MOTIVATIONS OF COMMUNITY GARDENERS IN THURSTON AND PIERCE COUNTIES, WASHINGTON STATE

by

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ABSTRACT

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Kimberly Jones Benedict

Community gardens provide ample benefits to gardeners and communities in which they are located. Because the benefits are so great, all who want to garden should have access to garden space. As the population of the United States continues to increase, land available for conventional farming decreases due to land development and increase in the cost of land. This combined with the recent global economic recession has led to an increase in the presence and use of community gardens throughout The United States. No published study is available that examines whether there are community garden plots in Western Washington adequate to meet the demand of the community. This research creates a list of community gardens in Thurston and Pierce Counties, and surveys the gardeners using the gardens using a mixed-methods approach to see who is taking advantage of the community garden space that does exist. Similar to the motivations of historical community gardens, modern community gardens are frequently focused on environmental sustainability, saving or making money by growing food, and community building and/or cultural exchange. Although, most of the people who completed the survey had access to gardening at home, they chose to garden in a community plot which is likely much less convenient for them, because of the additional benefits provided by community gardens. This research is significant for city planners as it demonstrates the importance of and need for additional community gardens in Thurston and Pierce Counties of Washington State.

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Chapter 1: Introduction

Community gardens provide ample benefits to gardeners and communities in which they are located. Some of the benefits include increased consumption of fruits and vegetables by gardeners, increased property values near gardens, and increased tax revenue for cities with community gardens. Because the benefits are so great, all who want to garden should have access to garden space. As the population of the United States continues to increase, land available for conventional farming decreases due to land development and increase in the cost of land. This combined with the recent global economic recession has led to an increase in the presence and use of community gardens throughout The United States.

No published study is available that examines whether there are community garden plots in Western Washington adequate to meet the demand of the community. This research will fill the geographic gap currently in existence within published literature on community gardens. It will also focus on gardens not entirely located within large cities, most published literature focuses on urban community gardens. Additionally, this research will discover how many community gardens exist in Western Washington, specifically Thurston and Pierce Counties, and who is taking advantage of the community garden space that does exist. This information will be useful to city planners and government officials as they continue to grow and nourish cities and communities throughout Western Washington.

Thurston and Pierce Counties of Washington State were selected for this mixed-methods research because they are both contain a similar number of gardens and they both recently conducted a community garden assessment. King County, located just north of Pierce County, was also considered when choosing the study area but after initial research was conducted it was discovered that King County has significantly more community gardens than Pierce or Thurston Counties and its garden program is much more advanced than either Pierce or Thurston Counties. For these reasons, King County could not be compared with Pierce or Thurston Counties.

Structures of community gardens can be diverse, this paper uses the following definition for a community garden:

"A community garden is a collaborative, shared, open space that is accessible to residents of the local community who are gardeners. These gardeners agree to share in the maintenance (plant, tend, harvest, etc.) and products of the garden, which include healthful and affordable fresh fruits and vegetables."

This is also the definition used by Thurston County in their 2012 Community Garden Assessment. With all the identified benefits of community gardens, my research will create a list of community gardens in Thurston and Pierce counties and it will answer the research questions: Who are the people that choose to garden in Thurston and Pierce County community gardens? What motivations do gardeners have for gardening in the community spaces?

Research was conducted using a mixed-methods approach. An online survey created using Google Drive was used to gather information about the gardens in Pierce County, the information about Thurston County Gardens was obtained through the complete Thurston County Community Garden Assessment conducted in 2012. A separate survey, again created using Google Drive, was created to ask questions of the gardeners. A mixed-methods approach was taken when surveying the gardeners. Demographic questions were asked as well as questions about motivations for gardening in community spaces and perceived benefits of participation.

Chapter 2: Literature Review

Benefits and risks of community gardens to the greater community:

Community gardens provide many benefits for the communities in which they are located. Some of the benefits include increasing residential property values close to the garden, increased social opportunities for citizens who choose to participate at the garden, benefits to the local environment, and increased availability of fresh fruits and vegetables.

In their study, *The Effect of Community Gardens on Neighboring Property Values*, Vicki Been and Ioan Voicu of New York University examined all property sales in New York City over several decades and compared prices of properties near community gardens with those not near community gardens. They found opening a community garden has a statistically significant positive impact on residential property values within 1000 feet of the garden. Further, they found the positive impact increases over time therefor an established community garden has a greater impact on nearby property values than a new community garden. Been and Voicu also found higher quality community gardens have the most significant positive impact on residential property values and the impact is most significant in the most disadvantaged neighborhoods. Installing a community garden in a disadvantaged neighborhood will result in a greater increase in property values than installing a community garden in an already thriving neighborhood. (Flachs,

2010; Voicue & Been, 2008) Similarly, in his study, *Food For Thought: The Social Impact of Community Gardens in the Greater Cleveland Area*, Andrew Flachs states,

"New York City gardens had a statistically significant positive impact on residential property within 1000 feet of the garden, an impact that increased over time. More importantly, this impact was highest in the lowest income neighborhoods studied." (Flachs 2010, Pg. 2)

An additional community wide benefit of community gardens occurs due to the open green space that exists at the gardens. Cities experience many of the same benefits from community gardens as they do standard parks (Flachs 2010). In their 2010 study, *Sowing the Seeds of Success Cultivating a Future for Community Gardens*, Lee-Anne S. Milburn and Brooke Adams Vail discovered that development and maintenance costs of community gardens are typically lower than traditional parks, and parks departments benefit from community gardens because they increase the park system's user base to include people who don't frequent traditional parks but are interested in gardening in a community space.

Milburn and Vail also discovered that community gardens connect users to the place in which they are living and increase community pride. Community gardens can become central meeting areas and event spaces in neighborhoods. These central spaces can increase users' social networks within their community. These increased connections often lead to community activism and additional positive changes elsewhere in the community. In low-income and neglected

neighborhoods this can revitalize the neighborhood and increase hope for the future. (Milburn and Vail 2010)

The increasing prevalence of food insecurity among families and individuals as well as food deserts, or areas in which fresh fruits and vegetables are not easily accessible, in urban areas is a significant obstacle to becoming a healthy community. Food insecurity is a major issue in modern America. Food insecurity occurs when a person has limited supplies of food on hand and does not know where they will obtain future food. Over ten percent of America is food insecure (Flachs 2010), they don't know where their next meal will come from and their food sources are not reliable. People who live in food deserts and do not have reliable transportation often end up facing food insecurity issues and lack of access to healthful food.

