COMMUNITY GARDEN BARRIERS: A GROUNDED THEORY STUDY OF GAINESVILLE, FLORIDA

By

SARAH RACHAEL PERCH

A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN URBAN AND REGIONAL PLANNING

UNIVERSITY OF FLORIDA

2011

© 2011 Sarah Rachael Perch

To everyone who has helped me along the way- your support has helped me to reach this point

ACKNOWLEDGMENTS

This work would not have been possible without everyone I interviewed or asked for advice on community gardens. I would like to thank my family for listening to me ramble about community gardens. Thanks to Ruth Steiner and Dawn Jourdan, for helping me put my thoughts together and encouraging me to explore community gardens and barriers. Finally, I would like to thank Brian for always listening.

TABLE OF CONTENTS

page

ACKNOWLEDGMENTS 4

LIST OF TABLES 8

LIST OF FIGURES 8

ABSTRACT 10

CHAPTER

1 INTRODUCTION 12

Problem 13
Research Questions and Objectives 14
Organization 14

2 LITERATURE REVIEW 16

Food Systems 16
Community Food Assessments 17
Community Food Access 18
Urban Agriculture 20
Definition 20
Benefits 21
Why Not Urban Agriculture? 22
Community Gardens 22
Definition 23
History 23
Benefits 25
Affordable Housing 27
Local, State, and Federal Initiatives 27
Barriers 29
Community Garden Barriers 30
Summary 32

3 METHODOLOGY 34

Study Approach 34
Grounded Theory 36
Structure of Grounded Theory 36
Data Handling 37
Purpose 37

Data Collection 38
Using Grounded Theory 39
Criticisms 41
Summary 42

4 RESULTS 45

Policy 46
City of Gainesville 46
Community garden program 46
Comprehensive plan 47
Code of Ordinances 48
Gainesville policy conclusions 49
Alachua County 49
Comprehensive plan 49
Code of Ordinances 50
Policy in Other Communities 50
Interviews 56
Obstacles 58
Elements of Successful Gardens 61
Conclusion 62

5 DISCUSSION 66

Policy 66
Existing Condition 66
Policy Best Practices 67
Interviews 70
People and Policy 72

6 CONCLUSIONS AND RECOMMENDATIONS 75

Conclusions 75
Barriers in Gainesville 75
National Perspective 76
Study Limitations 76
Recommendations for Future Research 77

APPENDIX

A CITY OF GAINEVILLE COMMUNITY GARDEN PROGRAM INFORMATION 78

B INSTITUTIONAL REVIEW BOARD INFORMED CONSENT 85

LIST OF REFERENCES 87

BIOGRAPHICAL SKETCH 92

LIST OF TABLES

Table		page
3-1	Codes	43
4-1	Gainesville Comprehensive Plan elements	63
4-2	Alachua County adopted comprehensive plan elements	63
4-3	Community garden comparison chart	64

LIST OF FIGURES

Figure page

3-1 Selective codes. 44

4-1 Gainesville Comprehensive Plan questions 65

Abstract of Thesis Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Master of Arts in Urban and Regional Planning

COMMUNITY GARDEN BARRIERS: A GROUNDED THEORY STUDY OF GAINESVILLE, FLORIDA

By

Sarah Rachael Perch

May 2011

Chair: Ruth Steiner
Cochair: Dawn Jourdan
Major: Urban and Regional Planning

Sparked by movements such as Michelle Obama's Let's Move! initiative, interest in local food has grown in recent years. One of the most visible forms of local food production, and urban agriculture, is community gardens. Community gardens provide environmental, social, physical, health, and economic benefits to the community they are in. But what are the potential barriers that stand in the way of community gardens?

Using Gainesville, Florida, as a case study, this work explores barriers, both real and potential, that obstruct the growth and development of community gardens. A grounded theory approach is employed to analyze policies and regulations, along with interviews of agricultural extension agents, city and county staff, and others involved with community gardens.

Gainesville, Florida has a community garden program that is well-structured, but limited in its ability to reach out to those interested in working with non-City-owned properties. The current Comprehensive Plan and Code of Ordinances do not mention community gardens. This leaves the reader questioning where they fall in the Plan, what they are considered to be, and therefore what potential uses or restrictions, community

gardens fall under in the Code. There is much ambiguity in current policy as to what community gardens are, what they can be, and what gardeners may or may not do.

Models throughout the United States offer ways in which these barriers can be overcome. By developing an informative website, including community gardens in the Comprehensive Plan and adding community gardens to the Code of Ordinances, the City would clarify its stance on community gardening. By developing policy that clearly defines what community gardens are, including what is not permitted, community gardeners are able to understand and work with established policies.

Interviews with those involved in community gardening, agricultural activity, and policy in Gainesville suggest that policy is not the only type of barrier category to community gardens. Interviews indicate that, in addition to potential policy barriers, there must also be a want for a garden in the community, including people willing to take charge and participate in garden activities. Without this, community garden experts do not believe that gardens will flourish.

CHAPTER 1
INTRODUCTION

First Lady Michelle Obama started the Let's Move! initiative in February 2010, after establishing the White House Kitchen Garden. Let's Move! aims to solve the current obesity problem in the United States by focusing on children's health and behavior. Healthy eating is a major component of the initiative, which aims to increase access to healthy, affordable foods. The White House Kitchen Garden is the first vegetable garden at the White House since Eleanor Roosevelt's victory garden, setting an example of the powers of gardening, and establishing healthy eating as part of the solution to obesity (White House, n.d.). Vegetable gardens, such as the White House Kitchen Garden, are a useful tool in teaching healthy eating behaviors while providing access to affordable food. Community gardens provide a way for people to work together to grow their own food and explore the many other benefits of gardening.

Buzzwords like organic, local food, and urban agriculture are spreading rapidly throughout the United States. Farmer's markets are growing by leaps and bounds, increasing over 114% from 2000 to 2010 (U.S. Department of Agriculture, 2010). People are increasingly interested in knowing more about their food, which means that they are interested in learning more about food systems. Food systems involve anything that is part of the process of growing, distributing, and accessing food. Interest is increasing in urban agriculture and other related agricultural movements that emphasize local food and relationships between the grower and the buyer. Lyson (2004) coined the term "civic agriculture" to describe this movement, as its activities are tied to the community's social and economic development.

Problem

Lyson (2004) introduces community gardens as one of the most visible forms of urban agriculture. As other forms of civic agriculture have increased, so too have community gardens. Researchers, such as Allen (2008), Armstrong (2000), Schmelzkopf (1995), and Voicu (2006) have focused their attention on the many benefits of community gardens. However, with many of the potential benefits being studied, there needs to be a way to understand the obstacles to community gardeners. As the number of community gardens and gardeners increase, and interest in establishing more community gardens continues, there must also be an understanding as to what community gardens are, what it means to be a part of a community garden, and what special needs that garden and its community have.

There are many types of community gardens, ranging from gardens on school property and used as part of a curriculum for schoolchildren to guerilla gardens, or gardens started on land without the owner's permission or even awareness. Questions regarding land ownership, individual responsibilities, and management are only a few of the many hurdles community gardens face. As community gardens continue to develop, a thorough study of the potential problems and solutions they face needs to be conducted.

Planners play a distinct role to community gardens and the greater food systems network. They can examine food systems in innovative ways that support and promote local food systems (Campbell, 2004). Planners are involved in land use planning, regulations, and developing systems that support local food. They can study the benefits of community gardening, implement gardening programs, and support those who participate in community gardening. Planners can provide a valuable service to

local food systems, especially community gardening efforts, as they can bridge the gaps that may exist between the involved parties in food systems and local agriculture processes.

Research Questions and Objectives

The purpose of this research is to examine both real and potential barriers to community gardening. Originally, this work aimed to study social, legal, and economic barriers on the local, state, and national levels, focusing on Gainesville, Florida. Through the use of grounded theory, this work has developed in scope and scale and now reflects the largely undocumented nature of barriers to community gardens. Throughout this work, the following questions have driven this research:

- Are there barriers to community gardens?
- What are the barriers that community gardens face? Why?
- What prompts them?
- How do barriers vary?
- As community gardens gain in popularity as a form of urban agriculture in communities, the benefits are community gardens are continuously examined. But what must they first overcome?

Through policy analysis and interviews, a list of barriers will be developed and studied in light of best practices. The goals of this work are as follows:

- Analyze policy documents that relate to community gardens.
- Interview policy and community garden experts.
- Develop a list of social, legal, and economic barriers to community gardens.
- Suggest ways in which barriers have been addressed elsewhere.

Organization

This work seeks to develop and explore ways in which to study real and potential barriers to community gardens, ultimately discovering and researching these barriers and what they mean in the greater context of community gardening. It is divided into six chapters. Chapter 2 details the literatures that provide support for this work, including a discussion of barriers, food policy, and urban agriculture. Chapter 3 explains grounded theory, the methodology used for this work. This section details the rationale and benefits for using this type of methodology. Chapter 4 presents the results of initial policy analysis and the interview conducted. Chapter 5 discusses the results in light of previous research and best practices. Finally, Chapter 6 provides concluding remarks and discussion on this piece, as well as present possibilities for future work.

CHAPTER 2
LITERATURE REVIEW

Food systems, through programs and initiatives, such as farmer's markets and Let's Move!, are gaining local and national attention. Local and state governments (e.g. Baltimore, Maryland; Hartford, Connecticut; the State of Oklahoma) are establishing food policy councils and task forces to study and address food systems and concerns. Food systems, food security, and community food assessments are all part of a greater discussion on food access and equity. Increasingly, urban agriculture, including community gardens, is part of this greater food discussion, as it plays an important role in the greater food network and is associated with economic, social, and health benefits. Urban agriculture, particularly community gardens, opens up opportunities to include food discussions and activities in areas not traditionally associated with food production.

The benefits of community gardens have been much studied. But what are the barriers? This subject has not yet been discussed in great detail. Using another, related discipline helps to understand this phenomenon. Therefore, this work explores how barriers are addressed in affordable housing, another interdisciplinary planning field.

Food Systems

Access to healthy food is important for communities. This means that the food system must be developed, food deserts understood and addressed, and food security assessments performed. This allows people to make educated choices about the food they eat, while working towards the ultimate goal of making food accessible and affordable to all.

Though the interactions between food systems and planning are limited, there is much to study (Pothukuchi and Kaufman, 2000). Food is a natural part of planning, and

is manifested in much of what a planner does and is concerned with. For example, grocery stores and restaurants are part of a city and are somehow accounted for in its land use maps and codes. City households spend a considerable amount of their income on food purchases; food is a daily necessity that all people need. Households also spend a considerable amount of time traveling to grocery stores and other food outlets. This means that those whom planners are planning for are very much invested in the location of food and food-related venues, access to them, and how this influences daily life (Pothukuchi and Kaufman, 2000).

Food systems are not perfect. Access to food is not equally distributed or available to all. Local food councils, agricultural extensions, and other interested parties can work to overcome some of these obstacles. An important tool in these processes is the community food assessment.

Community Food Assessments

Community Food Assessments are ways in which the many diverse needs, entities, and establishments concerned about communities and food can be addressed. Pothukuchi (2004) says that community food assessments are the first step in planning for community food security. They are a way to tie together the general food system to address areas of food insecurity, while acknowledging areas of food production and distribution, as well as food policy councils. Pothukuchi argues that planners are well situated to conduct food assessments, as they are trained in understanding and analyzing communities, versed in communication, have interdisciplinary training, and trained in leading, facilitating and managing community-based group processes (Pothukuchi, 2004). Therefore, planners should acknowledge and participate in the

community food planning process and assessments, knowing that they are just a few of the many parties that need to be involved, but an important component in the process.

Food planning is related to other planning concerns, such as land use planning, environmental planning, and sustainable development, and can easily be integrated into the planning vernacular (Pothukuchi, 2004). Community food assessments are a solid starting point for food discussion and interactions by examining and defining food concerns in a general region. Then, concerns like food access, can be addressed in light of the greater food system, providing a more complete picture of the area's needs and potential.

Community Food Access

Food access involves two major concepts: food deserts and food security (or insecurity, depending on the perspective and context of the discussion). Both refer to a lack in accessibility of healthy food. Each plays a role in discussions of what communities need to overcome in order to provide necessary food to individuals. Food deserts focus on the physical place, while food security involves the people affected by lack of access to proper food. Food access, or lack thereof, presents a major problem to the health of communities.

As Persons (2008) discusses, food deserts are "areas where access to, and the price of, healthy fresh foods have been compromised by a combination of factors" that includes: a lack of nearby supermarkets or groceries, transportation barriers, poverty, and a need for better nutritional information (p.16). Often, "people tend to shop at 'convenience' stores where food is typically more expensive and less healthy,' which is a problem from a planning perspective, as well a public health concern (Larsen, 2009, p. 1159). Food deserts are often documented in Community Food Assessments as

signs of areas in which food insecurity may occur (Short, 2007). Food deserts are a physical indicator that an area lacks healthy food options. Often, they are associated with urban areas; however, increasingly, rural areas may also be considered food deserts.

