

# THE GIFT OF GOOD, VACANT LAND

## URBAN AGRICULTURE AND REDEVELOPMENT IN THE CITY OF BALTIMORE

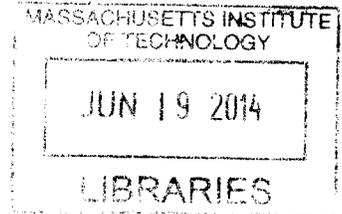
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## URBAN AGRICULTURE AND REDEVELOPMENT IN THE CITY OF BALTIMORE

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Andrew Cook

Submitted to the Department of Urban Studies and Planning on May 16, 2014 in partial fulfillment of the requirements for the degree of Master in City Planning.

### ABSTRACT

Urban agriculture in US cities has historically been treated as an interim land use, deemed only appropriate when real estate markets do not support the development of vacant land. However, urban agriculture in the 21st century has emerged in an era when cities have begun to embrace sustainability as a guiding principle, creating a window of opportunity for urban agriculture to become a more permanent aspect of city life. Additionally, this era of urban agriculture has also seen the emergence of commercial urban farms that seek to engage local economies in a way not seen in prior iterations of the practice. This has allowed urban agriculture an entry into the realm of economic development, perhaps the most significant driver of city growth. Because of these two factors, cities have begun incorporating urban agriculture into their land use planning efforts. However, many still treat it as a temporary land use.

This is the case in Baltimore City, where two programs have sought to encourage urban agriculture as a temporary use on city-owned land: Adopt-A-Lot and the Homegrown Baltimore Land Lease Initiative. These programs have supported a blossoming of new farms and gardens, which has in turn led to the articulation of three types of urban farm: commercial farms, community farms, and demonstration farms. All types contribute to sustainable development in different ways, but by limiting the land tenure offered through these programs to short term leases and license agreements, the city is hobbling their ability to be truly sustainable, economically, environmentally, or socially. The city is doing this out of a bias towards traditional development over sustainable development.

In this essay, I argue that treating urban agriculture as a permanent land use is the only way to make it an effective tool for sustainable development. In order to do this, the city of Baltimore needs to zone for urban agriculture, increase opportunities for farms in city parks, and establish processes for transferring ownership of vacant land from the city to urban farms.

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## PROLOGUE

On June 19, 2013 the collective members of Baltimore Free Farm were facing the prospect of losing a third of their farm to a housing developer. The city had just announced that two of the six city-owned lots the group had been farming since 2010 were about to be sold, and the collective was frantically trying to stop the sales. They had amassed hundreds of signatures from supportive neighbors, enlisted the help of local city council members, and were even raising money to put in their own competitive bid for the parcels. With the bid submitted, they waited nervously for the city's decision.

That same day, Baltimore City Mayor Stephanie Rawlings-Blake was at a dedication ceremony for Strength To Love Farm, a new urban farm on another piece of city-owned land in a neighborhood called Sandtown. The farm was being developed as a part of the Homegrown Baltimore Land Lease Initiative, a project aimed at creating new urban farms in the city. The initiative is a part of Rawlings-Blake's Vacants To Value program, a citywide effort at redeveloping vacant lots and buildings.

A television reporter at the event asked the mayor if it seemed counter-intuitive to be dedicating a new urban farm while the city was attempting to sell off an existing one. The mayor replied, "Believe you me, we have plenty other space." She added:

The point of this Vacants to Value initiative is to develop land that does not have potential for development. This land does not have development potential for the near future. When it does, and as our community grows, we'll look to do the same thing there, and look for other opportunities for urban agriculture. We always look for the highest and best use for city-owned property (Dacey 2013).

"Highest and best use" is a concept that considers what development is legally allowable, physically possible, and financially feasible for a site. Municipal officials award "highest and best use" to whatever use meets those criteria while producing the most profit, typically for the developer. This type of valuation leaves little room for considerations of community or ecological benefits, and favors building in ascending real estate markets. By invoking the highest and best use concept, the mayor implied that profitability was the primary criteria the city would use for valuing its vacant land. It therefore came as a surprise when, two weeks later, the city announced it would be selling the parcels at Baltimore Free Farm to the farm collective, not the developer. This was the first time the city had sold land to an urban farm. Some wondered if this was a precedent in the making.