Community gardens placed within food deserts can lessen food security issues for people who live near them by creating access to fruits and vegetables. Living in a food desert can have a negative impact on the health and well-being of the effected individuals as they often have insecure access to food and are unable to eat adequate servings of fruits and vegetables. Community gardens provide fresh, healthy, affordable fruits and vegetables to the people who garden in them and if established in food deserts, they can help cities deal with food insecurity amongst their citizens. Community gardens provide additional benefits to communities by supporting diverse and atypical diets. (Flachs 2010) Community gardens are especially important in low-income areas as they allow

residents to produce their own food at a fraction of the cost of produce in a supermarket.

Food produced in community gardens is often grown using organic techniques and it is always significantly less oil-intensive than conventionally produced food purchased in a grocery store. Community gardens also significantly reduce the garbage produced by people when they are consuming conventionally produced food and they provide a place for on site organic recycling, which reduces the amount of garbage a city must responsibly dispose of. (Flachs 2010) Community gardens can be a part of sustainable development in the way they increase access for low-income individuals and provide access to open green space within cities which may not have adequate amounts of open space.

Many urban areas lack adequate green space for citizens and wildlife to enjoy, community gardens can provide this important space in cities. Milburn and vail state gardens often take up empty vacant spaces within urban areas that have been left in disrepair. Community gardens beautify these areas and add green space to the neighborhood, they also reconnect people with natural processes and increase their awareness of their surroundings. Time spent in community gardens can also increase participants' desire to protect the environment, especially immediately surrounding the garden. Andrew Flachs states,

"Especially urban gardeners, are acutely aware of their environmental and social impact. Gardeners keep money within the community, beautify community space, and contrast the urban blight that characterizes low income urban areas. Many

gardeners use organic and environmentally safe techniques, so that food can be eaten fresh from the soil." (Flachs 2010, Pg. 3)

Although there are very few risks associated with gardening in a community garden or installing one in a city, there are risks associated with all actions in life and for thoroughness sake, they will be discussed here.

"Risks from urban horticulture include environmental contamination of the water supply from agrochemicals and animal manures, and contamination of foods from air pollution. At the same time urban gardening offers potential positive opportunities for recycling city garbage for productive purposes (e.g. fertilizer, land fill)." (Marsh 1998, Pg. 9)

Benefits to individual gardeners in community gardens :

In addition to community wide benefits, community gardens have many benefits to the individuals who choose to garden in them. Recently Americans, especially low-income urban individuals and people of color, have become more increasingly disconnected with their food. (Flachs 2010) Community gardens reconnect people to their food and provide convenient and low cost access to food. They also provide an enjoyable space for an active lifestyle and they allow for positive social interaction between gardeners.

Lee-Anne S. Milburn and Brooke Adams Vail estimate families can save \$475 per year on their food costs by gardening, this depends on plot size, cultivation intensity, and climate, however this is a significant food source for people who are food insecure. Food insecurity is detrimental to personal health as available food may not be the most healthful but if it is the only food available so people must eat it. Community gardens established in food deserts are an

especially effective way to increase personal or family food security. Gardeners can grow foods not typically sold in grocery stores but that might be staples of their culture. This allows them to continue cooking the foods they know how to cook. (Flachs 2010) In *Building on traditional gardening to improve household food security* R. Marsh states, gardens can supplement a diet with vitamin and energy-rich fruits and vegetables as well as herbs and condiments.

"Very small mixed vegetable gardens can provide a significant percentage of the recommended dietary allowance for protein (10 to 20 percent), iron (20 percent), calcium (20 percent), vitamin A (80 percent) and vitamin C (100 percent)." (Marsh 1998, Pg. 6)

Marsh goes on to state community gardens contribute to food security by providing direct access to food that can be harvested and eaten on a daily or as needed basis. In their study, *Review of the nutritional implications of farmers' markets and community gardens: a call for evaluation and research efforts* Lacey Arneson McCormack, MPH, RD; Melissa Nelson Laska, PhD, RD; Nicole I. Larson, PhD, MPH, RD; and Mary Story, PhD, RD state that community gardens have the potential to increase access to fruits and vegetables, especially in lowincome areas that have poor access to affordable, healthful foods. Building community gardens in these areas could increase access during growing seasons, which could result in more healthful dietary patterns and reduced health risks. There are many benefits of gardening, but for the food insecure, direct access to nutritious foods is the most important one. "Gardening and working to produce one's own food creates a tangible connection to produce. Through this connection, people become more invested in their food choices. Studies have shown that gardeners are more likely to choose fresh and healthy food over fast and non-nutritious food." (Flachs 2010, Pg. 4)

In their study, *The influence of social Involvement, Neighborhood* Aesthetics, and Community Garden Participation on Fruit and Vegetable Consumption, Jill S. Litt, PhD, Soobader, PhD, MPH, Turbin, MS James W. Hale, MSS, Michael Buchenau, MLA, and Julie A. Marshall, PhD, MPH studied the relationship between an urban adult population's fruit and vegetable consumption and its garden participation, among other factors, in Denver, Colorado. Turbin et. al collected survey data using a multiframe sampling design. They conducted a 45-minute face-to-face survey and asked questions such as frequency of fruit and vegetable consumption, gardening participation or lack thereof, physical activity rate, and perception of neighborhood aesthetics. Fruit and vegetable consumption was highest among people who gardened in a community garden, followed by people who gardened at home and lowest was people who did not garden at all. Community gardeners reported eating an average of 5.7 servings of vegetables per day, home gardeners ate 4.6 servings and nongardeners ate only 3.9 servings per day. The recommended daily intake is 5 servings of fruit and vegetables per day. When examined, the other factors considered did have an impact on fruit and vegetable consumption as well.

"Adjustment for educational attainment, physical activity, social involvement, and perceptions of neighborhood aesthetics reduced bud did not eliminate this association; however, the difference in fruit and vegetable consumption between home gardeners and nongardeners that was observed in the bivariable analysis was no longer significant." (Litt et al 2011, Pg. 1469)

The effect of other variables did not negate the significance of gardening on fruit and vegetable intake. After adjusting for socioeconomic status, social and psychological covariates, and health Litt et al still found that community gardeners consumed almost a serving more of fruits and vegetables per day than did home gardeners and nongardeners. Additionally, more gardeners than non gardeners consumed the recommended daily amount of fruits and vegetables. One gardener in the study stated,

"We not only told them about taking care of the land and taking care of the environment, but part of our responsibility is taking care of ourselves as human beings and taking care of our bodies and eating better. That's why you grow all these fruits." (Litt et al 2011, Pg. 1470)

In addition to their study in Colorado, Litt et all also cited other studies in different urban settings including Philadelphia, Pennsylvania and Flint, Michigan which found gardeners consumed more vegetables including dark green leafy vegetables, eggplant, and tomatoes as well as fewer milk products, citrus fruits and sweet foods and drinks than did non gardeners. An additional personal health related benefit is gardeners stay active which leads to a reduced risk of heart disease, type 2 diabetes, and obesity (Mckormick et al 2010). These health benefits also lead to an economic benefit of reduced medical costs. Litt it al went on to share,