Food security, or insecurity, is the focus of a study conducted by the United States Department of Agriculture's Economic Research Service (ERS). In their 2009 report, "Food Security in the United States," the ERS declared that, in 2008, 85.4% of households on the United States were food secure. That means that the remaining 14.6% of households, an estimated 49.1 million people, were food insecure at some time in 2008. The ERS defines food insecurity as households "unable of having or unable to acquire enough food to meet the needs of all their members because they had insufficient money or other sources for food." In Florida, the study found 14.2 percent of households, or over 1,000,000 households, to be food insecure (Nord, 2010). This was lower than the national average, but still a significant number of household in Florida not able to reach food security.

Planners must address the needs of the community, keeping food access and security in mind in their work, as food is a necessity for all people. Food security should be comprehensive, focusing on equity, health, and sustainability, as well as the community as a unit (Pothukuchi, 2004). Without access to sufficient food, communities are prevented from flourishing and are unable to develop to their full potential. Alternative food sources and activities, such as urban agriculture, are an effective way to address food access.

Urban Agriculture

Urban agriculture has an extensive history that can be traced to many regions of the world (Bhattarya, 2005). Traditionally, and today, it provides a way for people to access fresh food and green space in areas that might otherwise be built up. Though urban agriculture has such a lengthy history, recent studies have focused on studying the integration and feasibility of urban agriculture products in the United States.

Definition

Urban agriculture is a somewhat ambiguous term that describes any type of agricultural activity that occurs in an urban setting. It is part of a greater movement towards local food production and consumption (Nordahl, 2009). Instances of urban agriculture are difficult to define precisely, as they may take many forms. Mendes et al (2008) writes that urban agriculture "can include community and private gardens, edible landscaping, fruit trees, food-producing green roofs, aquaculture, farmers markets, small-scale farming, hobby beekeeping, and food composting" (p. 435). Community supported agriculture (CSAs), co-ops, and other similar operations can also be instances of urban agriculture, when they are produced in urban areas. Urban agriculture encompasses all kinds of agricultural activities, including producing fruits and vegetables, raising chickens, or keeping bees. These may be public, private, or institutionally supported and operated. There is much variety to what constitutes urban agricultural activities.

Urban agriculture is a way for produce and other edible animal products to be more easily accessible to people not in places traditionally associated with fresh food. The benefits of urban agriculture are environmental, economic, and equitable in nature,

leading to a strong association between urban agriculture and the tenets of sustainability (Nordahl, 2009).

Benefits

As agriculture is integrated into urban areas, it brings with it a multitude of benefits. Brown (2000) says that “there are numerous agricultural endeavors in the United States, and increasingly health professionals, urban planners, environmental activists, community organizers, and policy makers are recognizing the value of urban agriculture for economic development, food security, and preservation of open space” (p. 20). Urban agriculture has environmental, social, physical, and health benefits.

Mendes (2008) details many benefits of urban agriculture. First, it presents an opportunity to create or maintain green spaces in the city. Sometimes, this is done on brownfields or other sites not previously green, increasing the amount of green in the city. Introducing plants to an area that was not previously green can improve air quality. Socially, urban agriculture can add a sense of place to neighborhoods, while also connecting neighbors and building community capacity. Those active with urban agriculture, particularly youths, can learn valuable skill sets, including interacting in a group and leadership responsibilities. Physically, agriculture can improve the visual quality of an area and increase its aesthetic appeal. Health-wise, green space contributes towards an improved state of mental health. In addition, urban agriculture increases access to fresh and potentially healthy food. Finally, depending on the type of agricultural, it involves and promotes physical activity (Mendes, 2008).

Urban agriculture, through its very nature and benefits, creates a much needed link to urban food security (Brown, 2000). Urban agriculture and interest in local food can “contribute to rising levels of civic welfare and socioeconomic well-being” (Lyson,

2004, p. 85). Through the connections that urban agriculture can provide to equity and security, urban agriculture becomes part of planning. Therefore, the less positive aspects of urban agriculture must also be considered.

Why Not Urban Agriculture?

Urban agriculture takes food production, which typically has happened outside or on the outskirts of cities, and brings it in to urban residents. While this introduces alternative ways to access and distribute food, there are several reasons why agriculture has traditionally not flourished in cities. These activities can produce undesirable smells and noise. Cities have been hesitant to introduce agricultural uses into land near residents, which is often not allowed under traditional Euclidean zoning Euclidean zoning divides land into categories, with several uses as buffers for noxious uses. Recently, however, some of these rules have been amended to allow certain agricultural activities associated with benefits to the community. As urban agriculture is integrated into cities, its needs must be considered, along with the potential it has for enhancing local food systems. As urban agriculture is increasing integrated into cities, community gardens have emerged as a very visible example of what urban agriculture can be.

Community Gardens

Perhaps the most visible form of urban agriculture is community gardens (Lyson, 2004). Also called urban gardens, community gardens offer a place of refuge in urban areas where food, or other plants, may be grown and enjoyed by its users and even passersby. Though community gardening has existed for many years, recent interest in community gardens, as part of a greater urban agricultural movement, has sparked much interest in the benefits and implementation strategies of community gardening.

Definition

Community gardens include several typologies, which can make defining and classifying them difficult. The American Community Gardening Association, a nonprofit organization that supports and promotes community gardens, defines community gardens as “any piece of land gardened by a group of people” (n.d.). This definition is quite vague and allows for flexibility when thinking about and addressing community gardens. Gardens themselves are flexible in their location, users, purpose, and sources of support.

Community gardens may be developed from many different kinds of property and by various individuals. Gardens may be on institutional, public, or private lands. They can be composed of both edible and decorative plants. Plots may be individual, developed by groups, or some combination thereof (Lawson, 2005). Prominent types of community gardens include those associated with schools, churches, and ones sponsored by municipal governments. Schools often use community gardens as a teaching tool about the earth, food, and ecological systems. They might even incorporate the products from the garden into meals and snacks. Churches use the food, or profits from selling it, to support those who are in need. Municipal gardens could do all of these things, depending on who controls them, how the system is developed, and the individual garden. Like other forms of urban agriculture, community gardens have evolved over time and vary depending on the needs of the surrounding community and its resources.

History

Community gardens have historically played a role in the United States. As early as the 1890s, there were three distinct types of urban garden programs: vacant-lot

cultivation, children's or school gardens, and civic gardens. The late 19th and early 20th centuries encouraged individual action as part of the larger progressive movement. This supported and encouraged the development of all three forms of community gardens, particularly during economic depressions, such as the one between 1893 and 1897. Efforts during this time concentrated on immigrants and others in urban areas without access to quality food. Many programs were established. For example, an 1898 New York Association for Improving the Condition of the Poor (AICP) report listed urban gardening programs and projects in 19 cities. Gardens were encouraged during this time because they offered a way for individuals to cultivate gardening skills, access better quality food, and physical exercise (Lawson, 2005).

Community gardens continued throughout the 20th century. Particularly during the early part of the century, gardens were a way to promote food security, nutrition, and recreation. During World War I, war gardens were promoted. Everyone was encouraged to participate, rather than earlier efforts that targeted immigrants. The National War Garden Commission was created, as was the U.S. School Garden Army. Both served to encourage women, children, and others who were not fighting to grow food and help war efforts through gardening efforts. After the war, gardening again experienced popularity during the Great Depression. Gardens, particularly subsistence gardens, were often part of relief work efforts. A 1934 National Survey found that there were approximately 1.8 million home & vacant lot, community, municipal, and industrial gardens on about 400,000 acres (Lawson, 2005, p. 149). Gardening was considered a low cost project that was easy to implement and had many health benefits. After the Depression, gardens continued to flourish, especially during World War II. The World

War II Victory Gardens continued the effort with an estimated 15 million victory gardens in 1942 (Lawson, 2005, p. 170). The National Advisory Garden Committee was created to coordinate all types of gardening efforts. Throughout the early half of the 20th century, community and urban gardening efforts were abundant, as they coincided with the political, social, and economic movements of the time (Lawson, 2005).

As the 20th century continued, gardens again experienced an upswing around 1970. As people abandoned cities for the suburbs, community gardens were built in abandoned areas as a way to "address inflation, express a new environmental ethic, and reconnect neighbors during a time of social unrest" (Lawson, 2005, p.2). Many of these gardens were associated with "guerrilla" efforts that commandeered unused spaces. As these efforts continued, many cities, such as New York and Philadelphia, started to again develop community gardening programs to permit use of certain spaces for gardens (Lawson, 2005).

Throughout the history of community gardening in the United States, gardens have taken many forms. The perceived and understood benefits of community gardens have often been touted and were reasons for encouraging gardening efforts. Through their history, community gardens emerged as a way in which people could enjoy green space, learn valuable skills, and enjoy a diversity of company (Lawson, 2005).

Benefits

Like urban agriculture, there are many potential benefits of community gardens. As seen through the history of community gardening in the United States, there have been many traditional benefits to gardening, which continue today. Many of these have are discussed by community garden advocates and researchers as reasons to develop and maintain community gardens.

The benefits are environmental, social, physical, health, and economic in nature. First, gardens provide an oasis of green in urban areas. They help to clean the air and lower temperatures in the summer (Crow, 2010). Socially, gardens are collaborative spaces that allow its users to interact in a unique way (American Community, n.d.; Foster, 2006). They attract many people from different backgrounds and of varying ages and provide a common point of interest. Gardens have infrastructure for community interactions, including sitting areas, playgrounds, water features, and other physical spaces for gathering. This encourages community development, pride, and the potential for social change. In addition, crime is perceived to lessen as community gardens develop, particular ones given a lot of care (Crow, 2010). Overall, community gardens promote more engaged citizens and a better quality of life. Physically, gardens can beautify what was previously empty space (Center for Disease, n.d.). They can improve the appearance of the surrounding area and be aesthetically appealing spaces in the urban form (American Community, n.d.). Gardens promote fresh and healthy produce, physical activity, and are centers of therapeutic activity, all of which are health benefits. In addition, as people use the land, they learn about gardening and food, which also often includes nutrition and healthy eating habits (Crow, 2010; Center for Disease, n.d.). Finally, community gardening has economic benefits, including encouraging economic development, which is related to perceptions of less crime, indicating a safer area. Furthermore, community gardens raise nearby property values (Crow, 2010; Voicu, 2006). Gardeners may also save money on food by consuming their own garden products (American Community, n.d.). Community gardens have benefits, both real and perceived. Depending on the garden itself, these benefits may vary, by factors such as

location, size and population, all of which influence garden activity. Overall, community gardens may have a large effect on the area in which they are located.

Though community gardens have many benefits, they face a number of barriers that obstruct their growth and development. The subject of barriers is discussed but not defined in community garden and related subject literature. Often, it is assumed that the reader understands what a barrier is without discussing what it actually is in any detail. Therefore, using another interdisciplinary planning field that also addresses barriers helps to frame the discussion of barriers.

Affordable Housing

Affordable housing provides a way to understand how barriers are addressed in an interdisciplinary field that involves planning. Like community gardens and other aspects of food systems, affordable housing requires interaction between planners and others who, while interested in similar goals, have many ways to solve them. Affordable housing addresses interactions and concerns on the local, state, and federal levels, something also faced by community gardens. In addition, affordable housing has many restrictions that are difficult to define and many people are interested in understand potential barriers to affordable housing.

Local, State, and Federal Interactions

In 1990, then-president Bush called for an Advisory Commission on Regulatory Barriers to Affordable Housing that released a 1991 report, "'Not in my Back Yard': Removing Barriers to Affordable Housing." This report discusses affordable housing as a local, state, and federal concern. While the federal government called for the report, often other government bodies are responsible for affordable housing. In an analysis of the report, Downs (1991) states "federal government policy cannot reduce most

housing-cost-raising impacts of most local government regulations unless it can generate or encourage some means of compelling local governments to modify their behavior… only state government constitutionally can regulate local governments and maybe overcome them" (p. 1122). Downs continues to detail how state governments can influence local governments through pressure to change practices, encouragement of certain actions, or a combination of both measures. Affordable housing, Downs (1991) echoes of the Commission's report, must be addressed on all three levels of government. Local government is often the one responsible for its own affordable housing, thus they must be equipped with the tools to address affordable housing concerns. State government must help local governments with the necessary procedures and requirements. Federal government sets policy examples and is able to study and address many concerns regarding affordable housing (Advisory Commission, 1991).

Though not exactly identical, affordable housing policy involves many similar subjects to those involving community gardens. Like affordable housing, community gardens are subject to federal, state, and local policies. If the garden is dealing with food production, the United States Department of Agriculture (USDA) and other federal bodies are involved. States can enable or prevent community gardens from forming. For example, in 2010, Idaho passed House Concurrent Resolution 59, a resolution to "encourage[e] healthy, locally grown food production, distribution and consumption in the State of Idaho, support of local farming, the consumption of locally grown foods and the promotion of greater food self-sufficiency within the State, and further encourage Idahoans and Idaho businesses to celebrate and get to know their local growers and to

purchase and consume more food produced in or near Idaho" (Idaho Grown Food Production, 2010). Examples of state-wide policy like this encourage awareness of local food production, including community gardens, and demonstrate that states play a role in the greater discussion of food policy and practice. At the same time, local governments often initiate community garden programs and ordinances that allow or prevent community gardens from forming. While local governments are often the ones to enact and directly support community gardens, state and federal government support is also a major influence in their development.

