Expanding the Use of Vacant Land for Urban Agriculture in Champaign, IL

Uniting the Built, Social, and Natural Environments

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Introduction

The tradition of urban farming has been part of American history, at times to fight poverty during economic depressions, and at other times to support a War. It has also been part of the educational system and used as a way to promote local activism and environmentalism in cities. Today when urban land becomes more developed, there remain pockets of unused land that could be used to garden in the city.

It is generally recognized that urban farms will never have the capacity to feed the entire population. Urban farms can, however, fill an important role in a broader effort to create a more sustainable and just food system. They can also provide access to fresh and affordable food, generate income, develop skills, and create job opportunities. Furthermore they encourage recreation, relaxation, socialization, and activism.

The urban farm is an ideal platform for generating dialogue among various parts of the community: children learn what local fresh food tastes like and develop a desire for more, students can put theory into practice by working on an urban farm, parents have a place to purchase high-quality fresh as well as local food, and men and women have a place to work and generate extra income. Agriculture in urban areas is generally seen as a resource that contributes to the improvement of conditions in poor neighborhoods in cities.

The City of Champaign has some of the most productive soil in the world. In fact, 90% of the soil in Champaign is considered ‘prime farmland’, with 78% considered ‘best prime farmland’\(^1\). In contrast, it also has a very high number of vacant land in close proximity to the downtown area, a high rate of unemployment, and lack of access to fresh food within the same area (nearly 20% of Champaign County residents are food insecure)\(^2\).

This report seeks to unite these discrepancies by formalizing a system of urban farms within these underutilized plots of urban land within the City of Champaign. It also offers recommendations for addressing potential barriers to urban agriculture that have been identified based on review of the Building and Zoning Code of the City of Champaign.
I – Historical Background of Urban Farming

a. What is urban agriculture?

How urban agriculture is defined varies broadly by region and country, as well as by field of study. In 2007, the Community Food Security Coalition’s Urban Agriculture Committee and the MetroAg Alliance established a comprehensive definition of urban agricultures:

Urban and peri-urban agriculture (UPA) refers to the production, distribution and marketing of food and other products within the cores of metropolitan areas (comprising community and school gardens; backyard and rooftop horticulture; and innovative food-production methods that maximize production in a small area), and at their edges (including farms supplying urban farmers markets, community supported agriculture, and family farms located in metropolitan greenbelts). Looked at broadly, UPA is a complex activity, addressing issues central to community food security, neighborhood development, environmental sustainability, land use planning, agricultural and food systems, farmland preservation, and other concerns (Community Food Security Coalition 2007).

b. The early food movement
Growing food in the city is not a new idea in America; people have organized to create places to garden in the cities since 1890s as a relief strategy that provided food, income, and purpose.

- **1893-1897**  
  **Vacant Lot Cultivation Association**  
  Pingree “Potatoe patches” was a program proposed by Detroit’s mayor Hazen Pingree, during the 1893 depression to enable the unemployed to survive using vacant land for gardens. The program provided ¼ to ½ acre sites, seeds, and instructions in 3 languages. Food was raised for consumption and sale. Its success led to similar programs in New York, Chicago, Boston, Philadelphia, and other cities. Most programs ended as the economy improved.

- **1890s-1920s**  
  **Children’s School Garden Movement**  
  At the same time of the Vacant Lot Cultivation Association, education reformers promoted school gardens as an interactive teaching venue that correlated with school subjects and taught civics and good work habits. The first school garden opened at Putnam School in Boston in 1891. Later, in 1914, the U.S. Bureau of Education established the Division of Home and School Gardening to promote gardens nationally and to encourage districts to include school gardens as part of their curricula.

- **Civic gardening**  
  There was a large city beautification campaign in many communities and vacant lot gardens, home beautification, and school gardening were all considered part of it. Gardening was encouraged through contest, free seeds, and classes, mainly lead by neighborhood improvement society, garden clubs, and women’s club.

- **1917-1919**  
  **War Gardens of World War I**  
  The interest in urban farming expanded though World War I and the effort was renamed School Garden Army. Millions of Americans planted backyard and community gardens as a way to augment the domestic food supply so that more could be sent overseas. Many participated, and gardens were started in backyards, vacant lots, parks, company grounds, railroad rights-of-way, and any available land. In 1918, the Bureau of Education restructured the gardening program into the U.S. School Garden Army. It is believed that 5.29 million gardens grew $525 million worth of food in 1918 alone.

- **1931-1935**  
  **Depression-era gardens**  
  In response to the early stages of unemployment during the Great Depression of 1930, people turned once again to gardening as a relief strategy that provided food, income, and purpose. Families applied to private, municipal, and state agencies for subsistence garden plots as well as jobs in cooperative gardens and farms. In 1934, over 23 million households
participated in subsistence garden programs\textsuperscript{10}, and then the State and Federal programs soon developed to provide staff, seeds, and guidance. There were two types of gardening programs: subsistence gardens located at homes or community gardens, and work-relief gardens where workers were paid to grow food that was used by hospitals and charities, and they did not allow sales of produce most of the time. Many programs ended in 1937 when the federal government shifted to other employment programs and established the food stamp program for farm surplus.

- **1941-1945**
  **World War II Victory Gardens**
  During the World War II, specifically after the Pearl Harbor attack, civic interest led to the federally guided victory garden movements where households participated in the campaign to grow food for personal consumption, morale, recreation and expressed patriotism. This campaign was part of a larger one: Food Fights for Freedom. This included rationing, recycling, canning, handicrafts, and volunteer farm work. In 1944, victory gardens produced 42\% of the nation's vegetable supply\textsuperscript{11}. Although after the war most gardens disappeared, some continued and evolved into the community gardens of the 70s.

- **1970s**
  **Community Gardens**
  In the 70s there was a rebirth of the interest and once again gardens reappeared in the neighborhoods, often as expression of urban activism in resistance to urban abandonment and a new environmental ethic. Garden programs emerged, such as New York's Green Guerrilla and Boston Urban Gardeners. In 1976, the USDA sponsored the Urban Gardening Program that established urban offices to promote vegetable gardening and community gardens in 23 cities\textsuperscript{12}. While many of the gardens started opportunistically on vacant land, as urban development pressure rose in the 1980s organizers increasingly attended to land security outreach.

- **1990s to present**
  **Garden programs today**
  Today, myriads of garden programs exist, such as neighborhood Community Gardens, Special Constituency Garden Programs, Entrepreneurial or Job Training Programs, Environmental Education Purpose, Public Housing Gardens, Horticultural Therapy Gardens, Roof Top Gardens, Urban Oases, and a diversity of gardening advocacy and support organizations.
What happened to urban agriculture?

“Culture suggests agriculture, but civilization suggests the city”. Will Durant

Urban farming has been part of American history, at times to fight poverty during economic depressions and at times to support a war. Looking back at the history, in most cases the local and the federal governments were involved; education, training and resources were provided. The question that arises then is why gardens did not become permanent.

Part of the reason, explains Thomas J. Fox, is that we have profited abundantly from the transformation from traditional farming into industrial agriculture\(^{13}\). The new business of agriculture began after World War II, prompted by peace and desire to feed a growing world, and enabled by new high-yielding crop varieties, irrigation techniques, and synthetic pesticides and fertilizers\(^{14}\) generating large revenues to farmers. This was a “Green Revolution” fueled by cheap oil and water and subsidies from the government.

Today only a few firms dominate in certain agriculture and food sectors, from inputs for food production like seeds, fertilizers, and pesticides, to where farmers sell their raw agricultural products, to where consumers shop for groceries.\(^{15}\) In 2007, less than 10 companies dominated the food market in the U.S: four players in beef packing controlled 83.5 percent of the market, four companies in pork packing controlled 66 percent of the market. In flour milling, the top three companies controlled 55 percent of the market; and some companies dominated in more than one industry like Cargill, which is leader in all three categories.\(^{16}\) As the balance of power shifts to the big farming industries, smaller entities in all parts of the food system are being left out.

The consequence of this is monoculture: few crop varieties, reliance on chemical inputs, and separation of animal and plant agriculture. This has resulted in an agriculture that has produced more food and cheaper than ever. Between 1920 and 1999, for example, US corn yields per acre increased by nearly 350 percent\(^{17}\). But production increase alone do not signal sustainability, in the next chapter the actual availability of fresh food and health related problems will be analyzed, as well as the food gap that still exists today regardless the amount of food produced in the country.

c. The rise of urban agriculture in the second millennium

Across the United States, communities are taking steps to make urban agriculture a reality and create a more welcoming atmosphere for development though farmers’ market, zoning and policies changes, and use of underused green spaces and brownfields.
Urban, backyard and community gardens – growing in the city for the city

The last decade has shown a significant resurgence of interest in local food and city farmers are staking claim to open urban space and finding fertile ground in modern American cities where even though planning promotes dense use of land, it is rarely achieved, and over time a weakening of intensity inevitably sets in.

The latest wave of urban farming is more complex to classify. Some of the main categorizations encompass: community gardens, school gardens that link hands-on science classes and change what is served in cafeterias, for-profit farms that takes advantage of the Farmers’ Market trend, and non-profit urban farms that provide job training and social services.

There are overwhelming examples of these kinds of Urban Farms across the United States (see figure 1); Chicago is one of the largest urban food producers in the country following New York City that is in first place. Others include Seattle, San Francisco, Los Angeles, Detroit, and Cleveland. This is relevant because Champaign faces similar climate conditions to Chicago; later in this project some specific models for the City for Champaign will be expanded.