"Previous research suggests that social and psychological processes and aesthetic experiences set, shape and sustain beliefs and food preferences, choices, and practices. Moreover, growing evidence indicates that community gardens represent a viable strategy to tap into these processes by fostering connections among community members and, importantly, connections between people and food-producing landscapes." (Litt et al 2011, Pg. 1466)

Besides providing food resources for those in need, community gardens can provide other economic resources through the sale of excess harvest or by using it to barter with others for additional necessities. Gardening is accessible to the poorest people since it relies on low-cost, low-risk technology and it is adaptable to many environments. (Marsh 1998) In their study *Community gardens as contexts for science, stewardship, and civic action learning,* Marianne

E. Krasny and Keith G. Tidball state,

"Community gardens are distinctive in their ability to integrate food production with environmental stewardship and civic engagement. Environmental stewardship takes the form of restoring neglected and degraded plots of land, and civic engagement includes building relationships, collaboratively mobilizing resources for advocacy and to promote neighborhood well-being, and coming together to share and celebrate cultural traditions." (Krasny and Tidball, 2009 Pg. 2)

Further, Andrew Flachs states that the desire for high output from one's garden space and that individual gardener's environmental ethic are not mutually exclusive.

Another personal benefit to people who garden in community gardens is increased opportunities for positive social interaction. Garden parties and workdays provide socializing opportunities for gardeners as well as a community space where people feel comfortable meeting and socializing. During their research, Litt et al. found people who were typically shy or otherwise uncomfortable in social settings were able to find commonalities with other gardeners in their community gardens and ease into social interaction. They also provide a safe space for children. (Flachs 2010) In her 2011 study, *Growing What You Eat: Developing Community Gardens in Baltimore, Maryland,* Michelle P Corrigan interviewed gardeners who gardened in a community garden located in Baltimore. One of her interviewees stated.

"My kids are learning. They're actually appreciating how things grow. Even just to see them, I mean, they like to plant, but when they actually see stuff, that's a different feeling for them. When they get to actually pick, they really enjoy that." (Corrigan 2011, Pg. 1238)

Garden communities are often diverse and include people who would be unlikely to meet in other circumstances including people from different socioeconomic levels, ages, and cultural communities. Gardening can enhance a person's physical, psychological, and spiritual well being as well as reduce stress levels (Milburn and Vail 2010). Community gardens also provide a place for ongoing learning among adults (Krasney and Tidball 2009) and a space for people to spend time outdoors. Pleasant outdoor space is especially important in urban community gardens where the garden might be one of the only green places in that area.

Motivations of individual gardeners in community gardens:

In their paper Review and Analysis of the Benefits, Purposes, and Motivations Associated with Community Gardening in the United States Carrie Draper and Darcy Freedman reviewed scholarly research published between 1999 and 2010 on the topic of motivations of people who garden in community gardens. In order to complete their research, Draper and Freedman identified published research using the Google Scholar search engine then they used literature cited sections of those articles to find additional published literature. Over one third of the articles Draper and Freedman identified were focused on youth gardening activities, which is not within the scope of this research paper. Most research papers looked at urban settings. Forty percent of the articles they found were case studies, or an in-depth analysis of a whole community garden or a part of a single or small number of gardens. Other types of research were intervention studies, cross-sectional studies, and reviews. The following reasons were all cited as personal motivations for gardening in a community space: access to fresh and better tasting food; time to enjoy nature; health benefits; opportunities to socialize; a chance to beautify and give back to the community; and efforts to support the conservation of green space.

In their paper *Past results and future directions in urban community gardens research*, Daniela Guitart, Catherine Pickering, and Jason Byrne conducted a review of English academic literature on community gardens including examining authors, geographic location of publication and gardens

studied, and research methods. Guitart et al identified the following common motivations of gardeners: to consume fresh foods; social development or cohesion such as community building and cultural exchange; to improve health among members; and to make or save money. Other important but less common motivations included the desire to educate, to enhance cultural practices, to enjoy nature, environmental sustainability, to access land, and to enhance spiritual practice.

A major motivation for many gardeners is the ability to save money on food by growing it themselves. Related to this is the desire to make money by selling surplus harvest or bartering with it. Gardening saves money that would otherwise be spent on food and it supplements income during difficult times. Vegetable gardens produced an average of \$504 worth of produce from a \$25 investment. (Flachs 2010)

"I found that the utilitarian desire for saving money and producing good food prevailed across demographics. In addition, low-income gardeners recognize the social and political ramifications of their actions." (Flachs 2010, Pg. 7)

Growing fruits and vegetables in a community garden allows the gardener to eat more fruits and vegetables than they may be able to otherwise afford to purchase.

Another motivation of many gardeners is the desire to increase their opportunities for social interaction. Community gardens provide a safe space for social interaction with a diverse group of people including people of different races, ages, genders, sexual orientations, socioeconomic backgrounds, and cultural traditions. Gardeners learn from one another about a variety of topics, some gardening related and some not, older gardeners pass on farming techniques and recipes to younger gardeners. Community gardens provide a safe space for community events, and a place to sustain community values. (Flachs 2010)

Current state of community gardens:

Participation in community gardens has ebbed and flowed with changing socioeconomic conditions in the United states, the most recent economic downturn has re-heightened public interest in community gardening. (Draper and freedman, 2010). With this recent increase in popularity, gardeners have been facing some obstacles including finding available space in established community gardens. In some cases this space deficiency is due to waiting lists at established community gardens, in other cases it is due to the inability of community gardens to obtain land to open or funding to continue on.

"Urban gardeners are often forced on to very marginal land because of land speculation and antagonistic city planners and governments that discourage agriculture an an urban land use. Where governments have been more tolerant and even supportive of urban agriculture, it has tended to thrive" (Marsh 1998. Pg. 9)

If gardens are able to find suitable land with supportive owners and local governments, they must still find people willing to do the initial work of setting up the garden and maintaining common spaces in the garden.

"From the perspective of the PPF in Baltimore [Parks and People Foundation], the only way to start a community garden is through the interest of community members. This organization stresses the importance of community in starting a community garden, 'You can't do it by yourself.' To those wanting to start a garden, she said, 'Just start it, and you can figure out liability or permission later." (Corrigon 2011, Pg. 1239)

In their 2003 paper, Community Gardens and Politics of Scale In New York City, Christopher M. Smith and Hilda E. Kurtz studied the controversial proposed auction of 114 community gardens in Yew York City in 1999. Community gardens have existed in New York for a century starting with gardens operated by the government during World War I and II and during the Great Depression. More recently community gardens were built by city residents in open lands during the 1970s. The gardens provided small green spaces amongst the crumbling walls that cursed the city during that time. Within the community gardens neighbors grew food as a way to supplement their grocery budgets and they beautified the space with ornamental flowers and trees. Community gardens were built in most neighborhoods in areas that were once used for drugs, prostitution, and other criminal behaviors. These gardens were sometimes built without prior permission of the landowners. By 2001 there were an estimated 750 community gardens in New York City spread across the five boroughs, Brooklyn having the most and Staten Island the least. Like gardens in other areas, these gardens provided important green space within the very urban city. The green space was used by wildlife and people alike. Additionally they provided jobskills such as basic business and horticultural skills for gardeners.