Barriers

Affordable housing, like community gardens, faces many potential barriers that are not always clearly defined. One of the greatest challenges is actually defining what constitutes a barrier. The Merriam-Webster Dictionary defines a barrier as "something material that impedes or separates" (Merriam-Webster, n.d.). There is very little literature that discusses a definition of or methodology for developing barriers. The 1991 Advisory Committee on Regulatory Barriers to Affordable Housing focuses on policy barriers, such as building codes and environmental regulations, while acknowledging that there are many other potential barriers, such as technological changes. The report defines the problem to affordable housing, defines what affordable housing is, but does not directly address what a regulatory barrier is or how to find one. However, it alludes to regulatory barriers as "unnecessary regulations at all levels of government" which are stifling (Advisory Committee, 1991, p. 1). The report mentions that there is "a maze of Federal, State, and local codes, processes, and controls" that could be regulatory barriers and that these may not always be anticipated as obstacles (Advisory

Committee, 1991, p. 3). While the report implies a definition of regulatory barriers, they are never outright defined.

There is very little literature that defines what a barrier is, or a methodology used to identify them. Listokin (2001), in a report for the U.S. Department of Housing and Urban Development (HUD) entitled *Barriers to the Rehabilitation of Affordable Housing*, defines barriers as "obstacles." Listokin goes on to say that these may be "unique to rehab or generally more problematic in rehab than with a new construction." The report implies that many factors can influence barriers (p. 2). Listokin then classified the barriers he identified into several categories, describing each in more detail, instances of their occurrence, and how to ameliorate them (Listokin, 2001, p. 10).

Affordable housing literature shows that while barriers are clearly discussed, it is rare for them to be defined. Rather, what definition there is, such as Listokin's, is vague, or merely implied from the greater context. From this, a barrier emerges as something that is perhaps unnecessary or stifling, or some kind of obstacle. While this is more concrete than most planning literature, which discusses barriers but does not define them, the concept of barriers are often used without a thorough understanding of what exactly they are.

Community Garden Barriers

Discussions of community garden barriers range from specific instances of community garden implementation to those that discuss community gardens in general terms of urban agriculture. The barriers themselves may be legal, physical, or intangible in nature. There are barriers that are general to agriculture and also ones unique to community gardening.

Persons (2008) discusses potential institutional, political, economic, and spatial barriers to agriculture. Never defining what constitutes a barrier, he describes potential obstacles for each type of barrier, implying that barriers are obstacles. Persons focuses on barriers to small-scale farms, low-income households, and food access, describing what may also be potential barriers to community gardens, as there are many similarities. This is because small-scale farms are often similar to community gardens, which may actually be considered small-scale farms in urban settings, particularly if the gardens or its members sell their food. The USDA has traditionally classified small farms as those that earn less than $50,000 in agricultural sales (U.S. Department of Agriculture, 2005). These farms often have a net loss and are quite vulnerable (Persons, 2008). Low-income households have less income to spend and may be on food stamps, which can limit their purchasing choices in respect to food. The possibility to directly market urban agriculture, especially community gardens, to low-income households is largely untapped (Persons, 2008).

Crow (2010) studies several legal obstacles or concerns community garden organizers may need to both address and overcome when organizing and implementing gardens. Though Crow does not detail her methodology or definition of barrier requirements or developments, she compiles a detailed list of potential legal barriers. Specifically, Crow mentions location choice and property attainment, the use of non-profits for community gardening, and obtaining insurance for community gardens. Crow then explains how certain communities have worked around or developed ways in which to address these barriers. Crow specifically mentions the State of New York and Dallas, Texas as examples of states or cities that have studied or come across these

issues, and Seattle, Washington; Chicago, Illinois; and New York, New York as examples of best practices. Overall, however, Crow is not seeking to fully understand barriers, but rather to encourage the development and growth of gardens and detail areas in which lawyers can be involved in the community garden process.

Crow (2010) sets the stage for community garden barriers to be more fully explored. Though she discusses some legal barriers, Crow does not fully examine what it means to be a barrier, as well as other possible policy, particularly regulatory, barriers. The piece starts to analyze examples of best practices, and why, but is lacking in that it does not include the perspective of community gardeners, or those involved in the community garden process. This is an important link, as there might be unknown barriers or ones predicted and not realized. Crow introduced the benefits of community gardens as important in justifying and understanding what community gardens are and can do. They are incentives for gardens to develop. However, the barriers to community gardens must be more thoroughly examined. This can be done by studying the barriers and understanding them in the context of best practices.

Summary

Community gardens are part of the greater food system network. They are a strong part of urban agriculture, and have many benefits to both garden users and the surrounding area. The literature discussed in this chapter presents several precedents for understanding both barriers and community gardens. However, as seen from the literature, little work has been done with specifically detailing what a barrier is, and how barriers are developed, particularly in respect to community gardens. In order to fully address the potential benefits of community gardens, the barriers to community gardens

must be understood. From this, the barriers can be addressed and allow community gardens to further develop.

CHAPTER 3
METHODOLOGY

This research seeks to understand real and perceived barriers to community gardens using a grounded theory approach. Gainesville, Florida is the case study for this work. Both policy analysis and interviews are included in the theory building. Policies include comprehensive plans, codes of ordinances, and other similar documents. Interviewees come from a wide range of backgrounds in the public, private, and nonprofit sectors. The original intent of this work was to ultimately develop a list of social, economic, and legal barriers that exist on the local, state, and national levels. However, as work progressed, a revised view on the process was required. This chapter documents the progression of the methodology, data collection methods, and the theory building process.

Study Approach

This work started as a qualitative single case study of barriers to community garden in Gainesville, Florida. The original study design was to develop a list of policies, supplemented by interviews, and analyze the documents seeking social, economic, and legal barriers to community gardens. However, as the study began to take place, and the literature review developed, it became clear that there is little previous work that discusses barriers to community gardens, particularly in policy. Rather, those involved in studying community gardens concentrated on the benefits of community gardening and barriers appeared only as a minor concern that may or may not have been fully developed. Those who did discuss barriers did not define what it meant to be a barrier, the methodology for developing and investigating barriers, and other information pertinent for truly focusing on community garden barriers. Therefore, this work evolved

from its original form to a more flexible study of community garden barriers that would allow for the subject to fully develop and for a firmer understanding of barriers to emerge. This involves using grounded theory as the methodology by which the study could develop, using both policy analysis, review of documents, and interviews to study the phenomenon.

Community gardens are surrounded by much ambiguity. What they are, their purpose, and their needs are all part of a greater confusion around pinning down what exactly constitutes community gardens. As mentioned previously, community gardens vary much by their purpose, location, and size. Gardens at schools are quite different than those on previously vacant land, or those operated by a group of neighbors. School gardens have a distinct community that utilize them, and may or may not have its products incorporated into school activities, including classes and meals. For the purposes of this research, school gardens are not studied in detail. Often, they involve populations under 18, and it is difficult to find information without previous knowledge of that particular school. Those involved with the gardens may be teachers and parents, which is different than community gardens open to the general community. This study focuses on community gardens not on school property, which do not have the extra level of policy dictated by school boards and which do not focus on teaching children. Therefore, this research first defines what it means to be a community garden and also a barrier, keeping in mind that though there are many types of community gardens, this work focuses on those not on school board property. Then, community gardens are discussed and understood in the context of Gainesville. From this, a list of potential policies and interviewees is developed, studied, and consulted. Upon completion, a

theory is developed, ultimately providing the researcher with a better understanding of community garden barriers.

Grounded Theory

Structure of Grounded Theory

Grounded theory presents a way to understand a phenomenon through analyzing the data that composes the phenomenon itself. Strauss and Corbin (1990) write that

> "a grounded theory is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon… One does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge" (p. 23).

This means understanding behavior like the participant does, learning their perspective, analyzing it, and giving a name to reoccurring behaviors and ideas (Jourdan, 2008). Essentially, grounded theory starts with a story and tries to figure out what is happening in that story (Charmez, 2003).

One of the unique aspects of grounded theory is the way in which the data are handled. Data are simultaneously collected and analyzed. Through the process of collecting and analyzing data, major themes emerge and are continuously categorized, refined, and integrated into the theory development (Charmez, 2003). This process, the gathering, conceptualizing, and interpretation, is integral to the building of theory (Jourdan, 2004).

Grounded theory is composed of three units: concepts, propositions, and categories. Concepts are the basic unit. They are labels for all events and instances that occur in the data. Concepts are then grouped together into propositions, which

indicate relationships between the concepts. Finally, the propositions are grouped and regrouped into categories that classify the information as the phenomenon appears. Through this iterative process, a hypothesis-like statement is developed.

Data Handling

As mentioned above, grounded theory involves a constant iterative process, with data continuously being collected and refined. There are three major components: data collection, data analysis, and theory development. Grounded theory starts with collecting initial data. Data is continuously collected, until the analysis reveals a connection between the data. As collection occurs, the data is analyzed. For example, after an interview, the researcher analyzes what was or was not said in the interview, looks for key points, and develops concepts, propositions, and categories from the interview. This process involves writing memorandum to describe the data collected. Then codes are created and employed to summarize the memorandum. The codes indicate the concepts and ideas that the researcher wants to take from the data. Next, the codes are refined. This allows for the most relevant codes to be highlighted, a process also known as selective coding. As the codes are developed and refined, memoranda are continuously written about each, explaining what it is and connecting the codes to each other. This process leads to the development of theory.

Purpose

Grounded theory helps to understand interesting phenomena that might not have been otherwise studied or documented. Through the grounded theory process, a critical understanding of a collective story is pieced together. Grounded theory is being used for this research because it provides a way to understand barriers, a concept which has not

yet been thoroughly studied. This research focuses on studying policy and regulation analysis, as well as interviews to understand barriers to community gardens.

Policy is a way to understand what is promoted or prohibited in a community. Though policy is not necessarily a clear indicator of what is actually happening in a community, for the purposes of this research, it is a very feasible way to understand what is promoted or prohibited in respect to community gardens in Gainesville. Policies, on the local level, especially in respect to ordinances, provide information on what is not allowed in a community. Other local policies, such as program information, comprehensive plans, and parts of ordinances, encourage certain uses or activities. This is helpful to understand what community leaders want to happen at the present and future in their locality. Policy becomes a way to think about how a community feels towards a certain subject.

Data Collection

To study the relationship between community gardens and policy, particularly how community gardens are addressed in policy, the following steps will be taken. First, a list of relevant government bodies is developed. Next, policy documents are sought out and listed, focusing on those that might address how the community feels about community gardens. From this, a study of those documents is implemented, focusing on potential barriers to community gardens. Codes and memoranda are developed as the policy analysis is performed. These identify topics of interest that develop from the analysis, and are continuously examined.

As the policy lists are developed and policies analyzed, interviews will also be conducted. From the list of government bodies, a list of potential interviewees is also developed, including other government employees, policy makers, agriculture and

gardening experts, and community gardening experts. This may include planners, parks department and agricultural extension agents, and nonprofit workers. The interviews are a way to better understand from the policy makers and implementers what is actually happening in the community, other directions to explore, policies to focus on, and other details that tell the story of community gardening, including if barriers exist, and if so, what they are. As with the policy analysis, after each interview, a careful documentation process is conducted. Topics of interest, including those mentioned by the interviewee and as seen through the interviewer's perspective are developed. Codes and memoranda are written, iterated, and integrated with those developed from the policy analysis.

As barriers are identified, they are thoroughly analyzed. This is done through a comparison with best practices, developed through literature and careful study. As community gardening is a current topic of much interest, there are many possible examples to follow or study. Therefore, when choosing best practices, it is important to consider the connections that the place has with the case study, in this case, Gainesville, Florida. Though each state, and even each community, has its own restrictions and guidelines that make its situation unique, the comparison with best practices identifies measures used in other communities that provoke thought and could possibly be integrated in future work.

Using Grounded Theory

Grounded theory is a qualitative approach that is similar, yet quite different from other methodologies. Like other qualitative methods, first a research problem is developed. In this case, the benefits of community garden are often discussed by researchers and community garden advocates. They are well known, documented, and

continuously explored. What stands in the way of community gardens has not been equally studied. Next, after the research problem is identified, grounded theory requires the development of a question. Unlike many traditional forms of research, this question can be fluid, more like a topic of study, and the answer sought is not necessarily a traditional yes or no answer, but rather a response to the question itself. The question here is: Are there barriers to community gardens? What are they? With the problem identified and question posed, the next step is to collect and start to analyze data. This study involves policy analysis and interviews as the data collection method, with the codes and memorandum as crucial steps in the analysis process.

It is important to note at this point that the researcher must carefully consider the data being collected. Often with grounded theory, there is a concern that the researcher will use his or her own biases to influence the results. Therefore, it is important to note that the researcher acknowledges that biases may influence how data is understood and should work to overcome these natural biases. Often, those interested in community gardens are advocates for gardens and tend to see the gardens themselves in an overly favorable light. Understanding this throughout this process is crucial.