## INTRODUCTION

Cities all over America are trying to figure out how to harness the potential of urban agriculture (UA). This issue is of particular relevance in many post-industrial “shrinking cities,” where population decline and subsequent housing demolition has made vacant lots abundant. Once vacant, the lots continue to contribute to decline by inviting illegal dumping, blight, and sometimes crime. Baltimore City is currently home to roughly 14,000 vacant lots, about 6,000 of which are owned by the City (BOS 2010). Its reputation for blight and crime is among the worst in the country.

The most common type of UA, a ground-level farm or garden, puts vacant lots to use. Such farms create order from disorder and bring productive activity to a space. The presence of watchful farmers and community members discourages illegal activity and can thereby change perceptions of a block or neighborhood. Advocates also point to UA’s benefits to public health in the form of fresh food access, its ecological benefits as a storm water or carbon sink, and even its benefits for community building and real estate values.<sup>1</sup> In the city of Baltimore, these attributes have led city officials to adopt UA as a tool for both “sustainable development” and “neighborhood revitalization.” This is evidenced by the collaboration between the Baltimore Office of Sustainability and the

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<sup>1</sup> In their 2008 report “The Effect of Community Gardens on Neighboring Property Values,” Ioan Voicu and Vicki Been find evidence that in New York City, community gardens have a statistically significant positive impact on the sales prices of properties within 1,000 feet of the garden and that the impact increases over time. They also find evidence that higher-quality gardens have the greatest positive impact, and that gardens have the greatest impact in the most disadvantaged neighborhoods.

Department of Housing and Community Development (DHCD) to create the Homegrown Baltimore Land Leasing Initiative, a program aimed at leasing vacant, city-owned land to urban farmers. This program, coupled with the DHCD's Adopt-A-Lot program, are the two primary ways urban farmers are gaining access to land in the city.

Having access to land is critical to urban farms, but they face stiff competition from more traditional urban land uses, like housing. Even in a shrinking city like Baltimore, a preference for traditional development is implied by the fact that UA is treated as an interim, or temporary land use. Through their short-term land access agreements, both Adopt-A-Lot and the Homegrown Baltimore Land Lease Initiative treat UA as a temporary land use. This permits UA to function as a tool for neighborhood revitalization insofar as it can help eliminate blight, create "buzz" in an area, and thereby attract new residents and businesses. But as Mayor Rawlings-Blake explained, these farms will ultimately be replaced by a more profitable use when the real estate market improves. Doing so, however, would eliminate the contributions an urban farm makes as a form of sustainable development.

The Baltimore Sustainability Plan defines sustainability as "meeting the current environmental, social, and economic needs of our community without compromising the ability of future generations to meet these needs." (BOS 2009) Following this, sustainable development can be understood as development that is beneficial (or at least harmless) to the environment, fosters equitability among the people it serves, and contributes to the functioning of the economy, all

without creating negative externalities for our children to deal with in the future. While this is a tall order for development of any kind, UA fits this definition perfectly: it reduces the environmental impact of cities by diverting food waste into compost and stormwater into irrigation; it fosters equity in cities by addressing disparities in fresh food access; when operated as a commercial endeavor, it contributes to the local economy through produce sales and by providing green jobs and training. Over time, UA also rejuvenates urban soils, leaving a gift of better land to future generations. By planning to replace urban farms with traditional development when the market allows, the city is planning to undo all this work. By its very definition, treating UA as a temporary land use falls short of anything that could be considered sustainable.

Nonetheless, American cities like Baltimore have thus far used the “highest and best use” rationale to treat UA as an interim activity, designing policies that provide land *access*, but fall short of offering secure land *tenure* to UA projects. Tyler Brown is the manager at Real Food Farm, one of the city’s largest urban farms. He sees the temporary use approach as shortsighted.

[This is] seemingly the biggest problem with Adopt-A-Lot or [the Land Lease Initiative]. It’s [DHCD] owned land, and they like the transitional use, but long term they want to be open to development. People coming back to the city is good, we need to increase that, but we also need to think “is this farm a long term asset to the community or just something that will help people move in?” We can’t just destroy it if it helps people

want to come back in. We have to think about how is it a long-term part of the landscape of the city (Brown 2014).