During the winter of 1998-1999 New York City under the direction of Mayor Rudolph Giuliani scheduled 114 gardens to be sold at auction in May of

1999. The gardeners banded together to protect their precious garden space. Although the gardens were legally set up as temporary land uses when they were originally created until more lucrative land users came along, the gardens had become important parts of the neighborhoods in which they were a part. As Smith and Kurtz stated,

"Individual community gardens are spaces of dependence; gardeners invest a significant amount of time in their gardens and forge a sense of individual and collective identity expressed within the place specific gardens... there are no substitutions for community gardens." (Smith and Kurtz, Pg. 200)

When Mayor Giuliani eliminated an important forum for public input into the land sale, he violated the procedures outlined in the Urban Land Use Review Procedure. Gardeners approached the New York State Attorney General to assist them. The Attorney General filed suit against the city and slowed the sale process. Mayor Giuliani wanted the gardeners to purchase the land their gardens were occupying on the free market. After some quick fundraising, the Trust for Public Land was able to work with Mayor Giuliani's office to purchase garden space which was scheduled to be sold.

Community gardens quickly become a major part of communities in which they are built and gardeners often become attached to not only the space in which they garden but also the community of people they are a part of at their garden. Community gardens rely on a network of local, national, and sometimes international sources for advisory, technical, financial, and political support. Additionally, community gardens rely on strong community leadership, many

volunteers, and outreach; all aspects of high levels of social involvement. (Litt et al 2011) Gardens can be democratic locations for uniting diverse groups of people with the benefit of self-help, and places for teaching skills, citizenship, and gardening in an effort to reintroduce nature to urban areas. Garden creation can be a community-based attempt to better their local social and physical situation. Community gardens can provide social, political, and environmental benefits to direct participants and the surrounding community. (Milburn and Vail 2010)

There are more than 18000 community gardens across the country and this number is growing (Dolesh 2011).

"Securing a garden plot in one of the 35 community gardens in Portland, Oregon, for example, is always a multi-year wait, and in some communities, the wait lasts as many as 10 years, explains Botanical Specialist Dan Franek." (Dolesh 2011, Pg. 3)

State of the literature:

Community gardens provide ample benefits to gardeners and communities in which they are located. Because the benefits are so great, all who want to garden should have access to garden space. As world population continues to increase, land available for farming decreases due to land development and increase in the cost of land. Untouchable land combined combined with the recent global economic recession has led to a major increase in the presence and use of community gardens throughout The United States. In their paper *Past results and future directions in urban community gardens research*, Daniela Guitart, Catherine Pickering, and Jason Byrne conducted a review of English academic literature on community gardens including examining authors, geographic location of publication and gardens studied, and research methods. As of their 2012 publication, Washington State was absent from the published English Language Literature on community gardens and a majority of published studies focused on gardens in large cities. Studies were published in a wide variety of journals focused on topics such as geography, environment and planning, society and culture, health, education, economics, and conservation biology. A majority of the studies were focused on social issues related to community gardening.

Chapter 3: History of Community Gardens and Context for Case Study of Pierce and Thurston Counties

"Although the environmental movement has given community (and especially urban) gardening new publicity as a sustainable and environmentally friendly alternative to petroleum intensive, large scale commercial food processing facilities, such gardens have existed in various forms throughout America's history." (Flachs 2010, Pg. 2)

Organized public locations created for people to garden have existed in American Cities since the 1890s. In the 1890s social reformers promoted urban vacant-lot cultivation associations to provide land and technical assistance to unemployed laborers in cities such as Detroit, New York, and Philadelphia. (Lawson 2005) During an 1893-1897 depression in Detroit, Mayor Hazen S. Pingree used gardens to provide food and improve morale of unemployed laborers and relieve urban poor. These gardens were created to save or make money by growing food. This effort was so successful it began a national movement of creating similar gardens. These efforts were successful but they were seen as a short term way to help the poor until the economy recovered or people established new careers. (Milburn and Vail 2010) The superintendent of the Philidelphia project said:

"To Land-owners the Vacant Lots Cultivation Association in substance, says: Lend us your idle land (subject to immediate dispossession whenever required) and we will offer ample self-help to all who cannot work the usual employments. We will leave the land (on demand) in better condition than we find it. We will make of it something even better than a park or playground for the poor, or rather we will show them how to make not only parks and playgrounds for themselves but productive gardens as well out of what are now only idle lots and in many cases rubbage heaps. We will help make the city beautiful while making this idle land and these idle people useful." (Lawson 2005, Pg. 34) The civic beautification that occurred as a consequence of these gardens convinced women's groups, garden clubs, civic organizations, and other to support vacant-lot cultivation as well as children's gardens and window-box gardens in tenement districts. Concurrently, school gardens were promoted by education reformers as a hands-on outdoor classroom that connected with school subjects and taught civics and good work habits. School gardens even had an office in the federal Bureau of education. (Lawson 2005)

During World War I, gardens were planted throughout the country in people's back yards and in community centers to augment the domestic food supply so more food could be sent overseas to feed American troops abroad. Again, these gardens were created to save or make money by growing food, although unlike earlier community gardens which were focused on beautification of cities and providing food and work for the poor, community gardens built during World War I and up to World War II sought popular support from all people and were focused on food security, nutrition, and recreation. Children's efforts united through the federally sponsored U.S. School Garden Army. (Lawson 2005) Education commissioner P.P. Claxton had spent several years gathering gardening statistics and he hoped to enroll the six million school children ranging in age from nine to sixteen in a United States School Garden Army that could produce a quarter of a billion dollars of vegetables along with the added benefits of character development, health benefits, education opportunities, and patriotism. Although he did not acquire enough funding to

enroll all six million children, he was able to begin an army of one and a half

million students. (Tucker 1993) The children marched to their gardens singing:

Johnnie get your hoe, get your hoe, get your hoe; Mary dig your row, dig your row, dig your row; Down to business, boys and girls, Learn to know the farmer's joys. Uncle Sam's in need, pull the weed, plant the seed. While the sunbeams lurk, do not shirk, get to work. All the lads must spade the ground, All the girls must hustle round Over there, over there; Send the word, send the word over there, That the lads are hoeing, the lads are hoeing, The girls are sowing everywhere, Each a garden to prepare, Do your bit so that we all can share With the boys, with the boys, the brave boys, Who will not come back 'til it's over, over there. (Tucker 1993, 47)

Shortly thereafter and in response to the Great Depression of the 1930s, families applied to private and public agencies for subsistence garden plots and for jobs in cooperative gardens and farms. Yet again, these gardens were focused on saving or making money by growing food. In 1934, over 23 million American households were participating in subsistence garden programs that grew produce for consumption at home. These gardens grew produce valued at \$36 million. Propaganda and promotion coming from the United States Government focused on the health benefits of gardening such as recreation, nutrition, and social benefits. The physiological and recreational benefits associated with gardening were very important to offset negative effects of war and the depression.

