affected by the site’s condition. AT&T was a great partner in moving the Farm to the next level. Of note, it is unclear if AT&T will engage again if youth programming does not continue. D&R Greenway is important because they were so instrumental in the farm’s formation and could continue to provide some support be it volunteer ship or connectivity. They also have a lot to lose if the site fails. The City of Trenton is important as it owns the site and could most likely amend the easement if displeased with management. The Garden State Agrihood
Board has their work cut out for them to keep these partnerships and relationships stable and the project moving forward despite the stalling to achieve their larger goals for East Trenton.

Final Thoughts

The most important thing I have learned from this project is that building relationships with the community and stakeholders takes time. Originally, I was interested in helping with data analysis, a five-year plan, and evocative graphics to help the project raise funds and possibly achieve some level of financial sustainability. When it became obvious this wasn’t what the project needed, I shifted to a desire to perhaps facilitate more discussions around expectations and goals. There were many questions left unanswered because the respondent gave me very politic answers or it was not the right time or place to ask them. Because of this reality, I took another step back to my own analysis of the project. If I had another year, I would spend more time with all the stakeholders to build those relationships up to a point where they could be very candid with me and I could be very candid with them. From this increased trust, more productive conversations would lead to more productive project results. Unfortunately, I do not have another year but I can take this understanding of time frames and relationship building forward in my landscape architecture practice.

That being said, I have learned a lot from investigating this project as well as how landscape architecture can help or hurt projects like this. It has demonstrated how crucial communication, site visits, and intention all are in the formation of a site. These factors are even more important in projects like this where bandwidth amongst participants and funds to address any issue are so limited. Seemingly obvious and simple decisions regarding
construction specifications for soil and fencing driven by money and a surface level understanding of the desired program can have a huge impact on the success of the project. In projects like these, it very difficult to go back and change anything after the fact because of those limited funds. While it is important to have a clear message of intent, it is just as important to have a clear plan of action with achievable, measurable goals.

Place-based management and leadership are key to the success of community-based work. The difference in priorities and perspectives of stakeholders based on whether they were regular visitors to the Farm illustrated this reality clearly. Site visits are also vital parts of the process before, during, and after implementation. If something is not working, the fastest way to become aware of this and to mitigate any problems is to be on site.

Lastly, high quality public processes are vital to the landscape architecture profession. Without robust public processes, we are perpetuating unjust practices that lead to disparity. Just because there are funds to execute projects doesn’t mean that the projects are necessary or that the public is interested. It is also naïve to assume that every project requires a strong public process. Not every project a landscape architect designs is funded by public funds or is for public consumption. It would also be naïve to assume that these private projects do not affect the public. They have to connect back into the network of streets, other private property, waterways, and public lands. is therefore important, even if a project does not require a public process, to understand that projects do not exist in vacuums, that from day one we must engage those we wish to benefit, and that we must act as advocates with our designs throughout the process.
Figure 53: Row Crops for Late Fall Harvest in the High Tunnel, photo by author, November 2019
Appendices
Appendix 1: Garden State Agrihood Project – Capital City Farm 2019 Year End Report

This report was provided by the Farm Manager.

MARCH 1, 2019

On March 1, 2019, farmer manager Angel Martinez and GSAP Board Member, Beth Feehan, gained access to the Capital City Farm and reviewed the state of the farm after a winter where there was little oversight or care taking place. For the next two months, Angel, with the help of Walter Roberts and Derrick Branch, cleaned out the greenhouse and two-acre property, ridding it of debris that had blown onto the property and cleaning up from lack of use since November of 2018, when the farm had been put to bed for the winter.

Funding from AT&T allowed the farm to purchase soil to enhance the growing material in the plots and assistance by Fernbrook Farms’ owner, Larry Kuzer, to bring his equipment on site to spread the soil was incredibly helpful.