Figure 1. Overview of some of the largest urban food producers and their budgets.
Farmers’ Markets – from the farm to the people

Farmers’ Markets started popping up across America in the mid-1970s. Los Angeles, Santa Fe, and New York City were among the early entries as consumers began to rediscover farmers as well as the taste and price value of locally produced food.

The idea of the Farmers’ Market is to connect local farmers and urban consumers. They are one of the most important factors to regenerate interest in local food and the revival of small farms. This has a mutual benefit: developing higher return retail outlets for small and medium farmers while providing higher quality food to urban consumers. Consumers increasingly are seeking out the flavors of fresh, vine-ripened foods grown on local farms rather than those trucked to supermarket from faraway lands. It is a movement that is gradually reshaping the business of growing and supplying food to Americans.

The USDA recorded 8,144 farmers markets listed in the USDA’s National Farmers Market Directory in 2013; this is a 3.6 percent increase from 2012. According to the latest Census of Agriculture, direct sales of food products from farmers to individual consumers rose by nearly 50 percent between 2002 and 2007. Worth an estimated $1 billion in 2005, local food sales grew to $4.8 billion in 2007 and nearly $7 billion last year, according to industry estimates. Furthermore, for nearby businesses in major cities across the U.S., having a farmers market nearby means an average increase in sales of anywhere from $19,000 to $15 million.

d. Why urban farming matters

Cities can reap multiple benefits by implementing urban food production. It can bring new life and vitality to the city as backyards, community gardens and systems of urban farms that engage the community. It can improve the distribution of healthy food to people in need and in areas of the city where healthy food is not readily available. It supports small enterprises that grow process and distribute locally produced fruit and vegetables, and finally cities can expand economic development (see Figure 2).
Figure 2. Different areas of urban agriculture and assessment related to economic, social, and environmental development

Economic development - fight against poverty

Literature on the economic impacts of urban farming is very limited. The following are the most frequently discussed economic impacts for urban farming:

Source of job, training, and business incubation

Food production teaches job skills and offers entrepreneurial opportunities that increase economic prosperity by developing new, local industries. Community food projects funded by the USDA provided and estimated 2,300 jobs and incubated 3,600 micro-businesses between 2005 and 2009\textsuperscript{21}.

Food justice programs, if located in neighborhoods where unemployment is high, can serve as a viable employment and catalysts for entrepreneurial endeavors\textsuperscript{22}. Farmers markets can also serve as business incubators. They have a flexible nature and are relatively low-risk endeavors that allow many participants to improve their operations and develop a customer base, create jobs and generate revenue\textsuperscript{23}.
Saving on food

Community and residential gardening, as well as small-scale farming can save households food dollars. Studies show that approximately every $1 invested in a community garden yields $6 worth of fruits and vegetables\(^{24}\); some reports quantify the savings for individual gardens that range from $475 a season\(^{25}\).

Savings for public agencies

Urban agriculture can save local governments and public agencies money, as they do not have to spend to maintain vacant lots. It also prevents vandalism, dumping, and labor-intensive upkeep of those lots\(^{26}\).

Home value increase

When vacant land becomes clean, productive, and more attractive to existing and new residents through agriculture, the area will be more desirable and housing values will increase. In turn, the community’s tax base will increase as well. Some studies show that the presence of gardens raised property values as much as 9.4% within five years of establishment\(^{27}\).

Social impacts – creates connections between the community

The benefits of urban agriculture go beyond the scope of just growing food. It can have an impact on human relationships and foster interactions among neighbors and their built environment, thus affecting the social fabric of the community.

Reducing blight

The presence of vegetable gardens in inner-city neighborhoods is positively correlated with decreases in crime, trash dumping, juvenile delinquency, fires, violent deaths, and mental illness\(^ {28}\). Gardens and farms beautify the neighborhoods as well as employ and benefit residents. This creates a higher local pride and attachment to space\(^ {29}\). Once people take pride and ownership of the space, it is less likely to be vandalized or crime-ridden.

Participating in community urban gardening offers a unique opportunity to develop relationship skills. Interactions of this type foster a social environment that provides participants with a social network that can encourage trust.

Community development opportunities

For people who are part of a minority or who are socio-economically disadvantaged, working in community projects proves to be “an important instrument for developing a sense of belonging and a sense of communal ownership that facilitates exchanges not only in the group, but also between the group and the rest of the community” (Bergeron et al., 2002).
The effort to develop and sustain urban food production inside cities builds social capital – trust, civic engagement, the development of community leaders, and the sharing of goods, service and information\textsuperscript{30}. Bringing people together, building community, and improving neighborhoods are some of the ways gardening empower its participants.

\textit{Educational opportunities}

Another social impact of urban agriculture is that it provides a medium for learning experiences, educational programs, and youth development opportunities. Learning outcomes includes awareness of environmental issues and ethics, sustainability, and food systems\textsuperscript{31}. Many youth programs also include nutrition education elements, as well as job training and youth leadership opportunities.

\textit{Cultural integration}

Gardens link different sectors of a city – youth, elders, and diverse race, ethnic, and socioeconomic groups\textsuperscript{32}. These people may have little in common, but urban gardens provide a safe ground for people to work together and build relationships regardless of their background.

\textbf{Community health} - supports a culture that values fresh, nutritious food.

\textit{Food access and security}

Urban agriculture can be a successful strategy for improving food access to food insecure areas\textsuperscript{33}. Community gardens are an affordable way to access fresh produce for people willing to participate. They also have the potential to expand beyond personal consumption, as excess fruits and vegetables can be shared with other community members and local food banks.

\textit{Increase fruit and vegetable consumption}

Research shows that people who participate or have family members that participate in community gardens “were 3.5 times more likely to consume fruits and vegetables at least 5 times per day than people without a gardening household member.”\textsuperscript{34}

Food imbalance is a statistically significant contributor to obesity and other food related health problems. The fewer fruits and vegetables one consumes, the more likely that obesity and diet-related illness become problems. As communities become more out-of-balance in terms of food choices, residents are more likely to die prematurely and at greater rates from diabetes, cancer, and cardiovascular diseases, as well as suffer from obesity and hypertension\textsuperscript{35}. In order for people to have healthier diets, they need access to healthy food: without access to food that is healthier and affordable, there’s no chance that people can enjoy better diets and lead healthier lives.

An important factor is also the level of nutrients that fresh foods contain, studies report the relationship between freshness and health that show that a 5-10 day transportation and storage lag between production and consumption leads to losses of 30-50% in some nutritional constituents\textsuperscript{36}.
Food and health education

Some reports suggest that more important than producing food, urban agriculture is a strategy to increase food and health literacy by including nutrition information and healthy food choices in health education programs\textsuperscript{37}.

Mental health and physical activity

Working with plans and in the outdoors engages people in physical activity and can benefit the mental health, mental outlook, and personal wellness of individuals\textsuperscript{38}. Cultivation activities trigger both illness prevention and healing responses. Health professionals use plants and gardening materials to help patients of diverse ages with mental illness improve social skills, self-esteem, and use of leisure time\textsuperscript{39}.

Environmental benefits – improves the local environment

Greens up the city

Urban agriculture improves the local environment by removing blight from vacant lots and returning a green landscape to the city’s neighborhoods. All the open spaces used for urban farms account for more green open space for the city that helps reduce contamination and improve the microclimate.

Recycle water and improve soil

Urban agriculture by itself will not solve all the ecological problems of the city, but it certainly helps protect the environment and harmful environmental problems can be minimized. Properly managed urban agriculture can turn wastewater and other agriculture byproducts from agricultural activities, such as composting, into resources that can be recycled and used again. The quality of the soil can be improved by the organic waste that urban farmers use and water can be harvested or recycled for irrigation.

Decrease carbon footprint

Local food production reduces the need for packaging, refrigeration, storage, and transportation of food, decreasing energy usage and costs associated with the production of food.
II – Income Disparity, Poverty, and the Food Gap in the City of Champaign

This section will explore the relationship between food deserts and lower income populations in the city of Champaign. It will show food deserts exist mainly in lower-income areas concentrated in the central area of the city. A system of urban farming in this area will generate positive social impacts: reduced blight, community development and education opportunities; health benefits: increased fruit and vegetable access and consumption, and increased opportunities for physical activity. Furthermore, urban farming will bring environmental benefits: greening up the city, recycling water and improving the soil, and decreasing the carbon footprint.

a. Poverty and unemployment in the City of Champaign

According to the U.S. Department of Health and Humans Services, in the United States, health disparities are often closely linked with economic disadvantaged populations. The City of Champaign shows a glaring disparity between the haves and the have-nots. The percentage of families in the City of Champaign that live below the poverty level is 11.9%, and the number of households that live in severe poverty, with incomes less than $10,000 is about 4,800 according to the 2008-2012 American Community Survey 5-Year Estimates (see figure 3 and 4).

Figure 3 also shows that the percentage of families that live in poverty in this study area is almost double the average of 11.9% in the City of Champaign. In Census tract 2, 22.9% of families live in poverty; in census tract 7, 18.6%; in census tract 9.01, 33.6%; in census tract 10, 15.5%; and in census tract 110, 16.7%.

In the City of Champaign, the neighborhoods with lower incomes and higher levels of poverty are located north of Springfield Avenue, comprised by the Census Tracts 2, 7, 9.01, 10, and 110 (see map...
1). This will be the focus area for this section of the study. Later the focus will be the smaller sample area shown in the map, where I propose a system of urban farming.