Of the thirteen urban farms in Baltimore, ten operate in whole or in part on city-owned land. The same can be said of the vast majority of the city's more than 70 community gardens. In other words, nearly all UA in the City of Baltimore is taking place on city-owned land, rent-free. While this demonstrates a substantial effort on the part of the city to promote UA, this strategy displays a bias towards traditional development. By treating UA as a temporary land use, the city has allowed a traditional, pro-growth agenda to handicap an otherwise promising strategy to bring life back to the city in a sustainable way.

In the remainder of this essay I explain the rationale behind treating UA as a temporary or permanent land use, and how those treatments affect the viability of urban farms, and by extension, the sustainability of the city as a whole. I find that in the 21<sup>st</sup> century, UA is better poised to become a permanent urban land use because of its increased commercialization, and the adoption of sustainability into urban agendas. Through an examination of the Baltimore City programs supporting UA, I identify the ways the city is still treating UA as a temporary land use by failing to provide secure land tenure agreements to urban farmers, thereby laying the groundwork for future conflict between urban farms and developers. Between August 2013 and April 2014, I visited and spoke with over a dozen urban farmers in Baltimore City in order to identify how their projects functioned as either "sustainable development" and/or "neighborhood

revitalization”, and in what ways city policies had influenced the results. I find that city programs have fostered a proliferation of urban farms, which have splintered into three categories: commercial farms, community farms, and demonstration farms. All three types of farms cite land security as crucial to their ability to contribute both to sustainable development and revitalization in the city, but suggest different approaches to land security based on farm type. Finally, I identify land security as central to formalizing urban farms as a permanent land use, and explore precedents and possibilities for ways the city could adopt a more truly sustainable approach to urban agriculture.

## URBAN AGRICULTURE v. THE GROWTH MACHINE

Although urban agriculture has enjoyed a resurgence of popularity in the twenty-first century, the practice is as old as cities themselves. The raised bed method for instance, a staple of contemporary urban farms, is traceable to 19<sup>th</sup> century Paris. Only when the invention of automobiles allowed for fast shipping over great distances did farms retreat to rural areas. For evidence of this relationship, one needs only look to Cuba: when the collapse of the Soviet Union led to a severe fuel shortage there, urban agriculture in Havana experienced an immediate renaissance.

Despite its long history, UA is frequently treated as a temporary land use in cities. This is likely due in part because it involves little in the way of infrastructure and so is easily removed. This can't be the only reason, however:

one could say the same thing about parking lots, but in most cities their presence is sacrosanct. More likely, UA has been historically treated as a temporary use because of its perceived lack of a role in the economic growth machine. And in fact, until recently, UA has typically taken the form of backyard or community gardens, in which growers are raising food for themselves, not for sale. This kind of activity is not in keeping with what Harvey Molotch describes as the city as a “growth machine” (Molotch 1976), in which the primary interest of city government is to facilitate economic development. Under such a regime, the parking lot can demonstrate its value by generating revenue and accommodating the vehicles of a theoretically growing workforce. In so doing, it plays a clear role in the day-to-day business activities of a city. The community garden can do no such thing. It generates no revenue and actually reduces the need of a gardener to spend money on food.

The fact that gardening reduces a gardeners need to spend money is also central to why UA has historically been perceived as a temporary phenomenon. Throughout the 20<sup>th</sup> century, the popularity of UA in American cities has risen and fallen in tandem with economic downturns. UA flourished during the Great Depression, peaked with the victory gardens of the World War II era, and fell off sharply afterwards. It flourished again during the recession of the 1970’s in the form of community gardens in blighted neighborhoods. In both cases, UA was practiced as a way to increase ones self-sufficiency during times of economic hardship. Self-sufficiency, however, is not a value supported by the growth machine model, which requires increasing consumption to support increasing

economic growth. It was therefore the desire of cities to convert land used for UA back to more profitable uses when the economy recovered. This cycle served to reinforce the perception of UA as a temporary land use, and guided the policies that would treat it as such. In New York City, this took the form of GreenThumb, a program begun in the 1970s that allowed community gardens temporary use of city-owned vacant land. The program was so successful that by 1998, there were approximately 700 community gardens operating on land owned by New York City. In 1998, Mayor Rudy Giuliani placed all 700 of these sites up for sale to private developers, sparking protests and lawsuits from gardeners in all five boroughs. Some gardens were quickly purchased by land trusts backed by celebrity funding. But the conflict lasted four years, during which gardeners were arrested for unsuccessfully attempting to prevent bulldozers from razing their gardens. In 2002 an agreement was finally reached allowing for the preservation of 198 gardens through land trusts and the development of 110 others.<sup>2</sup>