By May 1, the farm was ready for planting and starter plants were donated by Kubepak of Allentown and purchased from various nursery businesses in the surrounding area. The farm team continued to plant, weed, water, harvest until November when the farm was beginning to shut down for the season. As of this writing, there are still greens and lettuce growing in the greenhouse and one field, being donated when ready for harvest, to TASK for their salad bar.
PRODUCE DONATIONS TO TASK:

In 2019, the Capital City Farm donated close to 2,500 lbs of produce to TASK. Our relationship with the patrons and employees of TASK, is central to our mission of using the Capital City Farm as an anchor property to enhance the lives of the community surrounding the farm known as East Trenton. Throughout the year, the farm is a connector to the community for random donations to passersby, expressing an interest in eating strawberries in the early summer, cucumbers in the height of summer and cherry tomatoes in late August. Our produce was offered weekly on the salad bar purchased for TASK in 2019 and increased the access to fresh produce on TASK’s daily menu. The fruit trees were limited this year due to never being pruned properly. Several trees are in need of severe spring maintenance and assistance for this is being sought.

1600 lbs cucumbers

25 lbs lettuce

71 lbs greens (arugula, kale, collards, escarole, Swiss chard)

460 lbs of tomatoes (heirloom, cherry, Roma, beefsteak, sungold)

30 lbs peppers (Habanero, banana, Ancho)

114 lbs strawberries

16 lbs eggplant
STAFFING:

Beginning in March 2019, Angel Martinez was hired as farm manager, his experience working for the state’s largest Community Supported Agriculture farm being a huge benefit to the operations at CCF. In addition, three part time employees with a history of working at the farm helped Angel throughout the growing season to plant, maintain, water and harvest the crops listed above as well as to host volunteer and school groups who visited during the season, providing tours and agricultural education opportunities during the visits. The 2019 payroll included paying the Farm Manager $15/hour and the part time staff $13/hour with a 1099 given to all employees in January 2020. We are starting off 2020 with over $35,000 in the bank with approximately $15,000 due from D&R for the remainder of their funding for the farm.

Angel Martinez  $21,245.00
Walter Roberts  $15,968.50
Derrick Branch  $6,020
Warcheerah Kilima  $4,659.50

AT&T ENVIRONMENTAL STEWARDS PROGRAM

Support from AT&T enabled GSAP’s new board to partner with several youth organizations in the community to develop an urban environmental stewardship program for local teens. In this first year of the program, 10 teens were selected from Trenton and surrounding communities. To ensure the best program ‘fit’, we enlisted our community partners to assess
students’ readiness to participate fully in the internship, and then make recommendations. This process proved to be extremely efficient and we fielded a terrific cohort of teens via Capital Area YMCA and Science Mentors Programs. The internship was a 6-week (paid) work experience for high school teens. Stewards worked 20 hours per week focusing on issues related to food and environmental justice in urban communities. Capital City Farm served as a base of operations for the internship. Stewards completed their service hours by assisting the head farmer and staff with farm chores, planting and harvesting fresh produce for donation to the Trenton Area Soup Kitchen and for sale at our farm stand at the Greenwood Avenue Farmers Market. The balance of their work hours involved a variety of activities aimed at enhancing students’ knowledge and experience of critical environmental issues impacting natural resources and human health in urban communities. Stewards attended meetings, presentations, field trips, and films allowing them to connect with community advocates, public officials, private businesses working to improve the environment and implement better public policy to protect the health and welfare of urban communities adversely impacted by social and environmental injustice.

**TRENTON SEEDS**

Trenton Seeds Youth Initiative brought summer camp programs from the Capital Area YMCA and the Boys and Girls Club of Greater Mercer County once a week during the six weeks of the program. Campers spent two hours on the farm, discovering our native pollinator garden, our orchard, fields and high tunnel. The farm was an introduction to
environmental education and an introduction of how food grows with these youngest camp
visitors (pre K – grade 5). In total, the farm hosted roughly 250 campers from the Boys and
Girls Club of Greater Mercer County and 5 campers from the Capital Area YMCA. The
goal of the field trips was to expose youth to healthy food and environmental education, to
encourage discussion within families to purchase the produce at either Capital City Farm or
other farm market stands.