**Figure 3 - Poverty level: City of Champaign and area of study**

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<thead>
<tr>
<th></th>
<th>City of Champaign</th>
<th>Area of study</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Census tract 2</td>
<td>Census tract 7</td>
<td>Census tract 9.01</td>
<td>Census tract 10</td>
<td>Census tract 110</td>
</tr>
<tr>
<td>% WITH INCOME BELOW THE POVERTY LEVEL IN THE PAST 12 MONTHS</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>All families</td>
<td>11.9%</td>
<td>22.9%</td>
<td>18.6%</td>
<td>33.6%</td>
<td>15.5%</td>
<td>16.7%</td>
</tr>
<tr>
<td>All people</td>
<td>26.3%</td>
<td>25.5%</td>
<td>23.6%</td>
<td>35.8%</td>
<td>16.6%</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

Source: America Fact Finder: 2008-2012 ACS 5-Year Estimates DP03. Census Tract 2, 7, 9.01, 10, 110, and City of Champaign

**Figure 4 - Income: City of Champaign and area of study**

<table>
<thead>
<tr>
<th></th>
<th>City of Champaign</th>
<th>Area of study</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Census tract 2</td>
<td>Census tract 7</td>
<td>Census tract 9.01</td>
<td>Census tract 10</td>
<td>Census tract 110</td>
</tr>
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<td><strong>INCOME</strong> (in 2012 inflation adjusted dollars)</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Total households</td>
<td>32,152</td>
<td>638</td>
<td>1,552</td>
<td>1,703</td>
<td>2,189</td>
<td>2,406</td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>4,838</td>
<td>52</td>
<td>202</td>
<td>305</td>
<td>167</td>
<td>379</td>
</tr>
<tr>
<td>$10,000 to $14,999</td>
<td>2,054</td>
<td>74</td>
<td>151</td>
<td>103</td>
<td>151</td>
<td>214</td>
</tr>
<tr>
<td>$15,000 to $24,999</td>
<td>4,010</td>
<td>157</td>
<td>282</td>
<td>237</td>
<td>464</td>
<td>377</td>
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<tr>
<td>$25,000 to $34,999</td>
<td>3,457</td>
<td>103</td>
<td>384</td>
<td>266</td>
<td>294</td>
<td>495</td>
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<td>$35,000 to $49,999</td>
<td>3,661</td>
<td>85</td>
<td>254</td>
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<td>325</td>
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<td>$50,000 to $74,999</td>
<td>5,171</td>
<td>138</td>
<td>113</td>
<td>288</td>
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<td>239</td>
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<td>$75,000 to $99,000</td>
<td>335</td>
<td>0</td>
<td>79</td>
<td>143</td>
<td>164</td>
<td>160</td>
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<td>$100,000 to $149,999</td>
<td>3,323</td>
<td>29</td>
<td>81</td>
<td>67</td>
<td>208</td>
<td>156</td>
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<td>$150,000 to $199,999</td>
<td>1,116</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>45</td>
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<td>$200,000 or more</td>
<td>1,187</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>55</td>
<td>16</td>
</tr>
<tr>
<td>Median household income (dollars)</td>
<td>41,403</td>
<td>28,172</td>
<td>29,375</td>
<td>32,780</td>
<td>36,186</td>
<td>29,833</td>
</tr>
</tbody>
</table>

Source: America Fact Finder: 2008-2012 ACS 5-Year Estimates DP03. Census Tract 9.01, 7, 10, 110, and City of Champaign
Map 1 – Location of the area of study in the City of Champaign
The population of the study area is mainly young adults between 24 and 49 years old (see figure 5) and the average unemployment rate in this area is 11%. This is considerably higher than the 7.2% of the unemployed civilian labor force rate of the City of Champaign (see figure 6 and 7).

This area also receives several benefits from public agencies and local government in a larger proportion than the average of the City of Champaign. In Champaign 16.6% of the population receive benefits though Social Security, 2.7% receive a Supplemental Security Income, 1.4% receive cash public assistance income, and 7.3% receive SNAP benefits. As is shown in Figure 8 below, these percentages are much higher in the study area.

This population could benefit from an urban farming program that encourages physical activity and that could potentially be a source of job and generate extra income. The expense associated with the public assistance provided to this area could be reduced by some of the benefits of urban farming, including the generation of job and business incubation. Moreover urban agriculture can benefit local and public agencies, as they will save money on the maintenance of vacant lots.

Figure 5 - Population by sex and by age: City of Champaign and area of study

<table>
<thead>
<tr>
<th></th>
<th>City of Champaign</th>
<th>Area of study</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Census tract 2</td>
<td>Census tract 9.01</td>
</tr>
<tr>
<td><strong>POPULATION</strong></td>
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<td></td>
</tr>
<tr>
<td>Total Population</td>
<td>81,055</td>
<td>1,693</td>
</tr>
<tr>
<td><strong>POPULATION BY SEX</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>41,256</td>
<td>757</td>
</tr>
<tr>
<td>Female</td>
<td>39,799</td>
<td>936</td>
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<tr>
<td><strong>POPULATION BY AGE</strong></td>
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<tr>
<td>18 and over</td>
<td>67,020</td>
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<tr>
<td>20-24</td>
<td>18,201</td>
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<td>25-34</td>
<td>12,994</td>
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<td>35-49</td>
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<td>50-64</td>
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<td>276</td>
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<tr>
<td>65 and over</td>
<td>6,154</td>
<td>194</td>
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</table>

Source: United States Census Bureau, 2010 Demographic Profile

Figure 6 - Unemployment level: City of Champaign and area of study

<table>
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<th>City of Champaign</th>
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<td>Census tract 2</td>
<td>Census tract 9.01</td>
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<tr>
<td><strong>EMPLOYMENT STATUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population 16 years and over</td>
<td>68,865</td>
<td>1,213</td>
</tr>
<tr>
<td>Civilian labor force</td>
<td>43,521</td>
<td>915</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3,142</td>
<td>170</td>
</tr>
</tbody>
</table>

Source: America Fact Finder: 2008-2012 ACS 5-Year Estimates DP10. Census Tract 2, 7, 9.01, 10, 110, and City of Champaign
Figure 7 - Unemployment level comparison: City of Champaign and area of study

<table>
<thead>
<tr>
<th>City of Champaign</th>
<th>Census tract</th>
<th>Census tract</th>
<th>Census tract</th>
<th>Census tract</th>
<th>Census tract</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>9.01</td>
<td>10</td>
<td>110</td>
</tr>
<tr>
<td>7.20%</td>
<td>18.60%</td>
<td>14.20%</td>
<td>9.90%</td>
<td>8.20%</td>
<td>3.90%</td>
</tr>
</tbody>
</table>

Source: America FactFinder: 2008-2012 ACS 5-Year Estimates DP03, Census Tract 2, 7, 9.01, 10, 110, and City of Champaign

Figure 8 - Benefits by public agencies and local government for the City of Champaign and area of study

<table>
<thead>
<tr>
<th>City of Champaign</th>
<th>Census tract 2</th>
<th>Census tract 7</th>
<th>Census tract 9.01</th>
<th>Census tract 10</th>
<th>Census tract 110</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Percent</td>
<td>Estimate</td>
<td>Percent</td>
<td>Estimate</td>
</tr>
<tr>
<td>Social Security</td>
<td>15,533</td>
<td>6.6%</td>
<td>11,364</td>
<td>4.9%</td>
<td>11,432</td>
</tr>
<tr>
<td>Mean Social Security (dollars)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>Supplemental Income</td>
<td>853</td>
<td>3.7%</td>
<td>143</td>
<td>5.2%</td>
<td>201</td>
</tr>
<tr>
<td>Mean Supplemental Income (dollars)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>Cash Assistance Income</td>
<td>817</td>
<td>3.6%</td>
<td>1,191</td>
<td>5.2%</td>
<td>3,938</td>
</tr>
<tr>
<td>Mean Cash Assistance Income (dollars)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>Food Stamp Benefits in past 12 months</td>
<td>3,343</td>
<td>7.3%</td>
<td>134</td>
<td>5.6%</td>
<td>5,653</td>
</tr>
</tbody>
</table>

Source: America FactFinder: 2008-2012 ACS 5-Year Estimates DP03, Census Tract 2, 7, 9.01, 10, 110, and City of Champaign

b. The study area and the food desert

Research shows that for millions of Americans, especially people living in low-income communities of color, finding fresh food is not easy\textsuperscript{42}. According to the USDA, food deserts are defined as urban neighborhoods (and rural towns) without ready access to fresh, healthy, and affordable food\textsuperscript{43}.

The USDA, Treasury Department and HHS have defined a food desert as a census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery stores or healthy, affordable food retail outlets. By this definition, census tract 7 within the area of study is defined as a food desert by the USDA (see map 2). Census tracts qualify as food deserts if they meet low-income and low-access thresholds:

1. They qualify as “low-income communities”, based on having: a) a poverty rate of 20 percent or greater, OR b) a median family income at or below 80 percent of the area median family income, AND
2. They qualify as “low-access communities” based on the determination that at least 500 persons and/or at least 33 percent of the census tract’s population lives more than one mile from a supermarket or large grocery store.