When developing codes, it is necessary to consider the data source, content, and meaning. Codes often represent ways for the researcher to keep track of key points discovered in the data. Over 40 codes have been developed, as seen in Table 3-1. After the codes are developed, they are culled through a selective coding process. This process revealed several themes: obstacles, things necessary for success, physical considerations, psychological considerations, interpersonal relations, policy-related, and resources for help. The obstacles are those codes that deal with things that prevent or

stand in the way of community gardens. The things necessary for success are potential barriers, if not present in community gardens. Physical considerations are those physical things that should be part of the community garden process. Its counterpart is the psychological considerations. The interpersonal relations code addresses the interaction of people in the gardens themselves and in garden politics. Those codes that are policy-related are consideration that developed through policy or that should be in future work, as well as those that involve policy makers. Finally, help includes resources to be consulted during community gardening process. Figure 3-1 shows the next phase of coding.

The codes show the development of theory as the data is collected and analyzed into concepts, categories, and finally the codes themselves. The process of coding and selective coding provides a way to analyze the data, allowing for relationships to be noted and explored. Through the process of grounded theory, which allows for data collection and analysis to be conducted throughout the process, the data can be analyzed on many levels.

Criticisms

Grounded theory is not widely used in food planning research. As Jourdan (2008) states, “one of the primary criticisms of this methodology relates to the issue of social construction… a grounded theory researcher collects a number of sources of data, ranging from empirical to experiential. The researcher assumes that all data are a reproduction of reality. The data are not treated as true or false. Instead, they are evaluated with respect to their level of sophistication” (Page Unknown). However, as Jourdan suggests, the issue of social construction is addressed through the researcher

assessing his or her own biases and how these might affect the work. This adds transparency to the work, indicating the researcher's own awareness of the grounded theory process (Jourdan, 2008).

Summary

This work analyzed policies, regulations, and interviews through a grounded theory process. Grounded theory is a qualitative theory building methodology that allows for the data to be collected and analyzed simultaneously. Grounded theory analysis involves noticing and exploring themes and categories within the data to build and develop theory. Here, policies, regulations, and interviews regarding community gardens, particularly those relating to Gainesville, Florida, have been studied and analyzed in order to better understand barriers to community gardens.

Table 3-1. Codes

Code number	Code Title
1	Interagency coordination
2	Things in community gardens that can be “fancy extras” (i.e. benches)
3	Land choosing and restrictions
4	Water Limitations and restrictions
5	Zoning
6	Time frame
7	Interaction with neighborhood
8	What to do with excess food
9	Roll of grassroots organizations
10	Community desire and outreach
11	Physical accessibility
12	Role of and need for marketing and advertising
13	Garden rules and regulations
14	Funding
15	Maintaining versus starting
16	Insurance and liability
17	Available resources
18	Urban agriculture versus community gardens
19	Politics
20	Membership requirements
21	Member attributes
22	Education
23	Need more gardens
24	Finances
25	Physical separations
26	Psychological obstructions
27	First impressions of Gainesville program
28	Rethinking Gainesville program after learning more
29	Gainesville Community Garden website impressions
30	Perceptions on Gainesville’s community gardens
31	Initial understanding of what a community garden is
32	Why have community gardens
33	What happens when community gardens are not mentioned?
34	How is a community garden started?
35	Community gardens and current keywords
36	The relationship between community gardens and arts & culture
37	The relationship between community gardens and recreation
38	The relationship between community gardens and parks
39	Community gardens and energy savings
40	Community gardens and conservation
41	What requirements do community gardens have?
42	Obesity, health and community gardens

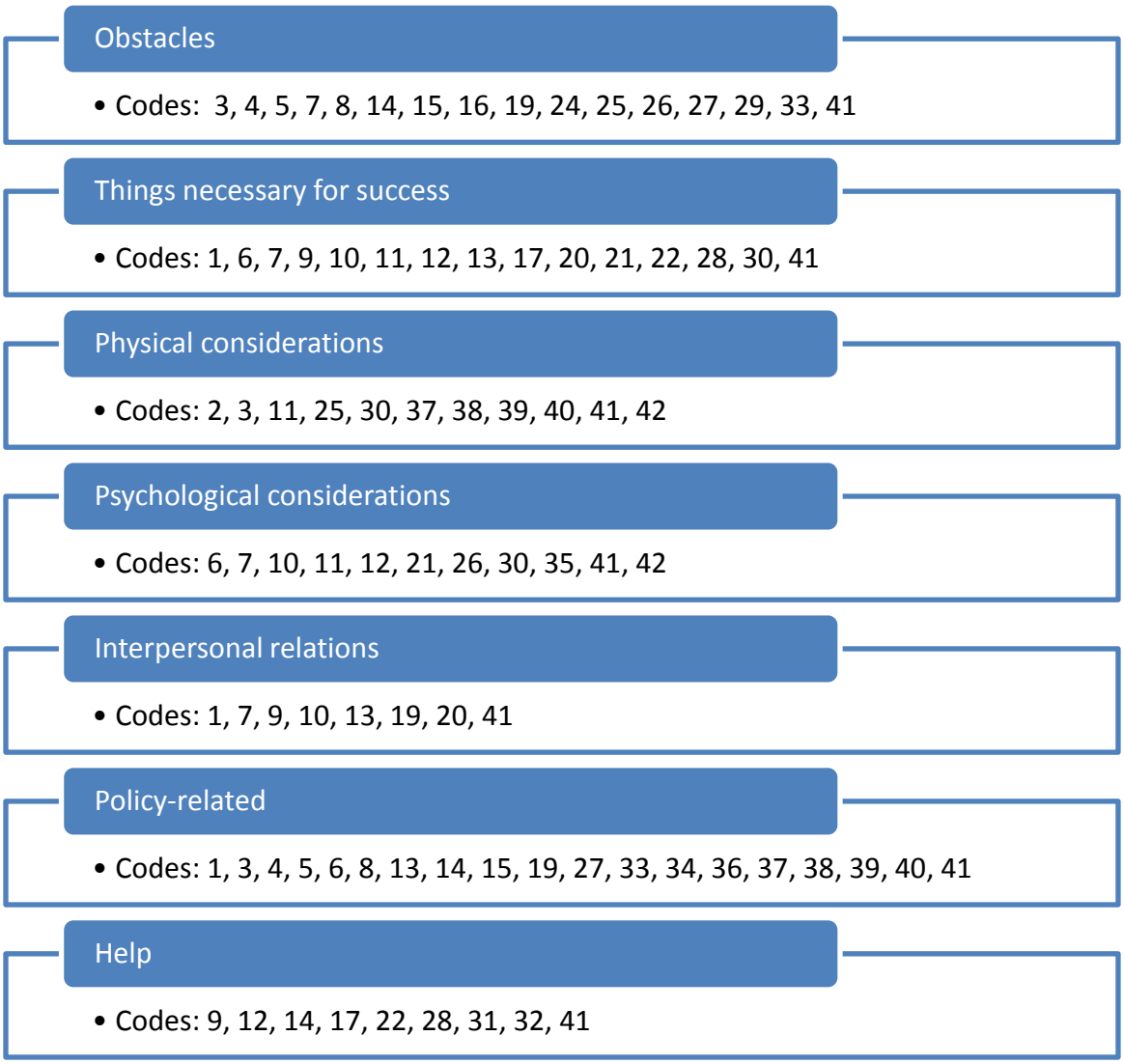


Figure 3-1. Selective codes

CHAPTER 4
RESULTS

Gainesville, Florida is located in north central Florida. It is the county seat of Alachua County. The city itself is approximately 62 square miles in area, and has an estimated population of 116,616, as of 2009 (US Census Bureau, 2009). Gainesville is home to the University of Florida, which is, with Shands Hospital, the leading employer in the City (City of Gainesville, n.d.). According to the American Community Survey, the 2009 median income for Gainesville residents is $27,420, with 35.3 % of people living below the poverty line (U.S. Census Bureau, 2009). Gainesville is ideally situated for growing food. With mild winters, warm summers, and extremely long growing seasons, it is a local place for agricultural activity. Alachua County and the surrounding region are host to a number of agricultural activities. As of 2007, there were 1,535 farms in Alachua County, and 27% of the County is farmland (USDA, 2007). The City of Gainesville supports and sponsors a number of agricultural projects, including at least five Community Supported Agriculture (CSA) farms, at least four successful farmers markets, and restaurants that support locally grown products. Gainesville also has a community gardening program, implemented by the City, which tries to take advantage of the many resources available through the strong education base, including the agricultural extension, community activists, and knowledge of growing in the community. This is part of the greater policy documents that affect community gardening.

Policy

City of Gainesville

Community garden program

The City of Gainesville's community garden program is a growing operation, implemented by the Parks, Recreation and Cultural Affairs Department, as part of the Nature Operations Division. According to its website, the program is staff managed but the gardens are run by volunteers (City of Gainesville, n.d.). As of January 2011, city staff confirmed that seven gardens had completed all the necessary processes to be a community garden in the City program. Of the seven, one is not being maintained as a garden. In addition to the seven established gardens, six in operation, another is scheduled to open in the spring of 2011, and one more is in the application process. In total, there will be nine gardens, active and inactive, in the program. This is almost double the number of gardens in January 2010, when there were only five gardens in the program. The program itself is designed to support community gardens, or "neighborhood green spaces set aside for local residents to grow vegetables for their own consumption, who otherwise might not be able to" (City of Gainesville, n.d.). The community garden program, though run by the Parks, Recreation and Cultural Affairs Department, works closely with the Neighborhood Planning Division, which supplements garden efforts through things like providing sheds or fences.

The Gainesville community garden program is only for gardens on City property. While there is the possibility that other community gardens may exist in Gainesville, they are not eligible for this program if not coordinated through the City and follow the rules prescribed by the City. According to program regulations, each garden must have a Site Coordinator and assistant, who are responsible for running the garden, including

plotting the gardens, acting as a liaison to the City, and addressing concerns and issues that occur in the garden, which then may be taken to the City, if they cannot be resolved internally. The Site Coordinator and Assistant are responsible for signing a License Agreement with the City of Gainesville that details the gardening program requirements and procedures. According to the agreement, the City provides certain key things, such as the property, which must be owned by the city, a limited amount of water, and periodic site checks. The Site Coordinator is in charge of maintaining the garden records, keeping order, and other daily maintenance concerns, including allowing no permanent fixtures in the garden. Individual gardeners must apply for a plot, start work soon after the garden has been tilled, keep the garden clean, and follow a number of guidelines, which can be found in the License Agreement. The License Agreement, with complete details of what is or is not permitted, can be found in Appendix A. The community garden program is a tangible endorsement of community gardens by the City of Gainesville. Other potential areas gardens can be addressed is in policy and regulation documents, such as comprehensive plans.

Comprehensive plan

After studying the City of Gainesville's website and other information about the community garden program, the next step was to examine Gainesville's Comprehensive Plan. The Gainesville Comprehensive Plan is divided into elements, displayed in Table 4-1. Each element was carefully reviewed, looking for mention or indication of community gardens, or anything similar that could be used as a point of reference for community gardens. After a careful study of the elements, the word "community gardens" is missing from the document. While they were not mentioned negatively, are also not mentioned positively. Instead, the reader had many questions about how to

classify or categorize a community garden. For example, is a community garden considered a nature park? Part of the “Green Network”? A cultural amenity? Figure 4-1 shows are more detailed list of points of confusion regarding selected elements from the comprehensive plan that are most relevant to community gardens.

The Gainesville Comprehensive Plan does not discuss community gardens. By doing so, it is unclear what goals, if any, there are for community gardens in Gainesville. The Evaluation and Appraisal Report (EAR) for the City of Gainesville, which analyzes the current Comprehensive Plan before the Plan is updated, mentioned that the future Land Use Element should include at least one policy that supports community gardens, along with local food production and food co-ops. This is a good start to thinking about community gardens, but the EAR is only a recommendation for what could be included in future policies. However, this is not the only policy document that can address community gardens and their potential. Often, codes of ordinances can address community gardens.

Code of Ordinances

The next policy and regulation document studied was the Gainesville Code of Ordinances, which, like the Comprehensive Plan, does not mention community gardens. The Gainesville Code of Ordinance includes the Land Development Code, which is the implementation of the Comprehensive Plan. The most apparent barrier to community gardens again is the ambiguity as to what a community garden is, and what type of use or activity it falls under. Specific instances in the Code address recreational facilities and open space as permitted uses in conservation districts; the use of lawns and green space in flood control districts; landscaping and gardens as untraditional art forms; and the use of gardens in Traditional Neighborhood Development (TND) districts.

While some of the ordinance features could include community gardens in their uses, they never specifically are stated in a particular use category. Therefore, while they are not prohibited or outright restricted, community gardens are also not encouraged. This is not necessary for community gardens to develop, but encouraging community gardens through policy helps community gardeners clearly understand the City's perspective on community gardens.

Gainesville policy conclusions

This study includes the City of Gainesville's community garden program, Comprehensive Plan, and Code of Ordinances. This study finds very little discussion of community gardens, outside of the community garden program itself. The lack of mention of and details about community gardens leaves many questions as to their function, use, and potential unanswered.