This episode illustrates how treating UA as a temporary land use allows pro-development forces to capitalize on its vulnerability. On the other hand, the New York City case also shows the desire on the part of citizens to protect UA in their communities. Although Giuliani managed to sell off 110 community gardens, he also managed, albeit unwillingly, to usher 198 of them into permanent land trusts.

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<sup>2</sup> Of the remaining 400 gardens, 200 were operated by the Parks Department and the public school system, and would continue to be so. The other 200 gardens were either granted to the parks department or sold to non-profits.

Although the most recent resurgence of UA in American cities also corresponds with an economic downturn (the recession that began in 2008), this era is different for two significant reasons, both of which may create a more conducive environment for treating UA as a permanent land use.

The first reason is the rise of commercial urban farms. Commercial urban farms are distinct from community gardens in that they grow food for sale, instead of personal consumption. The rise of commercial UA is a recent phenomenon: Baltimore City is home to thirteen commercial farms, all of which have started since 2005. One in particular, Big City Farms, sees job creation as a central mission. According to director Ted Rouse, Big City Farms is proving “the growing model of producing \$150,000 in sales per half acre farm, and employing two to three people full-time, growing organically.” (Rouse 2014) Projects like Big City Farms have allowed UA an entry into the realm of economic development. If urban farms can be profitable businesses that also create jobs, city leaders may better understand their value within the “growth machine” paradigm. However, commercial urban farm models like Big City Farms often require large up-front capital expenditures to get started. When urban farms own their land, they can leverage that as equity to get loans. Rouse, who is also a real estate developer, sees leasing land as a roadblock for funding to expand Big City Farms:

The private capital folks are urging us to find land we can own as an added benefit. It remains to be seen if they will close without the land

ownership. The numbers support investment without land ownership, but it's very difficult. The Farm Credit Bureau meant to loan to farmers is telling us they won't loan to us unless we own land (Rouse 2014).

In this way, the growth of commercial urban farms may be stymied by policies that continue to treat UA as a temporary land use. If cities want to maximize the economic potential of these farms, policies that support land ownership are preferable.

The second reason that UA may become more permanent in 21<sup>st</sup> century cities is the emergence and institutionalization of sustainable development. The modern era of UA is the first to coincide with a broadly accepted urban environmental ethos. By making sustainability a priority, cities have begun to evaluate projects not only by their economic development potential but also by their social and environmental impacts. Because UA is so well suited to a sustainable development agenda, municipal sustainability plans frequently incorporate it into their land use strategies, albeit still as a temporary use. However, if capturing the benefits of UA is important to sustainability today, it would stand to reason that it will also be important tomorrow. When the interests of future generations are taken into account, treating UA as a permanent land use is the logical choice.

## SUSTAINABLE DEVELOPMENT IN A SHRINKING CITY

Baltimore City's population has been in decline since the 1950s. In addition to increased vacancy, a shrinking population means a shrinking tax base, and therefore less money for public services like schools and police. Combined, these factors contribute to the wicked problems of poverty, crime, and disinvestment in Baltimore and similar cities. But shrinking cities also present a unique set of opportunities. Low rents and abundant space have made Baltimore a haven for artists and musicians, which have helped to characterize the city as a place for creative experimentation. In 2002, Baltimore sought to capitalize on this by designating a neighborhood already known for arts and culture as the Station North Arts and Entertainment District, and offered a variety of tax incentives for artists and art-related businesses. The goal was to revitalize the neighborhood by building on the momentum of a grassroots art community. A decade later, it would appear the strategy is working, insofar that dozens of new businesses have opened in the area, and housing is being renovated at a breakneck pace. However, criticisms of gentrification are as common in Station North as artisanal coffee. The Copycat building is a live/work warehouse in Station North that has been predominantly artist housing for three decades. The building has a reputation for creative activity, which has earned it an iconic status in the neighborhood. Since the establishment of the Arts and Entertainment District, rents at the Copycat have increased dramatically. According to the building's website, a studio apartment there recently rented for \$1,375/month, roughly the

cost of two-bedroom rentals in similar areas. If artists and other low-income residents are eventually priced out of the neighborhood, the social equity imperative of sustainable development will have been ignored.