Map 2 - Food desert area defined by the USDA

A survey conducted for this study shows that in the study area, full-service grocery stores, farmer’s markets, and other vendors that sell fresh fruits, vegetables, and other healthy foods cannot be found. Map 3 shows the location of stores that sell at least one item of three of the following categories: dairy, animal, vegetable and fruit (see Figure 9 for complete list of items surveyed). It is also notable that of the stores, those that are closest to the 1 mile radius of the study area have less variety of produce (see Amko, El Progreso, CVS on Green in Figure 9) and also their prices are higher than the Chain supermarkets located at a greater distance.
On the contrary, stores that can be found and are easily accessible within the 1 mile radius of the study area are convenience stores and fast food restaurants that mainly sell cheap, high fat, high sugar, processed foods and offer few healthy alternatives. Map 4 shows the location of these stores.

Map 3 - Location of grocery stores in study area
Map 4 – Location of Gas Stations and Liquor Stores

Figure 9 - Fresh food availability chart

<table>
<thead>
<tr>
<th>Store</th>
<th>Milk (1 gallon)</th>
<th>American cheese (8 oz)</th>
<th>Egg (123)</th>
<th>Chicken (per pound)</th>
<th>Tomato (per pound)</th>
<th>Lettuce (per pound)</th>
<th>Potato (pound)</th>
<th>Corn (per pound)</th>
<th>Carrot (per pound)</th>
<th>Apple (per pound)</th>
<th>Peach (per pound)</th>
<th>Strawberries (per pound)</th>
<th>SNAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walmart</td>
<td>$2.49</td>
<td>$2.99</td>
<td>$3.79</td>
<td>$2.50</td>
<td>$1.29</td>
<td>$1.29</td>
<td>$0.50</td>
<td>$0.69</td>
<td>$0.69</td>
<td>$1.29</td>
<td>$1.58</td>
<td>$2.99</td>
<td>yes</td>
</tr>
<tr>
<td>Meijer</td>
<td>$2.50</td>
<td>$3.60</td>
<td>$2.99</td>
<td>$2.90</td>
<td>$1.49</td>
<td>$1.49</td>
<td>$0.80</td>
<td>$0.65</td>
<td>$0.99</td>
<td>$2.20</td>
<td>$3.69</td>
<td>$3.00</td>
<td>yes</td>
</tr>
<tr>
<td>Aldi</td>
<td>$2.49</td>
<td>$2.99</td>
<td>$1.79</td>
<td>$2.49</td>
<td>$1.19</td>
<td>$1.29</td>
<td>$0.60</td>
<td>$0.50</td>
<td>$0.79</td>
<td>$1.99</td>
<td>$3.99</td>
<td>$2.99</td>
<td>yes</td>
</tr>
<tr>
<td>County Market</td>
<td>$2.50</td>
<td>$2.39</td>
<td>$2.99</td>
<td>$2.60</td>
<td>$1.49</td>
<td>$1.29</td>
<td>$0.50</td>
<td>$0.79</td>
<td>$0.99</td>
<td>$2.99</td>
<td>$3.99</td>
<td>$2.99</td>
<td>yes</td>
</tr>
<tr>
<td>Schnucks</td>
<td>$2.59</td>
<td>$3.79</td>
<td>$1.99</td>
<td>$2.99</td>
<td>$1.69</td>
<td>$1.49</td>
<td>$0.60</td>
<td>$0.59</td>
<td>$0.89</td>
<td>$2.19</td>
<td>$3.49</td>
<td>$3.00</td>
<td>yes</td>
</tr>
<tr>
<td>Am lo</td>
<td>x</td>
<td>x</td>
<td>$2.69</td>
<td>x</td>
<td>$2.75</td>
<td>$2.19</td>
<td>x</td>
<td>$0.99</td>
<td>x</td>
<td>$4.50</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>El progreso</td>
<td>$3.00</td>
<td>x</td>
<td>$2.70</td>
<td>$3.59</td>
<td>$1.09</td>
<td>$1.39</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>$4.50</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>CVS on green</td>
<td>$3.35</td>
<td>$3.49</td>
<td>$2.25</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Prepared by Andrea Megens-Berry, March 2014
SNAP (Supplemental Nutrition Assistance Program) is the largest program in the domestic hunger safety net. As it is shown in Figure 10, the percentage of people with SNAP and other benefits in the study area is much higher than the 7.3% in the City of Champaign. Inversely, stores that are part of the SNAP program and have lower prices, and more options for fresh food (see Figure 9) are the ones that are located the farthest from the study area.

**Figure 10 - Comparison of benefits: City of Champaign and area of study**

![Bar chart comparing benefits across different areas.](image)

- **City of Champaign**: 17% with Social Security, 7% with Supplemental Security Income, 7% with cash public income, 7% with Food Stamp.
- **Census tract 2**: 9% with Social Security, 2% with Supplemental Security Income, 2% with cash public income, 2% with Food Stamp.
- **Census tract 7**: 15% with Social Security, 9% with Supplemental Security Income, 5% with cash public income, 5% with Food Stamp.
- **Census tract 9.01**: 23% with Social Security, 12% with Supplemental Security Income, 3% with cash public income, 4% with Food Stamp.
- **Census tract 10**: 21% with Social Security, 12% with Supplemental Security Income, 2% with cash public income, 2% with Food Stamp.
- **Census tract 110**: 29% with Social Security, 16% with Supplemental Security Income, 4% with cash public income, 2% with Food Stamp.

Source: America FactFinder; 2008-2012 ACS 5-Year Estimates DP03. Census Tract 2, 7, 9.01, 10, 110, and City of Champaign.
III – Implementing a System of Urban Farms in the City of Champaign

“Urban agriculture is a way to secure income therefore it has an important role in urban planning. Urban agriculture can also transform vacant land into green spaces which are important for the city authorities”. Daniel Sackey, Agriculture and Food Department, Accraa, Ghana.

The food system should provide healthy, nutritious, and safe food for everyone, grown in a manner that stewards the natural environment. An effective food system would challenge the structural racism and classism that for so long have determined who has access to food. Understanding the economic, social, health and ecological impacts of urban agriculture is enough to justify moving forward to introduce a system of urban food production for the City of Champaign. Wide availability of fresh fruit and vegetables will ensure that the residents can eat well regardless of income.

Champaign has a unique opportunity to improve the well-being of its residents, expand the economy, and create a healthier urban environment by changing the way people experience and interact with food in their everyday lives. The city has recognized the importance of access to food and urban agriculture, as developed the first community plan on sustainability in 2013: Champaign Growing Greener Plan. In Chapter 7 of this plan addresses Food and Urban Agriculture, and includes the following goals and strategies:

**Goal 1:** Ensure that healthy foods are accessible to all residents
- **Strategy 1:** Where access to healthy food is limited, explore partnerships to improve access to healthy foods.
- **Strategy 2:** Explore the potential for a neighborhood supported grocery co-op.
- **Strategy 3:** Develop partnerships with organizations like the Public Health Department to create healthy eating programs that can be shared through City neighborhood groups and City sponsored events.

**Goal 2:** Improve the availability of locally grown foods.
- **Strategy 1:** Create a community-wide group for practitioners working on local and healthy foods that will meet regularly.
Strategy 2: Support the effort to create a food hub, a place where locally grown foods are aggregated for distribution that would serve this area.
Strategy 3: Support the use of the Supplemental Nutrition Assistance Program at local farmers markets.

Goal 3: Advance urban food production
Strategy 1: Explore the potential of a small-scale permaculture program, which included perennials like fruits and nut trees and berry plants, in identified areas, such as the Boneyard Greenway.
Strategy 2: Partner with local organizations, like the University of Illinois Extension Service, to create a program to encourage home gardening.
Strategy 3: Investigate the potential for allowing poultry and bee keeping within the City
Strategy 4: Consider urban agriculture in large scale publicly funded residential developments.
Strategy 5: Create a program for leasing vacant City lots for food production.

Goal 4: Encourage farm-to table food producers in the City’s growth area
Strategy 1: Revise City Zoning regulations to recognize agriculture and agricultural business.
Strategy 2: Develop a program that supports organizations that are addressing local food insecurity through urban agriculture.
Strategy 3: Review City building and development codes that impact urban agriculture.

The City is still in its beginning stages of advocating, promoting and allowing urban farms. In December 2013 the City ordinance was changed and poultry is now allowed within the city limits.

This study focuses on Goal 3 and by analyzing the context of Champaign, identifies potential land where a system of urban farms could be located. It explores the possibility of locating a system of urban farms in a lower income neighborhood with high unemployment and currently classified as a food desert. Coincidently this area also has a high vacancy rate and several of these vacant properties are owned by the City of Champaign. A vacant lot may be a lot of things: an eyesore, a dump, a symbol of American industrial decline, but it also has a lot of potential to change the community with the support of the city.

a. Identifying potential land

The challenge for planners, designers, and policy makers is to consider how gardens serve active participants and the larger community while also acknowledging unique considerations that distinguish such gardens from other types of public space. From the larger study area (census tracts 2, 7, 9.01, 10, and 110) this chapter will focus on the area where the City already owns several vacant lots (census tract 2, 7, and 110) identified as “sample area for system of urban farms” in Map 1.
Repurpose vacant lots to produce food, income and reduce blight

Securing land is usually the first challenge when starting an urban farm project. In most cases, urban farms are located on land that would otherwise be underutilized, like vacant lots, transportation right-of-way, little-used sections of parks, or other underdeveloped land. In this case, the use of vacant lot for urban farming will be explored due to the high concentration of them in the target area.

There are 2,227 vacant properties in the City of Champaign, if we estimate that the average size of each lot is 0.2 acres, this is approximately 445.4 acres to produce food. The highest concentrations of these vacant properties per acre are located north of Springfield Av. and to the east and west of Neil St. corresponding to the study area, being the highest in census tract 9.01 with 0.68 vacant properties per acre (see Figure 11 and Map 5).