Alachua County

Comprehensive Plan

Alachua County does not have a specific community garden program. Nor are community gardens listed on their website. However, the Alachua County Comprehensive Plan amendments, scheduled for adaptation in spring 2011, address community gardens for what appears to be the first time in Alachua County policy documents. The Alachua County amended comprehensive plan elements are detailed in Figure 4-2. Of these elements, four specifically address community gardens: Future Land Use, Conservation and Open Space, Energy, and Community Health. In these, community gardens are established as allowed in urban areas. They are deemed an allowable use in the open space areas required in new developments. Community gardens are encouraged throughout the County, particularly on public land, such as

libraries. A policy under the Energy Element specifically states that the County should work with the Alachua County Library District to look into establishing gardens on library property. The Energy Element also mentions ensuring that the land development regulations address community gardens and encourage the use of edible plants on landscaped areas. Finally, community gardens are mentioned as a means to prevent obesity and should therefore be encouraged.

There is no mention of community gardens in previous Alachua County policy documents. However, amendments to the Alachua County Comprehensive Plan both mention and encourage community gardens. They serve as a way not only to prevent obstacles but to firmly establish the encouragement of community gardens in unincorporated Alachua County.

Code of Ordinances

Unlike the Comprehensive Plan, the Alachua County Code of Ordinances does not address community gardens. While the Comprehensive Plan clearly indicates where and how community garden development is encouraged to occur, there is no matching guidance from the code. This could be problematic, because the code does discuss agricultural uses and zoning designations, and there could be confusion as to how community gardens are designated. The Comprehensive Plan is a start to encouraging and alleviating barriers to community gardens, but it is not matched by the Code of Ordinances.

Policy in Other Communities

Other communities throughout the United States can provide models for Gainesville to overcome the obstacles currently in its policy documents. These models can be thoroughly developed websites, inclusive plans, and both mock and real

ordinances. Selected cities, with information on where community gardens can be found in their respective policies are shown in Table 4-2. The Table provides basic information on the selected cities, notes if they have a community garden program, and if the community gardens are discussed on the official city website, in their plans, and/or ordinances. Urban areas of all sizes throughout the United States are creating and updating documents that very much promote community gardening, taking advantage of current interest and resources available for community gardening.

Comprehensive plans differ widely by state. Florida, for example, requires comprehensive planning documents, which are legally binding. This is not true of many other states. However, often communities still have some kind of comprehensive, general, or master plan. These plans may recognize and support community gardens, something that the Gainesville Comprehensive Plan does not do, but the Alachua County one does. The City of Berkeley, for example, includes community gardens in the Open Space and Recreation Element of their General Plan. Here, community gardens are established as a “public asset” that are part of the Parks and Waterfront Department (City of Berkeley, n.d.). Not all community gardens fall under this categories, as the plan describes the 17 current gardens, owned by many entities, including the City of Berkeley, the Berkeley Unified Schools District, the University of California, and various non-profits and private organizations. The Element includes a policy solely aimed at community gardens, including future plantings. In the discussion of future planting, there is specific mention of allowing planting in right of ways. Additionally, the policy encourages the development of gardens, particularly in neighborhoods currently without them. The policy also supports school gardens.

By including community gardens in their general plan, Berkeley addresses the concern that, without proper documentation, community gardens fall in a murky area. They could be civic, recreation, park, or various other types of facilities. Specifically, the General Plan includes future park sites, such as the right of way garden, which provides an interesting use for an otherwise underused space. In addition, Berkeley clears possible land use confusion by declaring gardens part of the greater park system.

Orlando, Florida discusses community gardens in both the Recreation and Open Space Element and the Conservation Element. In the Recreation and Open Space Element, community gardens are established as a recreation and open space need for the present and future. Community gardens are encouraged as innovative uses for vacant property. There is a note of caution as a specific site is mentioned as a good community garden space, providing there is an environmental assessment first (City of Orlando, n.d.). Later, in the Conservation Element, community gardens are considered as a positive green space that could help to “make Orlando one of the most environmentally-conscious cities” in the United States (City of Orlando, n.d.). Orlando sets the stage for Gainesville and other communities in Florida because it demonstrates that community gardens, as part of a larger discussion on recreation, open space, and energy, can be included in comprehensive planning.

Alachua County echoes the sentiment addressed in Orlando’s Comprehensive Plan. Though the Alachua County amendments will not be effective until the spring of 2011, they, along with Orlando, show that community gardens may be addressed in comprehensive plans throughout Florida in many different elements. These include Recreation and Open Space, Conservation, Future Land Use, Energy, and Community

Health Elements. There are many ways in which community gardens may be discussed, as they can be a recreational use, an oasis of green in the city, help to conserve energy, and work towards fighting obesity and establish good health habits. This means that there are many opportunities in which community gardens can be incorporated into comprehensive plans.

Perhaps the most popular means by which community policy discusses gardens is in Codes of Ordinances. Codes, such as the City of Albany, New York, specifically define community gardens. Albany does this in the zoning section of its ordinance. Here, the City also describes the purpose of including community gardens and their role as a public interest; preparation for about “500 gardens, seed purchases, gardening classes, food preparation and other such related services as may be required” (City of Albany, n.d., §345-23-- §345-25). This sets a standard for community gardens and the extent to which the City foresees their development. By clearly defining this information, users are able to understand the reason why community gardens are allowed in Albany, how they may be used, and other pertinent information about City rules and regulations.

Mention of community gardens in Codes of Ordinances can vary from specific detail to just a brief introduction. In Orlando, for example, community gardens are mentioned in the Open Space Guidelines and Standards for a development sector. Here, the need for parks is outlined, including the number of parks needed per area and the different types of parks, depending on the size and demands of the area it is in. Under the category of neighborhood parks, which “should provide modest and flexible recreation opportunities that meet basic neighborhood needs and accommodate multiple purposes…,” community gardens are specifically mentioned as an example

(City of Orlando, 2011, §68.500). Though this is a brief mention of community gardens, it establishes them as a type of park, one that is permitted, serves a neighborhood community, and has multiple purposes. This is a start for people interested in community gardens to understand that they are indeed permitted and that the City has already explored their development in certain areas.

Codes of Ordinances may include detailed information on gardens, gardening programs, and other related activities. There is a whole chapter of the City of Cleveland Codified Ordinances devoted to an Urban Garden District Zoning Code. Here, the district is established, specifically mentioning community gardens, which are also defined. Community gardens are defined and permitted uses and permitted accessory uses are established. The ordinance states that " '*Community garden'* means an area of land managed and maintained by a group of individuals to grow and harvest food crops and/or non-food, ornamental crops, such as flowers, for personal or group use, consumption or donation. Community gardens may be divided into separate plots… or farmed collectively by members of the group and may include common areas maintained and used by group members" (City of Cleveland, n.d., §336.02). The Ordinance continues by establishing that gardens may occasionally sell grown items, can use certain structures; have certain signage; recreational areas, such as benches, compost bins, and play areas; and discusses parking, walkways, fences, and more. Cleveland clearly has an extensive ordinance that addresses the development of community gardens as a formal zoning specification that describes appropriate land uses for a community garden. Though Cleveland is a larger city than Gainesville, it is one to consider, as its ordinance describing community gardens is very thorough.

Ordinances and zoning are intrinsically part of what restricts and enables community gardens. Several groups interested in community gardens have developed their own recommendations for ordinance and zoning policies that enable community gardens. Schukoske (2000) has developed the following measures to be included in ordinances as part of a greater piece developed for the American Community Gardening Association:

- Assign the duty of inventorying vacant public lots and private lots in low-income neighborhoods and the duty to make that information readily accessible to the public…
- Authorize contracting with private landowners for lease of vacant lots…
- Authorize use of municipal land for minimum terms long enough to elicit commitment to gardeners, such as five years, and provide for permanent dedication to the parks department after five years of continuous use as a community garden….
- Provide for clearing of rubble and contamination where needed, and for regular trash collection…
- Provide for access to water without charge to gardeners…
- Provide for liability insurance against personal injury…
- Provide a funding mechanism to cover the locality's cost in establishing a computer database and mapping program, property acquisition and maintenance, and technical assistance (Schukoske, 2000).

These elements would aid in defining what a community garden can do, the role of the City in the community garden process, and encourage community gardening through programming help. However, before this can happen, community gardens must be defined and given some structure. The Public Health and Law Policy (2009) has developed a model ordinance that includes:

- [Adopting] zoning regulations that establish community gardens as a permitted use in appropriate locations
- [Increasing] support for community gardens through partnerships with other governmental agencies and private institutions including school district(s), neighborhood groups, senior centers, businesses, and civic and gardening organizations
- [Securing] additional community garden sites through long-term leases or through ownership as permanent public assets by the City, nonprofit

> organizations, and public or private institutions like universities, colleges, school districts, hospitals, and faith communities (Public Health and Law Policy, 2009).

In addition, community gardens are supported in ordinances by addressing the permitted uses of community gardens, establishing garden structures and responsibilities, designing sites not to drain on adjacent property, and by setting rules for buildings on the property (Public Health Law and Policy, 2009).

The model ordinances set very clear rules and regulations for community gardens. Land use and regulations are a focus in the model ordinances because "supportive land use policies, like zoning ordinances, can help to create community gardens and ensure their long-term ability to operate on a site" (Public Health Law and Policy, 2009). Ordinances provide potential users with clear guidelines as to what the garden can be or do, eliminating the possible barrier of confusion in areas where community gardens are not addressed.

Interviews

In addition to policy analysis, this research involved conducting expert interviews. Planners, policy experts, and community garden experts were consulted. University officials, the Institute of Food and Agricultural Sciences extension agents, nonprofit employees, City and County employees, and others were asked to help with this project.

Interviews were conducted as another way to gather information on barriers to community gardens. The interviewees were asked for their thoughts on potential barriers to community gardens, including policy and non-policy obstacles; policies that encourage gardening; recommendations of other places to study or people to speak

with; and for their general comments on the topic. Interviews were conducted via email, on the phone, and in person, depending on scheduling and availability. The interviews were conducted with people involved with community gardening in Gainesville, Alachua County, the State of Florida, and throughout the United States. Interviewees were categorized into the following groups: those involved directly with community garden operations, agricultural extension agents, city or county staff, nonprofit personnel, university-affiliated personnel, and community activists. Six of the respondents were directly involved with community gardening, three were agriculture extension agents, five were staff, three were involved with nonprofits, two were university affiliated, and one was a community activist. The overall rate of people contact willing to participate in this study was 42%.

One of the most challenging aspects of the interviews was finding information on existing community gardens. Community gardens, generally, can be found in several ways. One may drive by a garden and notice a sign, read about garden activities in a local newspaper, look at listings of gardens, such as those on a nonprofit website or through cities. However, information about gardens can be sparse. Even if a garden is recognized as such, there might not be current contact information. If someone can be contacted, they might not be willing to discuss the detail of the garden itself. This is particularly true about unofficial gardens, where gardeners might be afraid of divulging details that may threaten the garden.

The interviews discussed a number of topics related to community gardens. These topics generally fall under two major categories: obstacles to community gardens and things that need to be addressed for successful community gardens development.

Obstacles

The interviewees identified many potential barriers to community gardens, which can be further separated into matters that are generally social, legal, physical, and economic. Often, the obstacles fall into several of these categories.

Social concerns have been categorized as such based on their involvement or interactions with gardeners and the greater community. Social concerns include Not in My Back Yard (NIMBY), lack of community interest, community resistance, lack of able-bodied willing gardeners, security and garden access, perceived tensions, politics, interpersonal interactions, and difficulty accessing interested people. Interviewees explained that many people associate community gardens with people they would not like in their particular neighborhood. They believe that gardens attract negative attention, are exclusive, and that garden security can be a problem. Sometimes, people not in the neighborhood think that a community garden would do well in a certain are; however, if the people around that garden are not willing and able to take care of the garden, interviewees said the garden would not succeed. In Gainesville, a community activist indicated that there was interest in starting a garden, but that neighborhood residents thought it over and decided they would not be able to properly care for it. Once a community garden is established, there are several social hurdles, including the relationships between gardeners. If someone is not able to mediate garden discussions, interpersonal interactions threaten the garden's peacefulness and longevity.

Legal barriers are those that involve interactions between real or potential legal concerns and community gardens, as well as regulations that influence community gardens. The interviewees identified the following as legal barriers: zoning, legal agreements, confusing regulations, ambiguity, access to water, composting limits,

selling or distributing food, security, and liability. One extension agent declared that "many who wish to sell start a community garden wish to sell their excess produce. However; they are not allowed to sell the produce at their garden site." The same agent, and others, mentioned that community may restrict garden activities, like composting, which limits the abilities of gardens. Many community gardens also face the problem of how to get, and then fund, insurance. In addition, potential community gardeners can be unsure if a garden is permitted in an area, as zoning regulations may not mention community gardens. If it is allowed, the gardeners then have to address whoever owns the land and come up with some kind of agreement. If not, the garden may become a type of "guerrilla garden" that could be demolished by those who have greater control of the land itself.

Physical barriers are those that involve the land itself. Finding land, water supply, garden location, water runoff, and soil toxins are all examples of physical barriers. Water, one interviewee with experience working with community gardens, is one of the most important considerations when establishing a community garden. Without affordable access to water, community gardens are not able to flourish. In addition, finding land that is suitable for gardening is crucial. The garden must be located near potential gardeners, who have easy access to the land. The soil must be suitable for gardening, and there should be appropriate sunlight. Without selecting a garden in a physically well suited plot, the community garden faces a natural barrier.