"Probably no other appeal to patriotism of the American people ever met more widespread and generous response than "war gardening." It set the great heart of

America beating from coast to coast. Inspired by excellent showing made last year and spurred on by the knowledge that "food will win the war" men, women, and children all over the United States took up war gardening this year. Both as individuals and as members of various organizations they had gone about this as true soldiers of the soil, in the same spirit with which their husbands, fathers, brothers, and friends went into the army and the navy. Charles Lathrop Pack, "Making a Nation of Garden Cities," Garden Magazine 27, 4 (May 1918): 183

During World War II, so called "Victory Gardens" were planted at individual households for personal consumption, morale, and recreation. After the war, the few remaining school and community gardens provided a catalyst for a resurgence in interest that occurred in the 1970s. Again gardens appeared in neighborhoods partially to provide resources for families trying to combat inflation and partially as acts of resistance to urban abandonment. During this time, a new environmental ethic was developing and gardens were places of expression and places for neighbors to connect during a time of social unrest. These gardens were first focused on saving or making money by growing good, later the focus shifted to environmental sustainability and community building and/or cultural exchange.

Gardens built during war times were similar to gardens built in individual cities during the late 19th century depression years, but this time national groups got involved and changes occurred at the structural level. Implementation and organization of the garden programs fell on local volunteer organizations but the government and national organizations disseminated technical information and resources for the gardens. The gardens were still temporary and once the crises was resolved, involved parties focused their attention elsewhere. During this

time, the leadership was not able to establish gardens as sustainable community resource. (Milburn and Vail 2010)

In the 1970s, people began rebuilding their own communities in an attempt to beautify them. Gardens were built with the focus of health and food security and their impact on positive social connections. Change in organizational structure of the gardens allowed for increased community ownership of the garden projects. These gardens still relied on outside agencies for financial and technical support, but citizens of the community began taking over planning and development of the gardens. (Milburn and Vail 2010) The 1970s were a time of increased environmental awareness in America.

Participating in a community garden was not only a way to obtain food and health benefits, but also a way for people to help the environment. This social change increased the popularity of gardening during peacetime more than it ever had in the past. The number of gardeners in America increased from only a handful in 1971 to thirty-eight million a decade later. People gardening in community plots made up about 8 percent of the thirty-eight million. In addition to the increased environmental awareness happening during the 1970's, it was a decade of significant inflation and therefore increasing food prices. These increasing food prices were also a significant motivator for people to grow their own food at home gardens and community gardens. (Tucker 1993)

In the 1980s, although inflation lessoned, the number of people who gardened in community plots declined less than the number of home gardeners

declined. Urban residents became attached to their garden spaces and waged campaigns when landowners or cities tried to take the land from them. (Tucker 1993)

After the recent economic downturn beginning in 2008 a new so called brand of community gardens began, Recession Gardens. These gardens were again focused primarily on saving or making money by growing food. A simple google search for the term "recession garden" brings up a wide range of results ranging from news articles about the increase in gardening as a way to supplement family grocery budgets to personal blogs with gardening tips and tricks. This recent increase in gardening popularity was boosted by First Lady Michelle Obama's installation of a vegetable garden on the White House lawn and her encouragement of eating more fruits and vegetables for their personal health benefits.

Intentions of modern community gardens are different now than they have been in the past. (Flachs 2010) This paper has already examined the literature on issues related to community gardening during the current era including the benefits to individuals who garden in community gardens, to neighbors of community gardens and to cities in which community gardens are located. Now this paper will study community gardens located in Pierce and Thurston Counties of Washington State as well as the people who garden in them and why the people choose to garden in them.

Thurston County Department of Health conducted a "Community Garden Assessment" in 2012 with the purpose of researching the community gardens that currently exist in Thurston County so as to make recommendations for locations where new community gardens could be established. An estimated seventy-seven percent of adults living in Thurston County, or about 147,500 adults, do not consume the recommended daily intake of fruit or vegetables. Thirty-two percent of Thurston County adults get some, most, or all of the food they make at home from their home or community garden. This statistic suggests that increased access to garden space could increase the amount of fruits and vegetables adults living in Thurston County consume.

Currently, there are eleven community gardens located in Thurston County and about 235 households or families are supported by the gardens, there are a total of 235 plots or shares amongst the eleven gardens. Only two of the community gardens are over 25 years old, so most community gardens in Thurston County are relatively new, with seven established in 2006 or later. Over half the community gardens are located on government owned property. Most community gardens located within Thurston County are on land owned by a church, on government owned land such as a park or at a school, or in a residential neighborhood.

The Evergreen State College community garden is the oldest garden, at 32 years old, it was started in 1982 (TESC). It is located on the campus of The Evergreen State College and it was started by a student club. The garden is open

to people not otherwise affiliated with The Evergreen State College. The Olympia Community Garden is the second oldest garden, it was started 30 years ago. The Olympia Community Garden is located within the City of Olympia on private land. On a yearly basis, the landowner gives permission to the Sustainable South Sound organization to run The Olympia Community Garden on his land. The next oldest garden is the Hale Place Community garden, which is located in the Bigelow Highlands neighborhood. The Hale Place garden is about eight years old. The Sunrise Park Community Garden is also about eight years old. It is located in a City of Olympia park near a low income housing development. The remaining seven community gardens are six years old or less. Two of these gardens are located at churches, two are located in public parks, one is located in a neighborhood, one is located at a public high school, and one is located in an outdoor shopping center. Popularity and availability of community gardens has increased significantly in the recent past, especially since the most recent economic recession.