Vacancy in shrinking cities also provides ample space for the development of UA. This makes shrinking cities uniquely positioned to be the centers of innovation for UA and other sustainable development practices that can flourish where market competition does not demand another high-rise. But by creating programs that only support UA as a temporary use, Baltimore is using it as it did the arts in Station North: as a means to an end of economic development. If this UA strategy is successful at sparking economic development, the city will eventually have to decide if there is a higher and better use for the land UA occupies. The question then facing government leaders of shrinking cities is will they follow the traditional economic growth models that led them to where they are today, or will they re-imagine their cities as places altogether different, where low development pressure can allow sustainable development to happen on a meaningful scale? If they choose the latter, it is critical that these cities craft policies that encourage long-term investment in sustainable practices like UA. In Baltimore, developing such policies is currently a work in progress.

## BALTIMORE'S URBAN AGRICULTURE POLICY ENVIRONMENT

The modern era of urban agriculture has its roots in the community gardening movement of the 1970s. In Baltimore, this took the form of a program

called City Farms. Begun in 1978, City Farms is a community garden network run by the Department of Recreation and Parks that offers plots in community gardens on city-owned land. The program manages over seven hundred lots in twelve locations throughout the city, most of which are in public parks. This has insulated the gardens from development pressure, allowing the program to be largely unchanged in over thirty years.

While City Farms emerged well before “sustainability” was a household term, the more recent UA programs stem directly from an increased awareness of sustainable development. Baltimore’s first sustainability plan, published in 2009, lays out goals for sustainability in the city and strategies to meet them. The second goal under the category of “Greening” is to “establish Baltimore as a leader in sustainable, local food systems.” To that end, the plan recommends increasing the percentage of land being used for urban agriculture in the city. Abby Cocks, environmental planner for the Baltimore Office of Sustainability (BOS), explains how this strategy can address both a shortage of local food and an abundance of vacant land:

We’re interested in growing more local food, but we also have a problem with vacancy... [Vacant lots] cause blight and drag down the neighborhood around them. So whenever we can find productive uses we want to do that. There’s also the potential for jobs, education opportunities, and putting money into the local economy with urban agriculture (Cocks 2014).

Not only are vacant lots contributors to blight and crime, but they are also a financial burden on the city. It costs the Department of Public Works an average of \$2,000 annually to maintain each lot (BOS 2010). With roughly 6,000 vacant lots on their hands, that amounts to \$12 million annually. But according to the Baltimore City Board of Estimates, the department allotted only \$4 million to vacant lot and building maintenance in 2013 (BCBE 2014), apparently leaving \$8 million of maintenance undone.

Apart from maintenance, managing vacant land is the purview of the Department of Housing and Community Development (DHCD). In an effort to address vacant land in Baltimore, the DHCD launched the Vacants To Value Program in 2010. Vacants To Value is a citywide effort primarily aimed at redeveloping city-owned vacant buildings or lots. The program includes targeted demolitions, improved code enforcement, and a streamlined effort to sell unwanted city property to residents and developers. The idea behind this strategy is to focus energy on stabilizing neighborhoods with low market values, but promising possibilities for revitalization.

In practice, Vacants to Value is an umbrella for a host of smaller programs. One such program is the Homegrown Baltimore Land Lease Initiative, a collaboration between the BOS and the DHCD. Its mission is to lease city-owned land to urban farms. The program began in 2011, and as of April 2014 has awarded leases to two projects, with a third near settlement. So far, the

leases have all been for five years, with a two-year notice to vacate, making them de-facto seven-year leases.