Economic barriers are those involving dealings with money or financial interactions. Though there are a limited number of economic barriers, payments and funding, they are important considerations. Interviewees identified payments and funding as major

economic barriers. Payments, such as collecting or paying rent and utility bills, require some kind of organizational structure, such as setting up the garden as a nonprofit, or other type of banking system and person in charge of handling business affairs. Funding, which includes fundraising and receiving donations, among other activities, must also be carefully handled.

Of the barriers discussed above, the following were ones specifically mentioned by those involved in Gainesville's community gardens:

- Garden location
- Finding and obtaining land
- Community interest
- Able-bodied and willing gardeners
- Interpersonal interactions
- Garden access & security.

Garden location, a potential barrier for both the City and unaffiliated gardens, was frequently discussed in interviews. An interview with nonprofit agency staff, confirmed City staff, indicated that garden location is very much tied to the other obstacles, such as community interest, finding land, and able-bodied gardeners. Interviewees involved with Gainesville community gardens tended to disagree themselves over how garden access and security should be handed, depending on the affiliation of the interviewee. Overall, interviews with people involved in Gainesville introduced and confirmed many barriers found elsewhere. Often, they agreed on the nature of the barrier, but there was also some dissent over what is the actual problem.

Elements of Successful Gardens

As community garden establish and develop, there are several elements of successful community gardens that the interviewees identified as important characteristics. These are twofold. First, there are practices that are identified with successful gardens. Second, there are important elements for community garden development.

Successful community gardens, according to the interviewees, have several key features. First, they must involve the community. This includes marketing and advertising the garden and its events, keeping in contact with members, and outreaching to the greater community. Neighbors must be willing to have the garden nearby, and people have to be aware of the garden, its purpose, and how it is run. Successful gardens must address the question of access. Garden hours should be posted somewhere convenient to all users. Gardeners, or the garden organization, must agree upon if the will have a fence or gate, how that will be used, and who is permitted inside the garden itself. This, and other details, can only happen if the garden is well organized. Workers should be willing to help out, the garden should be not be allowed to fall into a state of disrepair, and there should be events to keep the community involved. Without these measures, interviewees felt the garden would not be able to flourish or develop.

Along with successful implementation and development procedures, interviewees identified several elements important to garden development. Several individuals thought that gardens should be grassroots efforts. There must be interest and excitement about the garden, but that is something that cannot be forced. Hands-on education should be part of the community gardening process. To help with this, and

other garden matters, community gardens should take advantage of available resources, such as Master Gardeners and Extension agents. Community gardens should be aware of what they are or are not permitted to do, should use interested groups to help work for their goals, including establishing permissions and land uses to protect gardening. While these elements were not established as crucial measures for community gardens, these were seen as secondary measures that set the tone for successful community gardening.

Conclusion

Gainesville is ideally situated for gardening and agricultural production. Currently, its policies towards community gardening are somewhat ambiguous. Community garden program are established for use on public land, but it is little mentioned, and gardens not on public land are not addressed in City policies or regulations, such as the Comprehensive Plan and Code of Ordinances. Alachua County is beginning to address community gardens, but only on unincorporated parts of the County. Interviews with community gardening experts indicate that that are many barriers to community gardens, and only some of them are policy-related.

Table 4-1. Gainesville Comprehensive Plan elements

Elements	
Capital Improvements	Potable Water/Wastewater Management
Concurrency Management	Public School Facilities
Conservation	Recreation
Cultural Affairs	Solid Waste
Future Land Use	Stormwater Management
Historic Preservation	Transportation Mobility
Housing	Urban Design
Intergovernmental Coordination	

Table 4-2. Alachua County adopted comprehensive plan elements

Elements	
Future Land Use	Intergovernmental Coordination
Transportation Mobility	Capital Improvements
Housing	Economic
Potable Water and Sanitary Sewer	Historic
Solid Waste	Public School Facilities
Stormwater Management	Energy
Conservation and Open Space	Community Health
Recreation	

Table 4-3. Community garden comparison chart

City, State	Population (2009 American Community Survey)	Community garden program?	Community gardens in comprehensive plan?	Community gardens in code of ordinances?	Notes
Gainesville, Florida	116,616	Yes, through the Parks Department, supported by Neighborhood Planning	No	No	City has a community garden program, with clear guidelines, must contact Parks for information.
Albany, New York	115,638	Yes, Capital District Community Gardens	No	Yes	Albany's program dates to the 1970s. The Capital District Community Gardens (nonprofit) includes 3 counties.
Berkeley, California	102,804	Yes, Berkeley Community Gardening Collaborative	Yes	Pending	According to the General Plan, there are 17 community gardens in Berkeley. The Berkeley Community Garden Collaborate coordinates activities.
Cleveland, Ohio	431,369	Yes, through Parks, Recreation and Properties and grant programs	Yes	Yes	Cleveland has a few community garden opportunities, but one must search for them to find them on their website
Orlando, Florida	235,860	City community gardens, but no official program found	Yes	Yes	Orlando has an extensive community garden network. The Orange County Extension is very active with community gardens, as are many others in garden-related activities in the community.

Figure 4-1. Gainesville Comprehensive Plan questions

CHAPTER 5
DISCUSSION

Originally, this work was intended to be a study of policy barriers to community gardens in Gainesville, Florida. As the study developed, this evolved to include both the original policy analysis and information from interviews that extended beyond policy barriers. The study intended to focus on local, state, and federal policy barriers. After conducting interviews with experts involved on many levels of community gardening, it developed that, while there are some barriers on the state and federal levels, the majority of community gardening is a local affair. As such, state and federal documents are discussed, but the focus is on local policies and barriers.

Policy

Existing Condition

Gainesville has a community garden program with clearly defines rules and regulations regarding community gardens in Gainesville. However, access to the details of the program is limited and not much information is presented on existing gardens and contact information. After contacting the program officials, extensive information on the program is revealed, presenting a program with strong attention to detail that very much encourages community gardening. This includes a strong support network and access to water, something often discussed as a general community gardening barrier in interviews. However, this program, while strong, is only for neighborhood gardens on public property. It does not address, keep track of, or help gardens not in neighborhoods or on private or institutional property. This is a major limitation to understanding what community gardens exist in Gainesville, such as those on school property, which are perhaps mentioned in school newsletters but not on the Board of

Education's website, or those associated with religious institutions, and what regulations these gardens are (or would be) subjected to.

The Gainesville Comprehensive Plan and Code of Ordinances create many more questions than they answered regarding community gardening. Community gardens that fall under the City program need not worry about these policy documents, but other gardens might need to. The Comprehensive Plan, a required, legal document in the State of Florida, discusses many regulations and rules that could affect community gardens. However, since community gardens are never defined, it is unclear where they fall in the greater scheme of things. The Code of Ordinances, which discusses other types of gardens and green spaces, does not include community gardens as a specifically defined feature. This causes community gardens to be a confused use in the greater scheme of Gainesville policy.

Policy Best Practices

Community garden policy can include two basic components: mention in a comprehensive plan, or mention in an ordinance. In addition, community gardens might be encouraged through some kind of program. By having policies that address community gardens, confusion regarding their status may be cleared, and the gardens and their permissions clearly defined.

Throughout the United States, there are examples of best practices of community garden policy. These have been introduced in the previous chapter and include the models of Alachua County, Florida; Berkeley, California; Orlando, Florida; Albany, New York; Cleveland, Ohio; and models developed by nonprofit groups. Ordinances and comprehensive plans address various aspects of community gardening, and provide

examples for Gainesville policy. Though each of these communities differs from Gainesville, there are nonetheless similarities between Gainesville and the other communities, Each provides examples of how community gardens can, and are, addressed in real policy, and offers insights into the relationship between policy and practice.

Alachua County, unlike Gainesville, has no formal community garden program, but accounts for community gardening in their future Comprehensive Plan. There is no set way planned to keep track of community gardens, or a support network. Community gardening is something that will be encouraged, potential allowed uses are detailed, and work is planned to use county lands for community gardening. As these revisions are all recent and will not be implemented until spring 2011, it is unknown if a community garden program will develop, or if the amendments will successfully encourage community gardening. One potential barrier is the lack of discussion of community gardens in the Code of Ordinances, which would further encourage community gardens. However, this is a good start to address community gardening and the power it has to influence community development, healthy behaviors, and utilize underused spaces.

Gainesville's Code of Ordinance does not specifically mention community gardens. It does discuss activities in the conservation district that could include community gardens (ie: public open space, private open space). Without clearly stating what community gardens are, it is difficult to know if community gardens are truly part of other open space and garden discussions (City of Gainesville, 2010). However, Gainesville addresses many of the concerns found in the model ordinances referenced

in the previous chapter in the community garden program. Instead of this information being in an ordinance, which would be clearly posted online, this information is difficult to find. The Gainesville community garden program guidelines are quite comprehensive, but not easily found. Rather, the information is available once you find the appropriate contact person and then inquire about the program. The community garden program offers many services, such as tilling the land and water, but is only for gardens on public property that are able to fit with the other program guidelines. This indicates that Gainesville has a solid understanding of what community gardens need, particularly land and water, but is not easily accessible information and does not account for those not interested or able to work on public land.

There are several ways community gardens may be addressed in community policy. Plans, such as a comprehensive plan, set future goals, policies, and actions that establish community gardens are future uses. They also frame community gardens in the greater scheme of land use plans, recreational activities, and any other elements in which they are discussed. Ordinances contribute to this discussion by establishing community garden definitions, permissions, and the ways in which the site may be used. This firmly establishes community gardens and community garden programs as permitted use, with parameters for the garden to follow.

Policy is just one aspect of understand barriers to community gardens. Interviews with experts in community gardening provide a way to better understand the effects and influence of these policies on community gardening. This is necessary because, though policy barriers might exist, there could be other underlying barriers that are equally important concerns.

Interviews

Interviews with people involved in Gainesville's community gardening community, indicate that policy is not a major barrier to community gardening. Rather, they indicate that some of the more major concerns are not directly policy-related. The City community garden program is limited in scope, because the gardens must be on city-owned property, which is not always available. Experts indicated that gardens need to be located in a neighborhood, with easy access. In some neighborhoods, there are not enough people willing to commit to maintaining a community garden, which restricts those interested in starting one in a particular neighborhood. Access and security were also mentioned as concerns. Some gardens have fences and if the garden is public, there is a question of who may or may not access the garden, if this threatens gardeners, and how to appease people with different perspectives on how to address this issue. With the exception of community gardens located on University of Florida property, all other known community gardens in Gainesville are part of the city program. This limits potential policy barriers, as the gardens are part of the program, and therefore not concerned with other potential policy barriers. However, the feasibility of locating other community gardens, those running them, and their contact information is quite limited. Therefore, it is unknown if there are real effects of policy barriers in Gainesville.

In order to better understand potential barriers from both a state-wide and general perspective, interviews with experts from throughout Florida and others involved in community gardening provide an opportunity to see what other barriers there may be. By incorporating many individuals involved in community gardening in different stages, from different perspectives, and with experience in varying programs and community

gardens, similarities in barriers to community gardens and general garden barriers are more fully developed. This presents an opportunity to fill in potential gaps that could occur with the Gainesville data, and also to see the barriers faced by others.

While some of the barriers are policy-related, there are many types of barriers discussed by interviewees that are social, legal, physical, and economic in nature and extend beyond policy. Policy barriers focus on zoning and other permitted uses. Community gardens may be agricultural uses, they may be considered with parks, or altogether something separate, there is much confusion. Other uses are considered "lower" and therefore community gardens are often perceived as temporary uses until something better comes around. This threatens many community gardens, which cannot be assured of their permanence, legal status, and are sometimes denied leases or other land use agreements. Policies may extend to influence the composting abilities of the garden, if food distribution is allowed, and several other garden features or attributes, depending on who implemented the policy and how regimented it is.

Though there are several policy barriers, there are many other barriers that extend beyond mere policy. Often, these barriers depend on the community garden program, if any, that is in place. In many instances, it is the people involved, or potentially involved, in the gardens that present barriers. There are two different types of community garden barriers: those that occur in the starting and implementation phases, and those regarding maintenance. First, there is the question of starting a community garden. Of particular concern is garden location. People do not necessarily want gardens in their neighborhood, because of the people or uses they associate with community gardens. The garden must have proper sun, soil, and water access. Water is

a very big concern, as it can be expensive and time consuming to deal with. Gardens require funding and often someone must consider details like rent payments, if there are any, insurance and liability concerns, garden structure and layout, and whatever rules the garden might need. Depending on if there is or is not a community garden program or policy in place, the processes involved in starting a community garden can be quite difficult to overcome.

Once started, community gardens require dedication and commitment, so the garden does not fall in disrepair. Rules and regulations must be set. If they are not set, or if they are not followed, there may be confusion and chaos. Garden access becomes a concern, as some community gardens have fences, others do not. Some gardeners believe that the community gardens should be fenced in, others do not agree. Most gardening experts mentioned that for the sake of the garden neighbors, there should be set gardening hours, such as between dawn and dusk. Many gardens face funding cuts after the garden is started, and must find a way to maintain the garden. Gardens must be able to maintain member interest. There are many potential pitfalls, including uncertainty as to how long the garden will be permitted, that community gardens face once they have been established.