A community garden assessment was conducted in Pierce County in 2010. Similar to the Thurston County Community Garden Assessment, the Pierce County Community Garden Assessment was also conducted by the county health department with the goal of gathering information on the community gardens in existence to better enable county officials to provide support for the existing gardens and make recommendations for future community gardens. The 2010 assessment found fourteen gardens within Tacoma and eleven additional gardens

in greater Pierce county for a total of 25 community gardens in Pierce County. My research in 2013 identified 46 community gardens in Pierce County. The newly created Pierce County Community Garden website, housed on the Pierce Conservation District website, states there are 55 community gardens in Pierce County. Although some of the difference between my research and the 2010 Community Garden Assessment can be explained by new gardens opening in the three years between the time the two research projects were conducted, some of the difference is likely caused by incomplete research conducted during the 2010 assessment. Listed in the limitations and considerations section of the publications is the statement, "This inventory and assessment may not have captured *all* community gardens in Pierce County." Regardless of the possible research deficiencies that may have occurred in 2010, Pierce County seems to be experiencing a boom in the establishment of new community gardens with the addition of nine gardens between winter of 2013 and summer of 2014.

The oldest community garden in Pierce County is the Procter Community Garden, which is almost 40 years old. The Proctor Community Garden is owned and managed by the City of Tacoma Parks Department. Additionally six community gardens are at least fourteen years old and nine more gardens are between six and thirteen years old. With a total of sixteen gardens established for six years or more, Pierce County has far more vested community gardens than Thurston County. Additionally, Pierce County has more community gardens very recently established than Thurston County. Because Pierce County conducted

their assessment two years before Thurston County, they seem to be slightly ahead in their process of encouraging the expansion of available community gardens. Similar to Thurston County, the land Pierce County gardens occupy is mostly government owned with some owned by churches and schools, some located within neighborhoods, and the minority of gardens occupying land that is privately owned.

Chapter 4: Study Methodology and Analysis of Survey Data

The first step in compiling data for my thesis involved researching Thurston and Pierce Counties then compiling a list of all community gardens in each of the two counties.

Thurston County is located in the southern end of Puget Sound. To the east of Thurston County is Mount Rainier and the Cascade Mountain Range and to the west is the Pacific Ocean. Thurston County is about 60 miles south of the major metropolitan city of Seattle, WA and it is about 100 miles north of Portland, OR. Thurston County is 727 square miles and home to more than 220,000 residents. Over half of the population, 140,000 residents, live in the urban north county area made up of the cities of Lacey, Olympia, and Tumwater. The remaining 80,000 residents live in smaller towns including Bucoda, Tenino, Rainier, and Yelm as well as in more rural areas. Thurston County is one of the fastest growing counties in the Pacific Northwest.



Map 1: Thurston County, Washington

 Table 1: Community Gardens in Thurston County

Garden Name	Location	Coordinator	Contact	Number of Plots
Capital Vision [Christian Church] Community Garden	1775 Yew Avenue NE Olympia, WA 98506	David	360-791-8778 or davidwillis88@ msn.com	20
Evergreen Community Gardens	2712 Lewis Road NW Olympia, WA 98502	Matthew	Tesccommunity gardens@gmail. com	22

Hale Place Community Garden	1217 Yew Ave. NE Olympia, WA 98506	Rus	360-705-0862 or rusgey@yahoo.c om	22
Lacey Crossroads Community Garden (SSS)	5607 Corporate Center Lane SE Lacey, WA 98503	Marie	mflake@nwrain. com	16
Olympia Community Garden (Sustainable South Sound – SSS)	1401 13 th St. SE Olympia, WA 98501	Charles	360-943-9623 or charlesays@gm ail.com	17
Rainier High School Community Garden	308 Second Street West Rainier, WA 98576	Angie and Jeanine	360-446-2205 or karnesa@rainier .wednet.edu and 360-458-0578 or jeanninepia@g mail.com	10
Rochester Community Garden	10140 Highway 12 SW Rochester, WA 98579	Kellie	360-723-6375 or kmcnelly@roof communityservi ces.org	22
St. Mark Lutheran Church Food Bank Garden	2109 College Street SE Lacey, WA 98503	Gail	360-456-3281 or gatofrare@comc ast.net	46

Sunrise Community Garden (Olympia Parks)	505 Bing St. NW Olympia, WA 98502	Luke Burns	360-570-5857 or lburns@ci.olym pia.wa.us	55
Wendell Berry Community Garden	928 Wilson St. NE Olympia, WA 98506	TJ	urbanagrarian@ comcast.net	16
Yauger Park Community Garden (Olympia Parks)	530 Alta Street SW Olympia, WA 98502	Luke Burns	360-570-5857 or lburns@ci.olym pia.wa.us	69

Map 2: Community Gardens Thurston County, Washington



Pierce County is located just northeast of Thurston County. It is much larger than Thurston County with a population of about 795,000 people. It has 24 cities and towns of varying sizes with the largest being Tacoma, WA home to about 199,000 people. Pierce County is also home to Joint Base Lewis-McChord which has more than 25,000 soldiers and civilian workers. For Lewis covers 86,000 acres in Pierce County. In total, Pierce County covers 1,806 square miles of land.

Unfortunately there was no list in existence for Pierce County. A google search found a map created in 2012 for the 2012 Community Garden Harvest Tour. This map gave me a list of gardens and their general area and a place to start my research compiling physical locations and contact information for all the gardens.

Map 3: Pierce County, Washington



 Table 2: Community Gardens in Pierce County

Garden Name	Location	Coordinator	Contact	Number of Plots
Bonney Lake Community Garden	18421 89 th St. E Bonney Lake, WA 98391	Julie	yugo88@aol.co m	Unknown
Boze Community Garden	East 68 th between East L & East K streets, Tacoma, WA 98404	Kristin M	KristinM@pier cecontycd.org	Unknown

Brown's Point Community Garden	4301 Browns Point Boulevard NE Tacoma, WA 98422	Cindy Niemi	253-924-1847 or bcniemi@comc ast.net	16
City of Edgewood Community Garden	11912 18 th St. E., Edgewood, WA 98372	Dan Brown	cityhall@cityof edgewood.org	Unknown
E. 51 st and E. K Street	E. 51 st and E. K Street 98404	Kristen	kmcifor@forter ra.org	Unknown
Eatonville Community Garden	305 Center Street E., Eatonville, WA 98328	Unknown	coop.volunteers @rainierconnec t.com	28
Fircrest Presbyterian Church	1250 Emerson St, Fircrest, WA 98466	Unknown	office@fircrestp res.org	Unknown
Fox Island Community Garden	1017 9 th Ave., Fox Island, WA 98333	http://garden- wp.denimcreat ive.com/	fimwa@aol.co m	12
Franklin Gardin	1201 South Puget Ave Tacoma, WA 98405	Susan Wigley	wigles@clear.n et	Unknown
Gallucci Learning Garden	Corner of S. 14 th and G St. Tacoma, WA 98405	http://garden- wp.denimcreat ive.com/	Unknown	Unknown
Gig Harbor Community Garden	4118 Rosedale St., Gig Harbor, WA 98335	Barb Carr	253-228-0538 or ghcommunityga rden@gmail.co m	Unknown