According to the 2008-2010 Neighborhood Wellness Action Plan by the City of Champaign, this area continues to be affected by property maintenance issues; this problem can be attributed to the higher number of rentals, residents with limited income, and diminished housing quality. Furthermore, crime and aging infrastructure continues to be a problem in the area. The railroad tracks create a barrier for people getting into and out of the neighborhoods and walkways and viaducts are very dark and unsafe. Map 6 illustrates the negative issues affecting this area.

A vacant lot inventory was developed in a sub-zone of the study area between the North-South railroad line to the West, 5th Street to the East, Bradley Av. to the North, and University Av. to the South. This area is selected because there is a large amount of city owned vacant lots and can serve as a model to study the feasibility and yield of implementing urban farming. Map 7 illustrates this concentration of private and city owned vacant lots. This area also has several parks, private vacant lots, and condemned properties (see Map 7). This large conglomeration of vacant lots gives this area an opportunity to be comprehensively redeveloped, rather than piecemeal infill development.

**Figure 11 -** Vacant rate: Area of study and adjacent tracts

<table>
<thead>
<tr>
<th>Area of study</th>
<th>Adjacent census tracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census tract</td>
<td>Census tract</td>
</tr>
<tr>
<td>2 7 9.01 10 11</td>
<td>3.01 3.02 4.01 4.02</td>
</tr>
<tr>
<td><strong>HOUSING STATUS</strong></td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td>84</td>
</tr>
<tr>
<td><strong>DENSITY</strong></td>
<td></td>
</tr>
<tr>
<td>Area in acres</td>
<td>509.30</td>
</tr>
<tr>
<td>Vacant house per acre</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Source: United States Census Bureau, 2010 Demographic Profile. Census Tract 2, 7, 9.01, 10, 11, 5, 4, 3, 2, 0.00, 12.1.
Map 5 - Concentration of vacant properties per acre

Vacant houses per acre

- 0.03
- 0.11
- 0.16
- 0.22
- 0.25
- 0.27
- 0.35
- 0.40
- 0.61
- 0.63
Map 6 - Issues affecting the area
Source: Neighborhood Wellness Action Plan 2008-2010; Champaign, Illinois
Map 7 - Vacant lot opportunities in sample area
b. Models of urban farms

Urban agriculture can be practiced in many ways and by one individual or a whole community. The more people participating in a common field the more rules and organization it requires to manage the work and the destination of the produce as well as methods to secure the land. This section describes individually and jointly managed gardens and provides existing examples in the Champaign-Urbana area.

a) Individually managed gardens

These urban gardens could be side yards and residents gardens. The main purpose of this model is to supply food for the individual or the family of the farmer. It could be for profit if the farmer decides to sell its produce in the market. Individuals or families will grow vegetables in their home gardens or by leasing an adjacent vacant lot and make intensive use of the parcel.

Precedent: There are many individuals and families in the Champaign-Urbana area that grow food for consumption in their gardens.

b) Jointly managed gardens

When a group of individuals either share a common space for their own urban gardens or work collaboratively and share the produce, these are called jointly managed gardens. This section will determine some differences based on ownership of the land or final purpose of the produce.
1. Community gardening

These are semi-autonomous gardens jointly managed by representatives from the City of Champaign and a committee of represented citizen-gardeners who are responsible for the management and organization of the garden. The gardens are divided into small plots for gardeners’ use and they can choose to sell or consume their produce. The gardening and management rules will be dictated by the City program and applied by representatives of the City and garden. Although all gardens will have the same structure and must apply the same set of rules, there is no link or networking between them.

Community gardens maintain an ambiguous position as both public and private forms. As part of the open-space system, community gardens serve many public functions yet are distinct from traditional parks because they are maintained by participants and they evolve according to community participation and interest. The also serve an array of recreational, social, and environmental benefits.

Precedent 1: The City of Urbana has some plots for rent at the Meadowbrook Park. Any individual can rent and use these plots on a year by year basis and must abide by the Urban Park District’s organic gardening guidelines. There is a $50 fee for a full plot (17’ x 30’) and $30 for half plots (17’ x 15’).
Precedent 2: The Randolph Street Community Garden is a volunteer run project committed to providing an opportunity for residents of the North-end of Champaign to grow their own fresh organic produce. To get access to these plots of 10’ x 6’ there is a $10 yearly fee.

Images of Randolph Street Community Garden taken in October, 2013

2. **Collaborative**

Under this model a group of people gather to share resources and share the production. Participants could be linked based on interest and needs, geographical location, or faith. An association can be independent and responsible for determining its own method of operation and association structure. The common goal is to fight food insecurity, provide education and foster empowerment. The collaborative model can be a nonprofit association that can be associated with emergency food banks, collective kitchens and health services, or could be integrated with an organization that offers a range of social service.

Precedent: Sola Gratia Farm is a partnership of St. Matthew Lutheran Church and Faith in Place to develop a four-acre community farm adjacent to the church on South Philo Road. Sola Gratia Farm will provide fresh, seasonal vegetables for community shareholders and hunger abatement programs over the course of a 26-week growing season. They intend to donate at least 10 percent of production to benefit the Eastern Illinois Food Bank and other hunger related community programs.
3.  For service

These are high-production urban farms focused on empowering people and provide jobs. These enterprises seek to operate, promote, and demonstrate the use of agriculture as a vehicle for job training, employment, and community development. They offer training in all aspects of production and distribution of the farming and in the process prepares the people to reenter the workforce. They often sell their produce to local markets or restaurants, or hold weekly stands for neighbors providing a healthy option in food deserts.

Precedent: Prosperity Garden currently leases two properties from the City of Champaign along North First Street. Through neighborhood farming, Prosperity Garden is dedicated to cultivating a healthy community through education and collaboration. At-risk youth are introduced to career paths through agriculture, marketing, entrepreneurship, nutrition, and the culinary arts. Teens at the R.E.A.D.Y. Program (Regional Educational Alternative for Developing Youth) participate in both classroom instruction and hands-on gardening experiences, and are eligible for part-time summer jobs in the Gardens. Younger children who take part in the Don Moyer Boys and Girls Club have access to a summer Garden Club, which provides weekly gardening and nutrition activities.

![Images of Prosperity Gardens taken in August, 2013](image)

c. System of urban farms in sample area

An urban agriculture system in the north end of the Boneyard Creek area will provide fresh, safe, and local fruit and vegetables, and poultry to the community. Food produced on site will be sold and used within the community and the City at large. The system can create jobs for local youth and adults. Jobs may be associated with lot maintenance or with the creation of a new related business. Map 8 shows a system of urban gardens combining private and city owned vacant lots in the sample area.
Map 8
System of urban gardens
The economic value of community gardens and the importance they have in improving food security and community health have not yet been fully documented in academic literature. To estimate the yield of urban farms, this paper relies on data collected from urban gardeners that volunteered this information based on their record of pounds per crop and the number of plants per crop for the duration of the growing season in various cities of the USA. Figure 12 show the typical yield per square foot of productive garden.

**Figure 12** - Typical yield per square foot of productive garden and average price

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Units of measure</th>
<th>Harvest per sq. foot</th>
<th>Average price in $</th>
<th>Total sale</th>
<th>Months to grow</th>
<th>Number of crops per season (Apr-Sep)</th>
<th>Index $/season/sq. foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceberg lettuce</td>
<td>head</td>
<td>4</td>
<td>1.72</td>
<td>6.88</td>
<td>2</td>
<td>3</td>
<td>20.64</td>
</tr>
<tr>
<td>Cherry tomatoes</td>
<td>pound</td>
<td>6</td>
<td>3.00</td>
<td>18</td>
<td>6</td>
<td>1</td>
<td>18.00</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>each</td>
<td>30</td>
<td>0.62</td>
<td>18.6</td>
<td>6</td>
<td>1</td>
<td>18.60</td>
</tr>
<tr>
<td>Radishes</td>
<td>each</td>
<td>16</td>
<td>0.22</td>
<td>3.52</td>
<td>1</td>
<td>6</td>
<td>21.12</td>
</tr>
<tr>
<td>Snap beans</td>
<td>pound</td>
<td>2</td>
<td>1.72</td>
<td>3.44</td>
<td>2</td>
<td>3</td>
<td>10.32</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>pound</td>
<td>9</td>
<td>1.92</td>
<td>17.28</td>
<td>6</td>
<td>1</td>
<td>17.28</td>
</tr>
<tr>
<td>Carrots</td>
<td>each</td>
<td>16</td>
<td>0.25</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>8.00</td>
</tr>
<tr>
<td>Green peppers</td>
<td>pound</td>
<td>8</td>
<td>1.22</td>
<td>9.76</td>
<td>6</td>
<td>1</td>
<td>9.76</td>
</tr>
<tr>
<td>Eggplant</td>
<td>pound</td>
<td>4</td>
<td>1.22</td>
<td>4.88</td>
<td>6</td>
<td>1</td>
<td>4.88</td>
</tr>
<tr>
<td>Sweet corn</td>
<td>ear</td>
<td>2</td>
<td>0.41</td>
<td>0.82</td>
<td>3</td>
<td>2</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Source: *Cash From Square Foot Gardening, Mei Bartholomew; United States Department of Agriculture, Economic Research Service - Fruit and Vegetable Prices, 2014*