GREENWOOD AVENUE FARMERS MARKET

CCF was a vendor at this year’s Greenwood Ave’s Farmers Market (GAFM) for a partial part
of the 2019 season. The Market was in its fifth season, opening the third week of June and
closing the Monday before Halloween, open on Mondays from 12pm until 5pm in a parking
lot on Greenwood Avenue behind the Trenton Transit Center. One highlight for us was that
our tomato varieties were different than the other growers at the market and we often sold
out many weeks. Total sales at GAFM: $454.00

2019 BUDGET OVERVIEW

<table>
<thead>
<tr>
<th>MONTH</th>
<th>TOTAL SPENT</th>
<th>INCOME</th>
<th>NOTES</th>
<th>PAYROLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEBRUARY</td>
<td>$350.00</td>
<td>$20,000.00</td>
<td>Feehan donation</td>
<td></td>
</tr>
<tr>
<td>MARCH</td>
<td>$2,719.00</td>
<td></td>
<td>$1,795.00</td>
<td></td>
</tr>
<tr>
<td>APRIL</td>
<td>$4,702.00</td>
<td></td>
<td>$3,565.00</td>
<td></td>
</tr>
<tr>
<td>MAY</td>
<td>$6,620.00</td>
<td></td>
<td>$5,622.00</td>
<td></td>
</tr>
<tr>
<td>JUNE</td>
<td>$5,599.00</td>
<td></td>
<td>$4,995.00</td>
<td></td>
</tr>
<tr>
<td>JULY</td>
<td>$14,440.00</td>
<td>$25,000.00</td>
<td>Deposit: D&amp;R $19K, AT&amp;T, $5K Feehan Family $13,771.50</td>
<td>($5,550 Environmental Stewards)</td>
</tr>
<tr>
<td>AUGUST</td>
<td>$23,495.00</td>
<td>$19,000.00</td>
<td>Deposit: $10K and $9K from D&amp;R $16,520.00</td>
<td>($5,600 Environmental Stewards)</td>
</tr>
<tr>
<td>SEPTEMBER</td>
<td>$7,122.00</td>
<td>$11,250.00</td>
<td>Deposit: $9K D&amp;R and $2250 TASK $6,570.00</td>
<td></td>
</tr>
<tr>
<td>OCTOBER</td>
<td>$10,921.00</td>
<td>$25,000.00</td>
<td>Deposit: AT&amp;T second installment $7,349.50</td>
<td></td>
</tr>
</tbody>
</table>
2020 -These plans will have to be revised based on the change in status of the farm’s manager for the 2020 season. The GSAP Board of Directors will determine priorities and fundraising goals for 2020:

Farm Plan-Spring 2020
- Security for shed
- More soil
- Cold Bot: seal inside with caulking

Capital Project Items-funding required
- Winterize irrigation system for use in greenhouse during cold weather months
- Heater in Greenhouse: MunichRE grant
- Move greenhouse from SRO to create community space on property for classroom instruction and community use
- Entrance to TASK beautification: joint fundraising for rain garden, benches etc

Volunteer Workday Items
- Move berry bushes
- Trim fruit trees-get arborist to advise
- Donated Hoop House: Erect on back field

Community Programming
- Straw Bale Pollinator Garden in conjunction with Mercer County Parks Commission

Potential Tenant for Greenhouse
- Khalid Stewart, micro-greens grower

<table>
<thead>
<tr>
<th>NOVEMBER</th>
<th>DEC. 2</th>
<th>DEC. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6,500.00</td>
<td>$24,978.33</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>$5,330.00</td>
<td>$65,518.00</td>
<td>$65,518.00</td>
</tr>
</tbody>
</table>

Deposits: $2500 TASK, $625 Yoga Soul Donation, $21,853.33 AT&T
## 2020 Budget

### Operation Budgets – 2020

#### Indirect Expenses

<table>
<thead>
<tr>
<th>Expense Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitation services (Porta John)</td>
<td>$1,300</td>
</tr>
<tr>
<td>Water</td>
<td>$600</td>
</tr>
<tr>
<td>Electric</td>
<td>$700.00</td>
</tr>
<tr>
<td>Liability insurance</td>
<td>$1,600.00</td>
</tr>
<tr>
<td>Financial service expenses (banking, payroll, etc.)</td>
<td>600</td>
</tr>
<tr>
<td>Legal services</td>
<td>1800</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$6,600</strong></td>
</tr>
</tbody>
</table>