The Land Lease Initiative can be understood as a more robust, farm-centric version of an older program called Adopt-A-Lot, also under the Vacants To Value umbrella. Originally under the purview of the DPW when it was founded in 1973, that program's mission was to find citizen-stewards for vacant, city-owned land. This was a good thing from the DPW's perspective, as they no longer had to spend the money and manpower on maintenance. Through the program, interested citizens could enter into a one-year license agreement with the city that allowed them to steward their lot as green space. However, the agreement was not a lease, and the city maintained the right to evict citizens from the lots with only thirty days notice. Nevertheless, it became Baltimore's de-facto ground-up greening strategy: by 1999, there were 200 adopted lots in the city (P&PF 2000). The DPW did not consider the program a priority, however, and offered little oversight or support to participants.

In 2010 the DHCD took over the Adopt-A-Lot program and made several key improvements. Among them was the option to apply for a five-year license agreement after proving success in a first year of adoption, and a commitment from the DHCD not to evict food-growing projects before the end of a growing season. But perhaps most importantly, the DHCD strengthened the program by creating an online database of available and adopted lots. This database made it far easier for citizens to find out what lots near them were available, and to learn how to adopt them. It also spurred the first real effort at monitoring the program,

a task now under the purview of the Parks and People Foundation, a nonprofit greening organization that works closely with the city. Since the DHCD took over managing the program in 2010, the number of adopted lots in the city has jumped from 200 to over 800.

While the creation of the Land Lease Initiative and the modifications to Adopt-A-Lot have created more opportunities to start urban farms in Baltimore, the programs still treat them as an interim use by limiting the allowable time frames for farming. This can be understood in contrast to the decision made in Cleveland in 2009 to create urban agriculture zoning districts, in which UA is the only allowable land use. By prohibiting any other type of development, UA is treated as a permanent use, at least until a major zoning rewrite occurs. Land use lawyer Catherine LaCroix explains that by taking this step, “the city seeks to ensure that urban gardens are established as a goal in themselves, not as a holding strategy until it is time for residential or commercial building construction” (LaCroix 2010). Parcels zoned as “urban garden district” have typically been downzoned from residential or industrial categories, possibly reducing their dollar value or economic development potential. By creating such a zoning district, Cleveland has taken a gamble that in certain circumstances UA can provide more value for a community than traditional development. This is a leap of faith the city of Baltimore has yet to take. As Abby Cocke explains of the decision to set the five-year limit on the Land Lease Initiative,

A lot can change in five years...and acre parcels of flat open land are really attractive for development. That's sort of the ideal situation: to put big mixed use housing and retail development on [these sites] would bring in a ton of tax money to the city as well as jobs and housing for people... And at this point, where [urban agriculture] is a bit more experimental, we want to give the farmers as long as they need to get a return on their money, but not necessarily tie the land up indefinitely (Cocke 2014).

Here we see the city's rationale for treating UA as a temporary land use: so as not to stand as an impediment to increased tax revenue somewhere in the future. In truth, after decades of disinvestment and perpetual budget shortfalls, no one could blame the city government for desiring more tax revenue. On the other hand, treating UA as a permanent land use would only prevent a small portion of Baltimore's vacant land from being developed as something different. As of 2014, there are roughly 14,000 vacant lots in Baltimore, but only thirteen recognized urban farms. Even if an urban farm occupying five vacant lots were permanently established in each of the more than 200 neighborhoods in the city, there would still be roughly 13,000 vacant lots left. While not every vacant lot has the same development potential, it is helpful to recall Mayor Rawlings-Blake's assertion about land availability: "Believe you me, we have plenty other space."

Determining development potential of vacant lots is exactly what the Vacants To Value program has attempted to do. It uses a market value analysis in order to classify the development potential of census block groups on a

spectrum from “competitive” to “distressed.” According to the Vacants To Value literature, the strategy for dealing with distressed areas is to target them for large-scale redevelopment in the long term, but temporary holding strategies in the short term. The DHCD website explains further:

In areas where the scale of blight far exceeds development demand for housing for the foreseeable future, Baltimore Housing will focus on maintaining, clearing and holding-or "land banking"-vacant property for future use. The strategy includes targeted demolition, boarding and cleaning, and creative interim uses including creating new community green space where demand for housing doesn't yet exist (DHCD 2014).