God's Garden – Spanaway United Methodist Church	135 163 rd St. S., Spanaway, WA 98387	http://selfrelia ntcommunity. wordpress.co m/	Unknown	Unknown
Good Medicine Community Garden	1610 E. Wright Ave Tacoma, WA 98404	Dan Fear	253-304-2808 or danfear@hotma il.com or http://firstcreek. blogspot.com/	Unknown
Grace Baptist Church	2507 North Vassault (Behind the Church) Tacoma, WA 98406	Rich Fermo and Al Clemensen	Rich Fermo (253?)752-3910 or Grace Baptist (253?)752-6643 or gracebaptist@h arbornet.com	24
Green Thumb Community Garden	Corner of Portland Ave and Wright Tacoma, WA	Paul Stuthman	253-678-5483 or stuthman@yaho o.com	Unknown
Hilltop House	S. 19 th and Yakima Tacoma, WA 98404	John Flourney, Guadalupe Land Trust	253-792-9404 or jvc.at.glt@gmai l.com	Unknown
Junett Community Garden	North 16 th & Junett streets,Tacoma, WA 98406	Unknown	http://selfreliant community.wor dpress.com/	Unknown

Kandle Garden	2323 N. Shirley St Tacoma, WA 98407	Metro Parks, Doreen Odell	Unknown	Unknown
Key Peninsula Community Garden	9004-B Key Peninsula Hwy. N. Vaughn, WA 98349	Lance Armstrong	Unknown	Unknown
La Grande Garden	South 18 th and G Tacoma, WA 98405	Guadalupe Land Trust	Unknown	Unknown
Lakewood Community Garden	5510 Arrowhead Road SW Lakewood, WA 98499	Unknown	Unknown	Unknown
Leo's Garden	S. 14 th and Yakima Tacoma, WA 98405	James Harber	Unknown	Unknown
LLSE's Garden	N Ainsworth and 5 th Tacoma, WA 98403	Steven Garrett	Unknown	Unknown
Manitou Community Garden	4806 South 66 th St. Tacoma, WA 98409	Andrew Mordhorst	Unknown	Unknown
McCarver/Zina Linnik Community Garden	2111 S. J St. Tacoma, WA 98405	Unknown	Unknown	Unknown
N. 43 rd and Pearl	N. 43 rd and Pearl Tacoma, WA 98407	Chris Johnstone	Unknown	Unknown

Neighbors Park	S 8 th and S I St Tacoma, WA 98405	Unknown	neighborsparkg arden@gmail.c om	Unknown
Northeast Tacoma Community Garden	NE 57 th and Norpoint Way NE Tacoma, WA 98422	8 th and 1 Neighbors Group	ourgardencomm unity@hotmail. com	Unknown
Olympic View Friends Church Community Garden	Unknown	Heather Farrar and Dave Farrar	lsandige@harbo rnet.com	Unknown
Orchard and Vine	Corner of N. 45 th and Orchard St Tacoma, WA 98407	Unknown	orchardandvine @gmail.com	Unknown
Pilgrim Lutheran Church	10510 136th St. E., Puyallup, WA 98374	Unknown	office@pilgrim puyallup.org	Unknown
Point Defiance Ruston Senior Center Enabling Garden	4716 N. Baltimore St. Tacoma, WA 98407	Senior Center	tvickery@frank etobeyjones.co m	Unknown
Proctor Garden	3901 N 21 st St Tacoma, WA 98406	Doreen Odell of Metro Parks	253-305-1050 or mrbailey@q.co m	Unknown
Puyallup Community Garden	1111 19 th Ave SW Puyallup, WA 98371	Pierce County Master Gardeners	253-798-7170 or pierce.mg@wsu .edu	Unknown

Roger's Park/ McKinley Hill Community Garden	E 34 th St and E L St, Tacoma, WA 98404	Dometop Neighborhood Group, Lynette Scheidt	dometop1@hot mail.com	68
Viet Huong	S 18 th and G St Tacoma, WA 98405	Kristen	kmcivor@forter ra.org	Unknown
Self Reliant Community Garden	9716 224 th St Graham, WA 98338	Lisa Cool	253-847-7574 or wcooke648@m sn.com	Unknown
Shephard's Field Community Garden	245 Valley Ave E Sumner, WA 98390	Unknown	gardenerline@p eoplepc.com Or hotvedtbruce@ aol.com	Unknown
St. John Bosco's Church	10508 112 th St SW Lakewood, WA 98498	Unknown	patmccollough @stjbosco.org	Unknown
Steward Middle School Community Garden	5010 Pacific Ave, Tacoma, WA 98408	John Hoover	253-571-4219 or jhoover@tacom a.k12.wa.us	Unknown
Swan Creek Park Community Garden	2820 Pioneer Way Tacoma, WA 98404	Unknown	sue.b@prodigy. net	Unknown
The Farm- Sumner Community Garden	12324 Valley Ave E Sumner, WA 98372	Bruce	hotvedbruce@a ol.com	Unknown

University of Puget Sound Garden	N 17 th St and N Alder St Tacoma, Wa 98406	Unknown	upspermacultur e@gmail.com	Unknown
University Place Community Garden	7102 40 th St. W. University Place, WA 98466	Scott Seitz	Scott@Soloman sIns.com	Unknown
UW Tacoma Giving Garden	S 19 th Street and Fawcett Avenue Tacoma, WA 98402	Christina McAllister	czinkgraff11@h otmail.com	Unknown
Yakima Ave Garden	4620 S Yakima Ave Tacoma, WA 98408	Bonnie, Tom, Kim, Shannon, Gen	http://www.face book.com/grou ps/1259400874 22074/	Unknown

Map 4: Community Gardens Pierce County, Washington



Available garden coordinator contact information was used to e-mail the coordinators an online survey created in Google Drive which asked information about the garden they coordinate. Because Thurston County recently conducted their garden assessment, their garden coordinators were not re-surveyed.

Thirty-seven Pierce County garden coordinators were e-mailed the garden coordinator survey and seven responded to the survey. One additional coordinator responded and indicated that the garden they coordinate does not fit within the specified community garden definition used for the survey so they were removed from the list of community gardens in Pierce County. Pierce County garden coordinators were asked questions about the garden they coordinate including its size, number of plots, how many people garden in it, what types of things they grow, and how the garden is run.

Thurston and Pierce County garden coordinators both received an e-mail and mixed-methods survey designed to be passed on to the people who had a plot during 2013, the year the data was collected, or who had a plot the year before the data was collected. The gardener survey was also an online survey created in Google Drive. Coordinators were asked to forward the online survery and corresponding e-mail on to the gardeners at their garden. All gardeners were asked demographic information as well as information on their motivations for gardening and benefits they get from gardening. After receiving the survey, participants had two weeks to choose to participate. Forty-seven gardeners responded to the survey.