If corn and eggplant are excluded, because they have the lowest harvest per sq. foot rate, the average price is $15.47 per season (Apr-Sep) per square foot. That means that if all 17.85 acres in the sample area were used (which equals 43,560 square feet), an average of 150,282 pounds would be produced per year, yielding average sales of $753,586. By selecting only the most profitable crops, this amount could be increased by about 25%, to $833,300 per season (see figure 13). Furthermore, if each individual takes care of 640 square feet of garden as a part time job, on average, each one of the 68 people could earn $9,900 to $12,000 per season by selling their produce, in addition to the other extra benefits already mentioned from being part of a community of urban gardeners. Figure 13 quantifies the total yield, monetary revenue and people who may benefit from urban agriculture in the sample area.
Figure 13 - Quantifying urban agriculture yield in sample area

<table>
<thead>
<tr>
<th>Total vacant land available</th>
<th>Percentage allocated for urban farming</th>
<th>Total land for urban farming</th>
<th>Yield of produce per square foot per season</th>
<th>Total yield per season</th>
<th>Average price per sq. foot per season</th>
<th>Total income from sale</th>
<th>Minimum people involved</th>
<th>Average earning per person per season</th>
<th>People that will have access to fresh food per season</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.8 acres</td>
<td>85%</td>
<td>17.85 acres (775,368 sq. feet)</td>
<td>1.3 to 5.6 pounds</td>
<td>56,628 to 243,936 pounds</td>
<td>$15.47</td>
<td>$673,873 to $893,300</td>
<td>68</td>
<td>$9,900 to $12,000</td>
<td>347 to 1,496</td>
</tr>
</tbody>
</table>

All these numbers are relative to the kind of crops one chooses and whether or not they can be grown multiple times in one season or even extend their season with green houses or hoop houses. For instance, celery has one of the highest yields at 32,000 pounds an acre while dry beans are among the lowest at 1,400 pounds per acre. Apples produce 25,000 pounds per acre, with peaches and pears yield 31,000 pounds per acre.

An average American eats 418 pounds of vegetables, 275 pounds of fruits, and 32 pounds of eggs. That comes to 693 pounds of produce and 250 eggs per person. Looking at just the amount of fresh fruits and vegetables that Americans eat and ignoring the amount of frozen, dried and juiced fruits and vegetables, the average consumption of fresh produce is 327 pounds per year: 125 pounds of fruits and 202 pounds of vegetables.
As it is specified in its Growing Greener Plan, the City of Champaign recognizes the need to create a program for leasing vacant City lots for food production. To create such a program, it is necessary to review the City codes and revise City zoning regulations to recognize agriculture and agricultural business among other strategies.48

This chapter addresses some of the biggest challenges to urban farming in the city. These includes: the legal access to the land; City zoning and City Building regulations in the City of Champaign; and access to capital.

a. Legal access to land

Mechanisms for securing access to land include squatting, leasing, inclusion in public recreation areas, and ownership by a gardening group, supporting nonprofit, or land trust.49 When gardeners do not own the land, they run the risk of losing years of hard work if a developer wants to purchase that land and there is no protection from eviction. This lack of security makes it urgent to advocate for better land policies to ensure that low-income communities reap some benefit.

Public land access

Leasing: is the most common type of site procurement. The quickest and the least controversial way to gain access to the land is for gardeners to arrange with public or private landowners to donate or rent land at nominal rates, often with the agreement that the gardeners will leave the site in good condition upon the owner’s request. For the owner, being the city, an institution, or an individual, such arrangement allows the site to be used and maintained by others without jeopardizing the possibilities of later development.
The City of Champaign does own several vacant lots but does not have a formal lease agreement to make use of them for urban farming purpose. Since leasing city owned properties will be the most cost efficient to quickly access the land in the proposed area, it is important that the City creates a program for leasing vacant City lots for food production.

**Integrate community gardens into public recreation system:** Community gardens can also be integrated into an undeveloped park property or within existing parks. The garden becomes one more recreational activity, along with playgrounds, sport fields, and dog runs.

The City of Champaign can emulate precedents of this type, such as Meadowbrook Park in Urbana. In this park, any individual can rent and use these plots on a year by year basis and must abide by the Urban Park District’s organic gardening guidelines.

*Important Elements of Public Land Use Agreement*\(^{50}\)

As in any land use agreement, defining the terms of use is very important. These terms are meant to define the rights and responsibilities of both parties: the landowner, in this case the City, and the farmer (see Appendix a. that includes a list of Elements of Public Land Use Regulations and Appendix b. includes Sample Lease Agreement).

**Private land access**

**Ownership of site:** Sites may be purchased by a community group, supportive nonprofit organization, or land trust. Ownership is the best alternative to secure the land for long term gardening, but lower-income neighborhoods may not have the resources and connections to buy their gardens sites.

**Land trusts:** Land trusts can be formed to purchase garden sites or negotiate easements of private land. Usually land trusts establish procedures that ensure that the community gardening group is well organized and attends to ongoing participation and site maintenance. The typical trust agrees to hold the deed, ensure that property taxes are paid or exempt, provide liability insurance, and serve as a communication and reference tool to facilitate operations. In return, the gardening group typically establishes a management structure and agrees to abide by guidelines.

*Important Elements of a Private Land Use Agreement:*

As in any land use agreement, defining the terms of use is very important. These terms are meant to define the rights and responsibilities of both parties: the landowner and the farmer (see Appendix c. that includes a list of the Elements of a Private Land Use Agreement and Appendix d. includes a Sample agreement to Use Property for a Food Garden).
b. City Zoning Regulation and City Building codes

Urban agriculture is not discussed or included in Chapter 37 of the Municipal Code of the City of Champaign. The City zoning ordinance does not have a definition for agricultural use or specialty agro-business. Furthermore, the City Building codes does not regulate the building of structures for large production hoop houses or green houses.

Zoning and Ordinances

Zoning is used by local governments or municipalities to designate permitted uses of land based on mapped zones. It is the zoning code that dictates the specific legal use of the land. Residential areas are often where larger yards and plots of land exist for creation of urban gardens; the current zoning code does not contemplate the use of these residential zones for food production or for agricultural business.

An important legal distinction is made between growing food for your own consumption and growing it for sale. Zoning issues do not usually arise when people simply plant gardens in their yards; even free distribution of produce is not prohibited. Legal issues arise when commercial transactions take place or activities, like noise or traffic, disturb neighbors.

The following uses related to urban farming will have to be included in a revised zoning code:

**Use Classification for beekeeping and chicken keeping:** On December 3, 2013 Champaign City Council passed an ordinance allowing backyard hens within city limits. This is a big step towards promoting urban farming. Beekeeping should also be allowed, as this is a very common and productive practice among urban farmers.

**Compatibility of uses in residential districts:** Nonprofits and for-profits entities engaged in urban agriculture serve a wide variety of community development functions in addition to their agricultural activities. In that case, city regulations and zoning should contemplate temporary sales uses such as retail, outdoor Merchandise Sales and Seasonal Markets in residential districts. Other compatible uses may include Educational, Community Centers, Offices, and Parking.

**Light, community-based food processing facility:** It will be convenient for community members to have access to on-site locations to wash, dry, chill and store produce grown in their community gardens. The city should allow and include regulations in the city codes regarding these practices.

**Food warehousing, processing, packaging and distribution facilities:** Practitioners are also interested in promoting economic development and local jobs through the conversion of vacant industrial properties and buildings into centers for food warehousing, processing, packaging and distribution. If these facilities are allowed by the city in residential zones, they could potentially handle a higher degree of value-added food processing, such as a production kitchen, than the community-based food processing facility.
Composting, soil processing, packaging and distribution: As local agriculture expands, there is a growing need for locally produced compost and soil. Vacant industrial properties and buildings could be converted to this use. The city should contemplate in their ordinance a section that allows the commercialization of compost.

First steps that the City of Champaign can take to promote urban agriculture:51

1. Inventory public lots and vacant private lots in low-income neighborhoods and make that information readily accessible to the public.
2. Authorize contracting with private landowners for the lease of vacant lots.
3. Authorize the use of municipal land for minimum terms long enough to elicit commitment by gardeners (five years) and provide for permanent dedication to the parks department after five years of continuous use as a community garden.
4. Provide for clearing rubble and contamination where needed, and for regular trash collection.
5. Prepare land for gardening by tilling and building raised beds, configuring some gardens for access by disabled gardeners.
6. Provide for access to water without charge to gardeners.
7. Provide compost from locality's recycling programs.
8. Provide tools, hoses and secure storage facilities for tools and other necessary items.
9. Tap resources for training about gardening, including organic methods or pesticide use, and consulting about particular garden problems.
10. Provide technical assistance to support programs with youth, elderly, disabled, low income, and other population depending on neighborhood needs and interests.
11. Provide signage.
12. Network with farmer’s markets, entrepreneurship programs, vocational education, and organizational leadership programs.
13. Provide for liability insurance against personal injury.
14. Permit sale of produce.
15. Provide maintenances of locality.
17. Provide a funding mechanism to cover the locality’s cost in establishing a computer database and mapping programs, property acquisition and maintenance, and technical assistance.

Structures and building related to urban agriculture.52

The building code should define the many types of structures and buildings related to urban agriculture. This section identifies structures and buildings that are integral to the promotion of urban agriculture including structures that are not yet defined in the building code of Champaign.

Livestock related structures: At this time, the only types of livestock permitted in the City of Champaign are chickens. A license must be issued to legally raise hens (no roosters allowed) and
up to 6 hens are allowed. Coops may only be located in the back yard and only residents of
single family and two-family homes are eligible for a coop license. The coop must have a
minimum of four square feet per hen and the run must have a minimum of eight square feet per
hen and be covered on all sides, including the top.