People and Policy

There are many potential barriers to community gardens. From being allowed to garden at all to minute scheduling details, the path to community garden is littered with details. And, while there are several barriers that are shared by many community gardens, there are also many site- or community- specific barriers.

In order for gardens to develop and successfully operate, there are several important components. First, there must be available land. This may or may not be

supported by policies that encourage community gardening on certain properties, or areas, and assist in locating available land. The land itself must be suitable for gardening, without environmental questions on the safety of eating food from the garden. It should be located near the people who want to use it, as people are most willing to garden if they can easily access the garden. Sidewalks, bike paths, bus routes, and parking must all be considered when selecting where the garden should be located. Next, there must be affordable access to water. Without this, gardens have little hope of survival. Water can be expensive; however it is necessary for gardens to survive. Then, insurance and liability concerns must be addressed. This may stand in the way of finding and developing suitable land. Many community garden policies address this concern in their program documents. The community must also want the community garden and commit to its growth and development. Rules should be set and agreements made on garden structure and other details. Throughout the process of developing and maintaining community gardens, policy provides a way to structure and encourage community gardening practices.

Policy is a way to address where and how community gardens may develop. Policy can provide structure to community gardens by indicating if they are allowed, if they are encouraged, and how they may or may not be implemented. As one Alachua County staff member said, “we at the County wanted to make sure that there were not policy obstacles to providing community gardens.” Policy provides a way to address, depending on the policy itself, funding sources, rules and regulations. Policy can dictate what land may be used for community gardens, and for how long. This depends greatly

on the policy itself, if community gardens are or are not mentioned, and to what extent, as seen from the examples across the United States.

Though policy can be a strong influence, it is only one element of the potential barriers to community gardens. The community itself plays a large role in the development of community gardens. Therefore, while several of the barriers may be addressed in policy, it is not an end all for solving community garden concerns. There is a strong element of human interactions and willingness to dedicate time and effort to community gardening. Community gardens cannot exist without people dedicated to creating and maintaining them, as well as willing neighbors.

Grounded theory takes a phenomenon and studies what is happening, with the goal of understanding it as either a new theory, or as something already discussed in previous theories. Through this study of barriers to community gardens, barriers in policy and practice can be better understood in the context of Gainesville, Florida. Here, the interviews indicate that while there are policy barriers, there are also many social ones. These social concerns, in fact, are very important to the vitality of community gardens. Therefore, this grounded theory study finds that the phenomenon of barriers is not new, but rather can be understood in the context of existing social theories that discuss the role communities have in influencing their surroundings.

CHAPTER 6
CONCLUSIONS AND RECOMMENDATIONS

Community gardens face many potential barriers, both real and perceived. These may be policy-related, or they could extend to implementation concerns. As many communities have only recently developed community garden programs and policies, it is often difficult to study how effective they are, and what could be done to address potential barriers and their solutions. In addition, the atmosphere of each community varies, which presents further challenges to this process. However, there are several elements of commonality between community gardens throughout the United States that help to develop and implement programs and policies that can appeal to many communities and prevent barriers.

Conclusions

Community gardens are increasingly a topic of interest for planners, health professionals, and others involved in community development and related fields. Community gardens provide a unique way of accessing and participating in the food systems process. However, there are several barriers that could stand in their way.

Barriers in Gainesville

Gainesville, Florida has a community garden program that is well-structured, but limited in its ability to reach out to those interested in working with non-City-owned properties. The Comprehensive Plan does not mention community gardens, leaving the reader questioning where community gardens fall in the Plan, and which regulations they are subjected to. The Code of Ordinances presents more questions about the typology under which community gardens fall than potential uses or restrictions. This is a major potential policy barrier to community gardens in Gainesville and could help to

address other barriers, which primarily relate to access and those gardens that extend beyond traditional neighborhoods.

National Perspective

Models throughout the United States offer ways in which these barriers can be overcome. By developing an informative website, including community gardens in the Comprehensive Plan and adding community gardens to the Code of Ordinances, community gardens will not ambiguously fall into the restrictions they currently face. Specifically, many of these policies include information on how community garden land is to be developed, how many people may access the land, and where ideal community gardens are to be placed. By developing policy that clearly defines what community gardens are, including what is not permitted, community gardeners are able to understand and work with established policies. This is demonstrated by the diversity of responses from interviewees, which vary by their relationship with community gardens, the type of gardens they are familiar with, and the policies that influence these gardens.

Study Limitations

This work is limited by both time and access. Relying on interviews for much of this study means that the information available is reliant on the responses for requests for interviews. While those involved with community gardening are very interested in the topic and quite willing to respond, many of the author's requests for interviews went unanswered. With more time and resources, this could perhaps have been overcome. With so many community gardens developing throughout the United States, and really the world, there was a struggle to identify which resources were most available, relevant to this study (and Gainesville), and choices were made as to which information to include. With more time and information, there is the opportunity for a much more

extensive study to be implemented. The author, like many others involved with community gardens, is quite interested in subject, and has strived to overcome whatever biases might be in the research, because of the desire for many involved in community gardens to find results that favor their perspective.

Recommendations for Further Research

After conducting this study, it is clear that there is still room for many paths for future research. These include looking into how policies are implemented and what that means for community garden programs; understanding community gardens from the perspective of their users, and how that frames if a garden is or is not considered successful; a detailed study of community gardens from the local government perspective; and further research into how barriers vary. This is an exciting field in need of further study.

WELCOME TO THE CITY OF GAINESVILLE'S COMMUNITY GARDEN PROGRAM

The Gainesville Community Garden Program I administered by the Parks, Recreation and Cultural Affairs Department and is open to any resident of the City of Gainesville. The City provides basics such as the garden site, water, initial tillage, and fencing materials if needed. Each participating gardener agrees to abide by established procedures as set forth below.

To protect public health, animals, and the environment, all gardeners will adhere to basic organic gardening methods (no dangerous pesticides, herbicides, or synthetic fertilizers). More detailed information on organic gardening may be obtained from the Alachua County Cooperative Extension Service, 280 NE 39th Avenue, Gainesville, FL, and from the Florida Certified Organic Growers and Consumers, Inc., (FOG) P.O. Box 12311, Gainesville, FL 32604, 352-377-6345. Fax 352-377-8363.

If you would be interested in beginning a new Community Garden or joining an existing one, please call the City of Gainesville's Nature Operations Division at 334-2171.

BACKGROUND

A Community Garden is a neighborhood green space set aside for local residents to grow their own fresh vegetables, herbs, fruits, and flowers.

Since the beginning of agriculture thousands of years ago, families and communities all over the world have relied on

small gardens close to their homes and villages to provide fresh food. Today, although refrigeration has made it possible to store and transport large quantities of produce, in many countries small family and neighborhood gardens continue to provide a major portion of the fresh fruits and vegetables that people eat.

According to the American Community Gardens Association, community garden programs in the United States have proliferated over the past twenty-five years: from fewer than 20 such programs in the early 1970's there are now more than 550!

A number of important benefits account for this astounding increase in popularity. Among these are:

- ***fresh, wholesome and nutritious food at low cost to neighborhood residents;***
- ***neighborhood beautification and environmental enhancement;***
- ***healthful outdoor recreation;***
- ***educational opportunities relating to gardening and the environment; and***
- ***building and strengthening communities through positive social interaction and shared activities.***

Community gardening revitalizes neighborhoods, promotes social and economic self-empowerment, and can serve as the basis for new local entrepreneurship or "micro-enterprises". Community gardening is also widely recognized for its significant therapeutic value in the rehabilitation of individuals suffering from a variety of conditions including physical, mental, and psychological illnesses or disabilities as well as substance abuse problems. Perhaps most important in today's increasingly hurried and urbanized environment, community gardens are places where people can share their love of nature and help care for a small part of "mother earth".

<u>COMMUNITY GARDENS PROGRAM MISSION</u>

The mission of the Gainesville Community Gardens Program is to assist neighborhoods and community organizations in the creation, operation, and maintenance of community gardens, to:

- ***Improve public nutrition and the neighborhood environment;***
- ***Increase opportunities for healthful outdoor recreation, practical education, and positive social interaction; and***
- ***Build community self-reliance and sustainability***

CITY OF GAINESVILLE
DEPARTMENT OF PARKS, RECREATION AND
CULTURAL AFFAIRS
COMMUNITY GARDEN PLOT APPLICATION

For New Participants: Gardener cooperation is very important to the success of the City of Gainesville's Community Garden Program. As a gardener, you must be physically capable of working your plot or know someone who will work it with you. It is also important that each gardener follow all the rules and regulations regarding garden plots. Each new member will be required to attend an orientation meeting and sign a liability waiver.

This application is valid from October 1, ____ through September 30, ____. If a plot is not available, your application will be placed on a waiting list. All plots are assigned on a first come, first serve basis. Waiting list applicants will be notified in the event a plot becomes available.

PARTICIPANT INFORMATION
(Please Print)

NAME _____

ADDRESS _____ ***CITY*** _____ ***ZIP*** _____

HOME PHONE _____ ***WORK PHONE*** _____

IN THE EVENT OF AN EMERGENCY, CONTACT:

NAME _____ ***PHONE*** _____

GARDEN SITE _____ ***PLOT ALLOCATION #*** _____

SITE COORDINATOR _____

To be completed by site coordinator.

PARTICIPATION AGREEMENT

I agree to hold harmless the City of Gainesville, its agents, officers, and employees from suits, actions, damages, liability and expense in conjunction with the loss of life, bodily or personal

injury or property damage arising from or occasioned by any act of negligence or intentional wrongdoing on the part of Applicant/Participant. Nothing in this Agreement shall be interpreted as a waiver of the City's sovereign immunity as granted under Section 768.28, Florida Statues.

SIGNATURE OF PARTICIPANT_____DATE_____

FOR INFORMATION REGARDING THE LOCATION OF THE CITY'S COMMUNITY GARDENS, PLEASE CALL THE CITY'S NATURE OPERATIONS DIVISION AT 352-334-2171.

INFORMATION PROVIDED ON THIS FORM IS SUBJECT TO THE STATE OF FLORIDA PUBLIC RECORDS LAW (CH. 119.07, FLA. STAT.). UNDER THIS LAW, THE CITY IS REQUIRED TO PROVIDE ACCESS TO AND COPIES OF NON-EXEMPT PUBLIC RECORD UPON PROPER REQUEST FROM A MEMBER OF THE PUBLIC.

THIS FORM DOCUMENT NO. P98-0068 IS A LEGAL INSTRUMENT APPROVED BY THE CITY ATTORNEY. ANY DEVIATIONS FROM ITS USE SHOULD BE AUTHORIZED BY THE CITY ATTORNEY.

CITY OF GAINESVILLE'S COMMUNITY GARDEN PROGRAM

The Community Garden Program is a working partnership between neighborhood gardens and the City of Gainesville. Each Community Garden must have a site coordinator and two assistants before formal application can be made. Once that has been established then the process of signing individuals to garden plots begins. The following provides the guidelines for both the coordinators and the gardeners.

THE CITY OF GAINESVILLE WILL:

- ***Provide the available City owned property, if applicable.***
- ***Provide the appropriate review and notify all property owners within 400 feet of the proposed garden for neighborhood input and approval.***
- ***Provide initial tilling of the site.***
- ***Provide water and one spigot for every four garden plots.***
- ***Provide fencing materials if requested. Materials will consist of metal or recycled plastic posts and pressure treated pickets. Pressure treated pickets must not come in contact with the ground.***
- ***Provide five compost bins to each garden site, if requested.***
- ***Periodically evaluate each garden site to determine if it is fulfilling the criteria established and to assist in addressing any problems or needs that may have***

arisen including the construction of additional facilities.

<u>SITE COORDINATOR WILL:</u>

- ***Complete the Community Garden Lease Agreement form and coordinate the completion of each Garden Plot Application. All completed forms must be submitted to the City of Gainesville's Nature Operations Division.***

- ***Act a liaison with the City of Gainesville's Parks, Recreation and Cultural Affairs Department's Nature Operations Division.***

- ***Develop and submit the site plan and plot layouts (in conjunction with other core gardeners) for approval by the City.***

- ***Settle any disputes among gardeners when and if necessary. The Site Coordinator can consult with the Alachua County Extension Service or the Florida Certified Organic Growers and Consumers, Inc. (FOG) to resolve garden problems.***

- ***Assign all plots on a first come, first serve basis. In addition, specify how individual garden plots are separated and identified as well as determining the size of plots.***

- ***Insure that all gardeners' assigned plots fill out and sign garden rules and indemnification agreements.***

- ***Keep and maintain all records relating to the garden.***

- ***Insure general oversight, including a well kept site with proper maintenance.***
- ***Organize work parties***

- ***Insure that no fixed permanent seating or tables is installed on garden site.***

<u>GARDENERS WILL</u>:

- ***Complete the Community Garden Plot Application Form and submit to the Garden Site Coordinator.***

- ***Attend one garden orientation meeting, once assigned a plot.***

- ***Begin work on plots within 10 days after garden has been tilled, if applicable.***

- ***Not use any synthetic fertilizers, herbicides, pesticides or insecticides.***

- ***Agree to install fencing supplied by the City of Gainesville in a manner required by the City, if requested.***

- ***Work on gardens only between dawn and dusk.***

- ***Not use mechanized equipment any earlier than 9:00 AM.***

- ***Keep gardens free from weeds, rotten produce, and plant debris.***

- ***Dispose of stakes, plastics, and any garbage in a timely manner.***

- ***Maintain the shared paths adjacent to their garden plot, without digging into the main paths and keep pathways free of toxic materials and rocks.***

- ***Closely supervise children.***

- ***Use headphones when listening to radios or other portable sound equipment.***

- ***Not grow any illegal crops.***

- ***Not damage or harvest from another garden plot.***

- ***Not profit by selling produce unless proceeds are to benefit the garden as a whole. The selling of produce at the garden site is strictly prohibited.***

- ***Not bring any tires to the garden site.***

- ***Not bring any pets to the garden.***

- ***Not smoke or use tobacco products on site.***

- ***Not bring or consume any alcoholic beverages on the garden site.***

APPENDIX B
INSTITUTIONAL REVIEW BOARD INFORMED CONSENT

Informed Consent

Protocol Title: Analysis of Barriers to Community Gardens

Please read this consent document carefully before you decide to participate in this study.