#### Direct Expenses

<table>
<thead>
<tr>
<th>Expense Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor/salaries</td>
<td>$117,200</td>
</tr>
<tr>
<td>Seeds, pots, soil mix, fertilizers</td>
<td>$1,000</td>
</tr>
<tr>
<td>Soil/compost (for field production)</td>
<td>$4,000</td>
</tr>
<tr>
<td>Tools/supplies/ and equipment (new stuff + repairs)</td>
<td>$2,700</td>
</tr>
<tr>
<td>Ornamental/ beddin plants</td>
<td>$1,500.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$126,400</strong></td>
</tr>
</tbody>
</table>

#### Capital Projects

<table>
<thead>
<tr>
<th>Expense Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating/ventilation install</td>
<td>$12,000</td>
</tr>
<tr>
<td>Adding 1 tunnel</td>
<td>$2,000</td>
</tr>
<tr>
<td>Propane for heater</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$147,750</strong></td>
</tr>
</tbody>
</table>

#### Income as of April 1, 2020

<table>
<thead>
<tr>
<th>Income Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>MunichRE grant for greenhouse heater</td>
<td>$10,000</td>
</tr>
<tr>
<td>D&amp;R remaining monies</td>
<td>$16,100</td>
</tr>
<tr>
<td>Remaining AT&amp;T funds</td>
<td>$36,628</td>
</tr>
<tr>
<td>Remaining AT&amp;T funds</td>
<td>$36,628</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$85,022</strong></td>
</tr>
</tbody>
</table>

$20K minus $1200 for 2019 utilities and Winter Farmer Manager salary
$38,500 minus hourly worker winter salaries

Needed by 4/1/20
Appendix 2: List of Interviews Conducted

While I cannot list respondents with any identifiers due to privacy restrictions, I felt it necessary to list my interviews by date and method of interview to support the work conducted in this thesis:

Respondent 1, March 1st, 2019, phone
Respondent 2 & 3, March 22, 2019, in person
Respondent 4, May 1st, 2019, in person
Respondent 5, July 19th, 2019, Skype
Respondent 6, August 1st, 2019, phone
Respondent 7, January 9th, 2020, phone
Respondent 8, January 20th, 2020, phone
Respondent 9, January 30th, 2020, in person
Respondent 10 & 11, January 30th, 2020, in person
Respondent 12, 13, & 14, February 6th, 2020, in person
End Notes

17. Ibid.
18. Ibid.
19. Ibid., 127
20. Ibid., 129
22. Ibid., 35


29 University of Richmond et al., “Mapping Inequality: Redlining in New Deal America.”


31 Ibid.

32 Ibid.

33 Ibid.

34 Ibid.

35 University of Richmond, et al., “Mapping Inequality: Redlining in New Deal America.”


40 Ibid.


43 Ibid.

44 Ibid.


46 Ibid.


Wolfe, “The view from here.”


Ibid, 69.

Ibid, 71.

Ibid, 59.

Ibid, 60.

Ibid, 62.

Ibid, 63.

Ibid, 72.

Ibid, 74.

Ibid, 76.

Ibid, 66.

Ibid.

Ibid.

Ibid, 67.

Ibid, 77.

Ibid.

Ibid, 243

Ibid, 14.

Ibid.

Ibid, 22.


Worstell and Green, “Eight Qualities of Resilient Food Systems: Toward a Sustainability/resilience Index.” 29

Keyes, Ornelas, Jr., Penalosa, Rubira, and Sellers, “Food Assets, Trenton, NJ.”

Ibid, 158.

Ibid.

Ibid.


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Ibid, 6.

Ibid, 7.


Ibid, 25.

Ibid.


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Ibid.


Ibid, 55.


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Graham, Bradley. “Coalport after 20 Years: The Dream’s Tarnished,” June 1, 1975. “Areas - Coalport” Folder. The Trentoniana at the Trenton Public Library.