**Accessory storage buildings:** Sheds are commonly used at community garden and urban farm
locations as on-site storage locations for gardens tools and materials. They may also be used in
conjunction with rain barrels and other water storage devices as part of water catchment
systems. Design standards for garages may be needed for accessory buildings larger than a shed
in residentially zoned districts.

**Structures and buildings used for growing crops:** Depending on their size, these structures may
at times be considered accessory and at other times be considered primary. They should have a
standardized codification.

**Rainwater harvesting:** This is of interest on lots where public water is not available for
irrigation. In these instances rain barrels may be attached to sheds or other accessory structures
to catch and store rainwater. It is defined as an above-ground prefabricated storage receptacle
with an automatic overflow diversion system that collects and stores storm water runoff from
the roof of a structure that would have been otherwise routed into a storm drain.

**Razing and fill standards:** Preparing vacant and abandoned land for reuse should be
contemplated in the code. Relevant razing and fill standards may be included to prevent a public
hazard or the creation of a public nuisance. Upon completion of demolition, the premises shall
be filled where necessary with soil or other approved inorganic material and be returned to an
erosion-free and dust-free condition.

c. Access to capital

Once vacant lots are transformed from blight to a land with tomatoes and sunflowers, it is easy to see
the benefits. The economic benefits, however, are much harder to understand. The creation of viable
businesses is the essential next step for urban farming to expand and become a more prevalent part of
our food system. In order to be sustainable, urban farms must be viewed not as charities, but as
businesses that compete in the free-market realm. Innovative business techniques are just as important
in developing the new industry of healthy food as innovative growing techniques are.

For more urban farms to become profitable, they need access to capital, but the traditional methods for
financing farming operations are not available to most urban farmers. The fact is that most urban
farmers don’t own their land and many cannot get loans for start-up capital. Additionally, many urban
farmers when they start are not confident enough in their skill or in their success to risk going into debt
to get the farm started. But as in any business, to get the urban farm off the ground, start-up capital is
needed.
Recommendations to facilitate access to capital

Start small, it is easier to grow bigger than it is to shrink: success build on success

Partner with a developer, many new developers are incorporating urban farms in into their design, a possibility is that every new home in the development will pay a small fee that will go towards the urban farms.

Partner with a city and/or nonprofit, a partnership with a local nonprofit institute makes management of the farm simple and win-win situation for everyone. Cities have land that they have to pay to maintain, the key is that the city understand how it could cost less to create a farm than to mow the grass.

Apply for grants; the US Department of Agriculture has numerous sources of funding to help start or scale up new farming enterprises, like the USDA’s Community Food program

Make the most of volunteer labor, in every community there are people waiting for an opportunity to give their time; this is a very important resource that will benefit the farmers, the community and the volunteer.
V – Summary of general policy recommendations

Accepting the benefits and importance of urban agriculture, such as alleviating hunger and improving child nutrition, improving employment and income, and even helping clean up the urban environment, the question then becomes how to get started. This section will offer some recommendations for the City of Champaign, assuming that they continue to embrace the Champaign Growing Greener – 2013 Environmental Sustainability Plan and their goals regarding urban agriculture.

Use urban agriculture to make suitable vacant space productive for all. The first initiative should be to catalog how much idle space sits in a given time. Unused urban space is a wasted opportunity, and an asset denied to a community’s well-being and it limits city development.

Include urban agriculture as an urban land-use category and as an economic function in the planning system. Urban agriculture is a dynamic land use that adjusts quickly to a city’s growth and development but is not recognized as a valid land-use category in the City of Champaign. To gain the full benefit from urban agriculture activities, this must change.

By matching urban agriculture production systems with compatible open spaces, areas can be defined where urban agriculture is more stable (such as unbuildable areas due to flooding) as well as areas where it may be more temporary (sites awaiting development for example).

Use participatory policy-making approach. Involving a broad base of stakeholders and municipal authorities will result in a more equitable decision-making process that promotes engagement in all levels.

Experiment with temporary occupancy permits for urban producers using private and public open spaces. This solves the key problem of access to land for the urban poor. Temporary occupancy permits can be encouraged by other policy measures to make the lending of available and suitable space attractive to both public and private landowners. For example, property tax reductions can induce landowners to make unused land or space available.
a. Conclusion

Knitting urban agriculture into the urban fabric begins with recognizing its importance to the lives of local people and to the health of the local environment. Municipal authorities can craft policies to address multiple challenges in a comprehensive and equitable way by utilizing the expertise that exists within departments of the City of Champaign, engaged residents and institutions such as the Agricultural Extension of the University of Illinois.

The opportunities that the availability of vacant lots in the City of Champaign provide are within reach and revitalization efforts should be focused to engage and motivate people to improve the community through urban agriculture.
Appendix

a. Elements of Public Land Use Agreement

Land: Specifications of size and location
Rent: Cost to Tenant
Use of Land: Specification of permitted uses and prohibited uses (i.e. sales, tree removal, fires, etc.)
Term: Duration of lease, options for lease renewal, and expected tenure of project on land
Building and Improvements: Clarification of building types prohibited and permitted (i.e. carports, storage, temporary shelters, etc.) and improvements (i.e. fencing, garden beds, landscaping)
Right of Entry: For example, restrictions to farm employees, contract workers, volunteers
Hours of Use: Days and times of activities, clarification of over-night stay
Noise: Expected decibels of noise pollution created
Animals: Use of animals and restrictions thereof
Expected traffic: Estimated number of trips to the site and number of people expected on plot at any given time
Growing Practices: Farmers’ use of tools/machinery and use of pesticides, fertilizer, fungicides, etc. (on the City’s end, this could be a selection criteria; for example projects growing organically could rank higher than projects proposing to use these chemicals)
Environmental Impacts: Management of runoff and water pollution
Water Usage: Agreement on source, use, and payment
Routine Maintenance: Specifies responsibilities of landowner and farmer in maintenance of plot’s appearance and preventing hazards
Subleasing Policy: Permitted/prohibited and where liability for subtenant lies
Garden Produce: Clarification of ownership of produce from the land
Compost: Agreement on use and location of compost pile and perhaps use of landowner’s acceptable yard and kitchen wastes
Payment: Type and amount of payment; can be monetary or in-kind through share of crops
Liability: Two-way release of liability; each party gives indemnity to the other over specific scenarios and legal responsibilities for their respective uses of the land.
b. Sample lease agreement

This simple lease agreement is a starting point. Additional sample lease agreements. For more detailed leases, consult an attorney.

This lease is entered in this ____ day of ______________ between ____________________, landlord, and __________________________, tenant. The landlord leases to the tenant to use for agricultural purposes ______ acres/ square foot of land, and the following building: (list or attach a list) located in the Town of ____________ and County of ____________ located at (address) ____________

The tenant will pay the landlord $________ per year (or other specified time period) with payment to be made as follows: _____________________________. The tenant will also pay all the costs of planting, growing and harvesting crops grown on the land. The tenant will be required to maintain and repair fences, tile drains, and diversion ditches, and make ordinary repairs to maintain buildings and equipment used, and pay for utilities such as electricity and water (if relevant) during the period of the lease. The landlord will pay the taxes, fire insurance on buildings, major repairs or improvements, such as new fence, ponds, drain tiles, diversion ditches, etc.

The tenant will follow recommended conservation and agronomic practices in working the land. The landlord has the right to inspect or enter the property at any time. This lease shall be for ___ years beginning (date) ____________________ with automatic renewal for (how long): _______ (years) unless either party gives written notice to the contrary at least 3 months (90 days) before the expiration of the current rental period. The rental rate may be adjusted annually to account for increases in taxes, insurance or other costs of ownership.

Any differences between the landlord and tenants as to their rights and obligations under this lease that are not settled by mutual agreement shall be submitted to an arbitrator or other such person who has authority to make a final decision. It is agreed that the stipulations of this lease are to apply to and bind the heirs, executors, administrators, and assigns of the respective parties and is made and executed in duplicate.

In witness whereof the parties have signed this lease on this date of ____________________.

Landlord________________________________ Tenant__________________________________
Witness_________________________________ Witness_________________________________

c. Elements of a Private Land Use Agreement

Land: Specifications of size and location
Use of Land: Specification of uses and by whom
Term: Duration of use, protocols for renewal, and farm’s rights if land is sold mid-season
Right of Entry: For example, restrictions to farm employees, contract workers, volunteers
Work Schedule: Days and times of most farming activities with exceptions by landowner permissions

Growing Practices: Farmers’ use of tools/machinery and landowner’s responsibility to restrict activities like use of chemicals in order to maintain the farm’s organic standards.

Water Usage: Clarification of source, use, and payment

Garden Maintenance: Specifies responsibilities of landowner and farmer in maintenance of plot

Garden Produce: Clarification of ownership of produce from the land

Compost: Agreement on use and location of compost pile and perhaps use of landowner’s acceptable yard and kitchen wastes

Payment: Type and amount of payment; can be monetary or in-kind through share of crops

Liability: Two-way release of liability; each party gives indemnity to the other over specific scenarios and legal responsibilities for their respective uses of the land.

d. Sample agreement to use property for food garden

Prepared by the Sustainable Economies Law Center, Oakland, CA to provide guidance and ideas to individuals wishing to enter into an arrangement to use land for food growing. This Sample Agreement does not constitute legal advice, nor will it be applicable to every situation. Each person who uses this Agreement as a model should adapt it to their own purposes, preferably in consultation with an attorney. Many legal issues come up when growing food in urban areas, particularly when that food will be sold. This Sample Agreement does not address every legal issue or scenario, and its thoroughness should therefore not be relied upon.