Purpose of the research study:

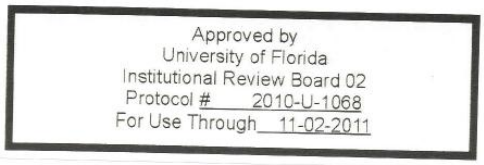
The purpose of this study is to better understand current and potential barriers to community gardens and federal, state and local planning and agricultural policies related to community gardens.

What you will be asked to do in the study:

The study will involve a series of questions and discussion on community gardens. You will be asked about current barriers to community gardens, as well as potential ones. As someone involved in community gardens, planning, and agricultural policy, the questions will be ones that ask for insight into your knowledge base on community gardens, community garden policy, and urban agriculture.

Time required:

30 minutes



Risks and Benefits:

There are no anticipated risks associated with this work. There are no direct benefits for participating in this research.

Compensation:

There is no anticipated compensation for participating in this research. An electronic version of the findings will be made available you, should you request one.

Confidentiality:

Your answers will be confidential, until you specifically otherwise mention that you are willing to be cited directly with your name in the work.

Voluntary participation:

Your participation in this study is completely voluntary. There is no penalty for not participating.

Right to withdraw from this study:

You have the right to withdraw from the study at anytime without consequence.

Whom to contact if you have questions about the study:

Sarah Perch, Graduate Student, Department of Urban and Regional Planning. University of Florida. Email: sperch@ufl.edu. Phone: (908) 884-0760

Whom to contact about your rights as a research participant in the study:

IRB02 Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; phone 392-0433.

Agreement:

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Participant: _____ Date: _____

Principal Investigator: _____ Date: _____

I would like an electronic copy of the results of this study. Yes____ No____

Approved by
University of Florida
Institutional Review Board 02
Protocol # 2010-U-1068
For Use Through 11-02-2011

LIST OF REFERENCES

Advisory Commission on Regulatory Barriers to Affordable Housing. (1991). Not in My backyard: removing barriers to affordable housing. Washington DC.

Alachua County. (2010). Alachua County Code of Ordinances. Retrieved February 18, 2011, from http://library4.municode.com/default-test/home.htm?infobase=10343&doc_action=whatsnew

Alachua County. (n.d.). Alachua County. Retrieved January 30, 2011, from http://www.alachuacounty.us

Alachua County. (n.d.). Alachua County Comprehensive Plan. Retrieved February 15, 2011, from http://growth-management.alachua.fl.us/comprehensive_planning/

American Community Gardening Association. (n.d.). What is a community garden? Retrieved December 5, 2010, from http://www.communitygarden.org

Armstrong, D. (2000). A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health and Place* 6, 319-327.

Baltimore Food Policy Task Force. (n.d.). Food Policy Task Force. Retrieved February 17, 2011, from http://www.baltimorecity.gov/government/agenciesdepartments/planning/foodpolicytaskforce.aspx

Berkeley Community Gardening Collective. (n.d.). Berkeley Community Gardening. Retrieved November 15, 2010, from http://www.bpfp.org

Bhattarya, S. (2005). Strategy for Identifying and evaluating sites for urban agriculture: A case study of Gainesville, Florida. (Doctoral Dissertation). Retrieved from the University of Florida Library.

Brown, K.H. and Jameton, A.L. (2000). Public Health implications of urban agriculture. *Journal of Public Health Policy* 21(1), 20-39.

Campbell, M. (2004). Building a common table: The role of planning in community food systems. *Journal of Planning Education and Research* 23(4):341-355.

Capital District Community Gardens. (n.d.). Capital District Community Garden. Retrieved November 15, 2010, from http://www.cdcg.org

Center for Disease Control and Prevention. (n.d.) “Community gardens.” Retrieved December 10, 2010, from www.cdc.gov/healthyplaces/healthtopics/healthyfood/communtity.htm

Center for Disease Control and Prevention. (n.d.). “Legal and policy resources on public health ‘Winnable Battles.’ Retrieved November 15, 2010, from http://www2.cdc.gov/phlp/winnable/zoning_obesity.asp

Charmez, K. (2003). Qualitative interviewing and grounded theory analysis. In. Inside interviewing: new lenses, new concerns. J. Gubium and J. Holstein. (Eds.). Thousand Oaks, CA: Sage Publications.

City of Albany, NY. (n.d.). Community gardens. Retrieved January 4, 2011, from http://www.albanyny.gov

City of Berkeley, CA. (n.d.). City of Berkeley. Retrieved January 4, 2011, from http://www.ci.berkeley.ca.us

City of Cleveland, OH. (2010). Codified Ordinances. Retrieved February 18, 2011, from http://caselaw.lp.findlaw.com/clevelandcodes/

City of Cleveland, OH (n.d.). City of Cleveland. Retrieved January 4, 2011, from http://city.cleveland.oh.us

City of Hartford Advisory Commission on Food Policy. (n.d.). Retrieved February 16, 2011, from http://www.hartford.gov/government/foodcommission/default.htm

City of Gainesville, FL. (2010). City of Gainesville Code of Ordinances. Retrieved January 5, 2011, from http://library.municode.com/index.aspx?clientId=10819&stateId=9&stateName=Florida

City of Gainesville, FL. (n.d.). City of Gainesville. Retrieved January 5, 2011, from http://www.cityofgainesville.org

City of Gainesville, FL. (n.d.). City of Gainesville Comprehensive Plan Documents. Retrieved February 16, 2011, from http://www.cityofgainesville.org/GOVERNMENT/CityDepartmentsNZ/PlanningDepartment/ComprehensivePlan/tabid/246/Default.aspx

City of Orlando, FL. (2011). City of Orlando Code of Ordinances. Retrieved February 18, 2011, from http://library.municode.com/index.aspx?clientId=13349&stateId=9&stateName=Florida

City of Orlando, FL. (n.d.). City of Orlando. Retrieved January 5, 2011, from http://www.cityoforlando.net

City of Orlando, FL. (n.d.). Growth Management Plan. Retrieved February 18, 2011, from http://www.cityoforlando.net/planning/cityplanning/GMP.htm

Crow, A. (2010). Developing community gardens: Removing barriers to improve our society. Kentucky Journal of Equine, Agriculture and Natural Resources Law 2, 219-234.

Downs, A. (1991). The Advisory Commission on regulatory barriers to affordable housing: Its behavior and accomplishments. *Housing Policy Debate* 2(4), 1095-1137.

Downs, A. (1992). Regulatory barriers to affordable housing. *Journal of the American Planning Association* 58 (4), p. 419-421.

Ecology Center. (n.d.). Berkeley Community Gardening Collaborative. Retrieved November 6, 2010, from http://www.ecologycenter.org/bcgc

Hall, D (1996). Community gardens as a planning issue (Thesis). The University of British Columbia, Vancouver.

Foster, S. (2006). The City as an ecological space: Social capital and urban land use. Notre Dame Law Review 82(2). Fordham Law Review Legal Studies Research Paper No. 899617.

Idaho Grown Food Production, HCR. 59, 16th Legislature, 2nd Sess. (2010).

Jourdan, D. (2008). Grounding theory in intergenerational citizen participation employing a grounded theory approach in the context of housing research. In P. Maginn. S. Thompson & M. Tonts (Eds.), *Qualitative methodology volume 10: Qualitative housing analysis: An International perspective* (249-270). London: Elsevier.

Jourdan, D. (2004). Planning to reduce worry: Designing an intergenerational planning process to lessen relocation-related anxieties experiences by those displaced in the pursuit of a Hope VI revitalization grant. (Doctoral Dissertation). Retrieved from ProQuest dissertation and thesis.

Larsen, K; Gilliland, J. (2009). A farmer's market in a food desert: Evaluating impacts on the price and availability of healthy food. *Health and Place* 15(4), 1158-1162.

Lawson, L. (2005). *City bountiful: A century of community gardening in America*. Berkeley: University of California Press.

Lets Move! (n.d.). About Let's Move! Retrieved February 17, 2011, from http://www.letsmove.gov/about.php

Listokin, D; Listokin, B. (2001). U.S. Department of Housing and Urban Development. *Barriers to the rehabilitation of affordable housing*. Volume 1: Findings and Analysis.

Lyson, T. (2004). *Civic agriculture: Reconnecting farm, food, and community*. Tufts University Press, Medford, MA.

Mendes, W; Balmer, K; Kaethler, T; and Rhoads, A. (2008). Using land inventories to plan for urban agriculture. *Journal of the American Planning Association* 74(4), 435-449.

Merriam-Webster. (n.d.). The Merriam-Webster Dictionary. Retrieved from www.merriam-webster.com/dictionary/barrier

Morgan, J. (1995). Zoning for all: Using inclusionary zoning techniques to promote affordable housing. 44 Emory Law Journal, 359-397.

Nardahl, D. (2009). *Public produce: The new urban agriculture*. Washington: IslandPress.

Nord, M; Coleman-Jensen, A; Andrews, M; Carlson, S. (2009). *Household Food Security in the United States, 2009*. ERR-108, U.S. Department of Agriculture, Econ. Res.Serv.

Ober Allen, J; Alaimo, K; Elam, D; Perry, E. (2008). Growing vegetables and values: Benefits of neighborhood-based community gardens for youth development and nutrition. *Journal of Hunger and Environmental Nutrition* 3(4), 418-439.

Oklahoma Food Policy Council. (n.d.). Food Policy Council. Retrieved February 17, 2011, from http://www.kerrcenter.com/ofpc/index.htm

Persons, A. (2008). Overcoming barriers to fresh produce: An analysis of three neighborhoods in southeast Gainesville (Thesis). University of Florida, Gainesville.

Pothukuchi, K. (2004). Community food assessment: A first step in planning for community food security. *Journal of Planning Education and Research* 23(4), 356-377.

Pothukuchi, K; Kaufman, J. (2000). The food system: A stranger to the planning field. *Journal of the American Planning Association* 66(2), 113-125.

Public Health Law & Policy. (2009). Establishing land use protections for community gardens. Retrieved November 15, 2010, from http://www.michigan.gov/documents/mdch/communitygardenpolicies_303374_7.pdf

Schmelzkopf, K. (1995). Urban community gardens as contested space. *Geographical Review* 85(3), 364-381.

Schukushki, J. (2009). Elements to include in a community garden ordinance. American Community Garden Association. Retrieved November 15, 2010, from communitygarden.org

Short, A; Guthman, J; Raskin, S. (2007). Food deserts, oases, or mirages?: Small markets and community food security in the San Francisco Bay area. *Journal of Planning Education and Research* 26, 352-364.

Strauss, A.; Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newberry Park, CA: Sage Publications.

U.S. Census Bureau. (2009). 2009 American Community Survey. Retrieved from http://factfinder.census.gov

U.S. Department of Agriculture. (2005). Farm Structure: Glossary. Retrieved November 8, 2010, from http://www.ers.usda.gov/briefing/farmstructure/glossary

U.S. Department of Agriculture. (2007). 2007 Census of Agriculture. National Agricultural Statistics Service. Retrieved November 6, 2010, from http://agcensus.usda.gov

U.S. Department of Agriculture. (2010). Farmers Market Growth. Retrieved February 16, 2011, from http://www.ams.usda.gov

Voicu, I; Been, V. (2006). The effect of community gardens on neighboring property values. Working Paper. New York University School of Law.

White House. (August 9, 2009). Inside the White House: The Kitchen Garden. Retrieved February 16, 2011, from www.whitehouse.gov/video/Inside-the-White-House-The-Garden

BIOGRAPHICAL SKETCH

Sarah Perch graduates from the University of Florida in May 2011, with a Master of Arts in Urban and Regional Planning. Her specialization is in Transportation and Growth Management. Before coming to the University of Florida, Sarah earned her bachelor's degree in urban studies, which she created herself as a combination of American Studies, government, and sociology, from Franklin and Marshall College in Lancaster, Pennsylvania. During her junior year, Sarah had the opportunity to participate in Columbia University's Shape of Two Cities program in New York and Paris. Sarah is originally from Westfield, New Jersey. Sarah's main planning interests are in the interactions between planning and health, including alternative solutions to heavy automobile use, food systems, and urban agriculture.