Prior to beginning research, a human subjects review was completed with The Evergreen State College's Human Subjects Review Board. The mixedmethods approach used to complete this research enabled the gathering of information on who the gardeners are as well as what their motivations are for gardening in a community space.

Ninety-five percent of individual gardener respondents gardened at community gardens in Thurston County. Of the forty-seven respondents, thirtyseven were female, eight were male, and two chose not to answer the question. Age of respondents ranged from 24 to 75 $\frac{1}{2}$. Eighty-two percent of the respondents were non-hispanic white, seven percent were American Indian or Alaska Native, and nine percent classified themselves as "other". Fifty-Eight percent of respondents were married and sixty-two percent of respondents were employed. Twenty percent or respondents were retired. Four percent of respondents were active duty military members or family members of an active duty military member. Thirty-nine percent of respondents were college graduates and an additional thirty-four percent had an advanced degree. Twenty six of the forty-four respondents, or fifty-nine percent, who answered the question, had space to garden at home. Only forty-one percent, or eighteen out of forty-four respondents did not have any other space to garden. This result indicates people choose to garden in a community space for reasons other than a lack of any other space to garden. Nine out of forty-seven gardeners indicated they had to wait for a garden plot before they were able to begin gardening.

When asked what some of the major challenges they faced while gardening at a community space were, common responses were slugs, pests and diseases on plants, finding enough time to garden, personal health issues or injuries, and working with other people in a communal setting. Some respondents indicated they have had difficulty working with other gardeners and have struggled with the politics at the garden they have a plot at.

When asked what their major motivation for joining a community garden was, twenty-two people indicated environmental sustainability was one of their top three reasons. Saving or making money by growing food was the second most selected answer. To consume fresh food and community building and/or cultural exchange were second and third respectively. Improving personal health, increasing access to land, and enhancing personal spiritual practice were all reasons not frequently selected as motivations for joining a community garden.

When asked whether gardening in a community garden has had an impact on their lives, a majority of respondents indicated gardening in a community plot has had a positive impact on their life. Of the thirty-nine respondents who answered the open-ended question, thirty-eight, or ninety-seven percent of respondents indicated the impact has been positive. One respondent indicated she did not have a positive experience due to increased stress in her life caused by the garden. She stated, "It has certainly had an impact, although it was not the impact I anticipated. I have actually experienced more stress related to the garden in the one year I have gardened there than I though I would." The respondent indicated

the stress was due to a "very robust" e-mail chain that circulates among members of the garden. She said, "Several members participated very actively. I do not participate unless I have something particularly useful to say or if someone asks for my input directly, as I know how annoying it can get for my inbox to be clogged with minutiae."

Other respondents had very positive things to say about their gardening experience. One gardener stated, "Yes. Made new friends, learn new skills, live more sustainably." Another garden stated, "Yes. I wouldn't have awesome tomato sauce otherwise." Many gardeners referenced the positive experience they had working with and learning from other gardeners. One stated, "Yes, I have learned from others, gained new friendships and the produce has provided food for our members and [the] local food bank." Another stated, "I wanted to meet some neighbors and this has been such a great way to meet neighbors. Plus I've picked up so many great practices and knowledge for the home garden." Another put it very simply, "met great people; learn[t] more about gardening."

Gardeners referenced eating more fruits and vegetables as a result of their involvement with a community garden. One stated,

"When I started I had no idea that I would meet so many nice people, trade vegetables and give and receive many free veggies. My husband and I have learned to eat radish greens, and some other Asian vegetables that we now enjoy. The garden is an emotional boost as it reminds me of my childhood growing up on a two acre plot with my Dad growing vegetables." Another gardener stated,

"It has impacted me because I am better able to afford an organic vegetable-based diet. I also like to purchase CSA shares, but it is more expensive than gardening. This year I am not going to join a CSA and I'm going to garden instead."

A third gardener stated,

"We eat many morning servings of vegetables during harvest time - if you worked to grow it, you're highly motivated to eat it! We've also learned a lot about gardening from the more experienced gardeners. We're getting to know our neighbors better, and enjoying time with them doing communal work. Finally, the garden is a good source of physical activity - it gets us moving outdoors on days when we might not otherwise."

Another benefit gardeners referenced was increased physical activity from

gardening. One stated,

"It's forced me to get outside and get much needed exercise. I've learned about composting, different kinds of insects, and organic repellants to keep them away. I've learned about starting seeds indoors. I can't begin to list all the things I've learned by having this garden. Things I've wanted to do for years but didn't think I could. The community garden has given me a chance to just get out there and "do it!" I read books on gardening but it's the practice of gardening is where the wisdom comes from."

Another benefit gardeners referenced is increased mental health and life

satisfaction. One gardener stated,

"The Wendell Berry Community Garden has offered me a community that is almost like a substitute for church. Most of my close friends are either in the garden or associated with someone in the garden either past or present. In addition I have learned a huge amount about growing and preserving food. "

Chapter 5: Conclusion and Recommendations

My research has identified the benefits of community gardens, created a list of community gardens in Thurston and Pierce counties, and discovered who the people are that choose to garden in the community gardens located in Thurston and Pierce Counties of Washington State. It has also discovered what motivations people have for gardening in the community spaces and what benefits they receive from gardening.

After reading the gardeners responses to survey questions it is undeniable that the benefits they receive from gardening are significant. Similar to the motivations of historical community gardens, modern community gardens are frequently focused on environmental sustainability, saving or making money by growing food, and community building and/or cultural exchange. Although, most of the people who completed the survey had access to gardening at home, they chose to garden in a community plot which is likely much less convenient for them, because of the additional benefits provided by community gardens. This is presumably due to the benefits they receive from gardening with others. People garden in community gardens for reasons other than lack of available gardening space at home. Because so few Pierce County garden coordinators and gardeners responded to the survey, additional research is needed to see if results are similar in Pierce County.

Knowing such significant benefits exist for communities and individuals that garden in community spaces, city planners and government officials should look for opportunities to encourage citizens to garden in community spaces and increase the availability of community gardens in cities and towns throughout Western Washington. The increase in property values near community gardens should be especially interesting for city government officials as an increase in property values leads to an increase in tax revenue for the city within which the property is located. When turning an empty or abandoned piece of property, which may not be providing any tax revenue to a city, into a community garden, this increase in tax revenue could be especially important. Cities could consider the potential for increased tax revenue as a way to offset the costs associated with the initial installation of community gardens. Additionally, because community gardens have lower maintenance costs than traditional parks, this option could be especially lucrative for cities. This tax revenue increase should be considered by cities when they are making decisions about what to do with extra or abandoned land.

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