This Agreement is made between ________________________ (“Owner”) and ________________________________________, (collectively referred to as “Gardeners”). Owner owns a [vacant lot/home] located at ______________________________________________________(referred to as the “Property”).

Gardeners are a loose affiliation of friends with an interest in farming and a desire to plant a vegetable garden on Owner’s Property. Owner supports Gardeners’ desire to grow food, and allows Gardeners to use the Property on the following terms:

1. Agreement: Owner Agrees to allow Gardeners to use the Property for the purpose of growing a food garden. As consideration for the right to use Owner’s Property to garden,

Gardeners agree to:
________________________________________________________________________
________________________________________________________________________ (Examples: “Pay Owner $1.00,” “Pay Owner $200 per month.” or “Allow Owner to consume produce grown on the Property,” etc.)
2. **Section of Property to be Used by Gardeners:** Owner agrees that Gardeners may conduct gardening activities on the portions of the Property described as follows (or shown in the attached Map of Property):

________________________________________________________________________

________________________________________________________________________

Optional (if the Property is also a home): Gardeners acknowledge and understand that Property is Owner’s home. Gardeners agree to respect Owner’s privacy and personal space, and therefore agree not to enter onto portions of the Property that are not designated for use by Gardeners.

3. **When Gardeners May Have Access to the Property:** Owner agrees to allow Gardeners to be on the Property on the following days of the week and during the following hours:

________________________________________________________________________

________________________________________________________________________

4. **Who May Be on the Property and Take Part in Gardening Activities:** Owner agrees that Gardeners may invite guests onto the Property to visit the garden or to help with the garden, as long as at least one of the Gardeners is with the guests at the garden. If Gardeners wish to give anyone else regular and unsupervised access to the garden, Gardeners must first receive Owner’s permission. Owner encourages Gardeners to invite and include neighbors in the garden project. Gardeners may invite neighbors to periodic “garden parties.” Owner may take part in gardening activities as much or as little as Owner wishes.

5. **Use of Produce:** All fruits, vegetables, and herbs grown on the Property will be consumed by the Gardeners, shared with Owner, given to neighbors or friends, or donated to charity. Gardeners will not sell the produce and do not intend to profit from the arrangement. Owner may consume produce from the garden, but agrees not to take more than is reasonably needed for personal consumption.

6. **Design and Appearance of the Garden:** Gardeners agree to maintain a tidy appearance on the Property, which includes removing dead plants and leaves and clearing debris. Gardeners agree to regularly water, weed, cultivate, and otherwise maintain the garden. Gardeners will adhere, roughly, to the design and layout provided to Owner and attached to this Agreement.

7. **Construction of Raised Beds:** Gardeners may construct raised beds on the Property. If the Owner so requests, Gardeners shall remove the raised beds on the termination of this Agreement.

8. **Construction of Greenhouses:** Gardeners may, if they wish, construct one or more small greenhouses or hoop houses on the Property. If any permits or approvals are required for the construction of any greenhouse, Gardeners must see to it that such permits and approvals are obtained prior to construction. If the Owner so requests, Gardeners shall remove any greenhouses on the termination of this Agreement.

9. **Where Gardeners Will Store Tools and Other Items:**
10. Arrangement for Access to Water:

_________________________________________________________________________

11. Gardeners’ Access to Bathrooms:

_________________________________________________________________________

12. Arrangement for Managing Waste and Compost:

_________________________________________________________________________

13. Arrangement for Parking:

_________________________________________________________________________

14. Use of Pesticides, Herbicides, and Other Chemicals: Gardeners agree to avoid use of chemicals, and use organic farming methods as much as possible. Prior to using any nonorganic pesticides or herbicides, Gardeners shall consult with Owner and receive Owner’s permission.

15. Testing and Remediation of Soil: Owner warrants that, to Owner’s knowledge, nothing toxic has been dumped and lead-based paints have not been used on the Property. Gardeners agree to conduct a standard soil test through the UMass Amherst Soil Testing Lab. Should dangerous toxins or heavy metals be found in the soil, then this Agreement will be suspended and Gardeners will not begin gardening until the Owner and Gardeners feel satisfied that the soil has been remediated or that Gardeners have found a way to avoid plant contact with contaminated portions of the soil.

16. Animals: Unless and until Owner agrees to allow animals on the Property, Gardeners agree not to keep bees, chickens, goats, or other kinds of animals on the Property.

17. Avoiding Nuisance: Gardeners will take care to ensure that water run-off, dust, visitors, and noise do not bother neighbors. Should neighbors complain that the gardening activities are a nuisance, Gardeners agree to cooperate with Owner to find a solution that will reduce or eliminate the nuisance.

18. Costs: Unless otherwise specified or agreed to by the parties, Gardeners shall be responsible for all costs related to the garden, including but not limited to, soil, tools, water, seeds, seedlings, and fertilizer. Owner shall be responsible for the following costs:

_________________________________________________________________________

19. Acknowledgment of Risks: Gardeners acknowledge and understand that there are risks and dangers involved in entering onto the Property for the purpose of gardening. This includes, but is not limited to: risk of injury from lifting heavy objects, falling or tripping on uneven surfaces or debris, risk of food borne illness arising from eating vegetables, strain from digging, bending, kneeling, and so on. Gardeners assume all risk of loss, injury, and illness, however caused, arising in connection with gardening on Owner’s Property.

20. Reduction of Risk: Gardeners will take care to remove hazards from the Property, including but not limited to holes, sharp objects, or items that could cause people to trip and fall. Gardeners will use care
in lifting, using ladders, and other activities that could result in strain or injury. Gardeners will carefully supervise any visitors to the Property, especially if visitors are children. (Optional: Prior to beginning to garden on the Property, Gardeners agree to construct fencing around the perimeter of the Property, at Gardeners’ own expense.)

21. **Agreement to Release Owner from Liability:** As consideration for the privilege of gardening on Owner’s Property, Gardeners agree not to make a claim against or sue Owner for injury, loss, or illness that Gardeners may experience in connection with gardening in Owner’s yard. Gardeners agree to indemnify, hold harmless, and defend Owner from all claims, liability, or demands that Gardeners or any third party may have or in the future make against Owner for injury, loss, or damage arising from the gardening on Owner’s Property or consuming food grown on the Property. This is intended to be a complete release, discharge, and waiver of any and all actions, causes of action, or lawsuits against Owner arising in connection with Gardeners’ presence on Owner’s Property for gardening purposes.

22. **Insurance:** Gardeners agree to carry the following insurance in connection with their activities on the Property: _________________________________________________________________

Owner agrees to carry the following insurance in connection with the Property:

_____________________________________________________________________

23. **Damage to the Property:** Should Gardeners’ activities result in any damage to the Property or to structures on the Property, Gardeners agree to repair such damage at Gardeners’ own expense, or Gardeners agree to compensate Owner for the value of property damaged.

24. **Handling Disputes:** If a dispute arises between Owner and Gardeners, and that dispute cannot be resolved through discussion, then parties agree to attend at least one mediation session. Parties will share the cost of the mediation.

25. **Duration of this Agreement:** This Agreement will be effective and Gardeners may begin gardening on _____________________ (date). This Agreement will terminate on _________________________ (date), unless the Agreement is terminated sooner by Owner or Gardeners. When this Agreement is terminated, Gardeners will cease to garden on the Property. Alternatively, Gardeners and Owner may agree to renew this Agreement at any time and for any duration they choose. Such renewal will be agreed to in writing.

26. **Termination by Owner:** Under the following circumstances, Owner may terminate this Agreement early, so long as he/she provides three months’ notice of termination to the Gardeners:

a. Owner decides to sell or develop the Property;

b. Owner or Gardeners are found to be in violation of the law as a result of the gardening operation;
c. Gardeners fail to comply with the terms of this Agreement, even after their failure to comply is pointed out to them, and they are given a reasonable time to correct the problem; or
d. _______________________________________________________________________

27. Termination by Gardeners: Gardeners may terminate this Agreement at any time with two weeks’ notice to Owner.

28. Responsibilities and Rights on Termination: At the expiration or termination of this Agreement, Gardeners will remove all of Gardeners’ possessions from the Property. Owner will not require removal of the plants, but Gardeners may remove them if they plan to plant them elsewhere. Gardeners may remove raised beds and greenhouses, and must do so if the Owner requests that they are removed. If Gardeners brought soil onto the Property for use in the garden, Gardeners may remove that soil upon termination of this Agreement. Gardeners will leave the Property in tidy condition.

By signing below, parties agree to adhere to the terms and conditions of this Agreement.

Owner Signature: _______________________________ Date: __________________

Print Name: _______________________________________________________

Gardener Signature: _______________________________ Date: __________________

Print Name: _______________________________________________________

Gardener Signature: _______________________________ Date: __________________

Print Name: _______________________________________________________

Gardener Signature: _______________________________ Date: __________________

Print Name: _______________________________________________________
References


2. United States Census Bureau, 2010 Demographic Profile


14. Fox, 21

17 Fox, 27n,


41 According to the 2011 Federal Poverty Threshold, a single person earning $11,484 and a family of four earning $23,021 is considered to be living in poverty.


45 United States Census Bureau, 2010 Demographic Profile


53 Chapter 7, Article I, Section 7 to 19 of the Municipal Code of the City of Champaign