So far, both of the sites leased to farms through the Land Lease Initiative have been in these distressed areas. Based on the strategies outlined by the DHCD, it can be concluded that these farms are a form of temporary land banking, and not a long-term commitment to UA. The city therefore has placed its bets on UA serving to aid revitalization in these areas, but if revitalization is successful, it's unlikely that the farms will be permitted to stay.

The case of Brentwood Gardens serves as a useful example of how an improving real estate market usurps UA. The 2014 season will be Brentwood Garden's last. After 25 years as a community garden, the two blocks it occupied on Brentwood Street will become a new artist-housing complex. When Dale Hargrave first adopted these lots, the surrounding neighborhood of Greenmount

West was notorious for violence and drug trafficking, and plagued by high rates of vacancy.<sup>3</sup> At first, Hargrave just wanted to prevent illegal dumping and drug dealing from happening on his lots. But the civic-minded Hargrave eventually became president of the New Greenmount West Community Association, and has tirelessly advocated for city reinvestment in the entire neighborhood. A major response from the city came in 2002, when Greenmount West was designated a part of the Station North Arts and Entertainment District, making it subject to a variety of tax incentives for arts businesses and sparking renewed interest from developers. In 2013 a deal was struck to build the 69 unit affordable artist-housing complex known as City Arts II. The garden-to-housing transition is in keeping with priorities outlined in the Greenmount West: Vision Plan. On the subject of open space, it advocates for maintenance in the short-term, but the construction of new dwelling units in the long-term (GW Plan 2011).

Hargrave gained access to the site where he created Brentwood Gardens through the Adopt-A-Lot program. Around 100 of the adopted lots in the program are also listed as “for sale” through Vacants to Value. Because the city is actively trying to sell these properties, these Adopt-A-Lot projects could all one day encounter the same fate as Brentwood Gardens.

Boone Street Farm, another Adopt-A-Lot farm less than a mile away from Brentwood Gardens, nearly did encounter this fate. In July of 2013, The *Baltimore Sun* published a story about Boone Street Farm, revealing that the lots

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<sup>3</sup> There were 120 vacant lots as of 2011, according to the Greenmount West: Vision Plan.

it occupied were listed as “for sale” through Vacants To Value. Cheryl Carmona is the manager at Boone Street Farm, and she told the *Sun* reporter that when she called and asked the city to take her farm off the “for sale” list, her request was denied. “This site is on the edge of some really up-and-coming areas,” Carmona said. “Having it taken away would be devastating.” (Kilar 2013) So Carmona requested the help of Miriam Avins, director of the land trust Baltimore Green Space. Avins has worked closely with the city to craft open space policies, and has a good relationship with the DHCD. One phone call from her, and Boone Street Farm was no longer for sale. This incident revealed a willingness on the part of the DHCD to protect UA projects from development, but only after some initial arm-twisting. As with the case of Baltimore Free Farm, it took media attention and the intervention of a well-connected individual to force the city not to treat UA as an expendable, interim use. In the absence of these interventions, an urban farm facing eviction has dismal prospects. Even if the city provided a new site, a farm in this situation would face the burden of rebuilding elsewhere, lose all the investment put into improving the soil, and sever any community ties they had so far managed to create. Thus, in the design and implementation of both Adopt-A-Lot and the Homegrown Baltimore Land Lease Initiative, sustainable development takes a back seat to the traditional development goals of neighborhood revitalization.

## MOVEMENT TOWARDS PERMANENCE

While Adopt-A-Lot and the Land Lease Initiative operate under the assumption of UA as a temporary land use, there are signs that city policy may be shifting towards a more permanent approach. Perhaps the most significant sign came in September 2013, when the Baltimore City Office of Sustainability published *Homegrown Baltimore: Baltimore City's Urban Agriculture Policy Plan*. The document is meant to inform municipal decision makers about the best ways to incorporate UA into planning for the city. Simply creating such a document suggests a commitment on the part of the city to support UA over the long-term. In its recommendations, the plan goes further by suggesting ways of strengthening land tenure for urban farms, such as approving direct land purchasing from the city, and converting Adopt-A-Lot license agreements into leases. Short of creating distinct UA zones as Cleveland has done, strengthening land tenure for UA is a good way of treating it as a permanent use. In 2011, the American Planning Association published a report called *Urban Agriculture: Growing Healthy, Sustainable Places*. The report states that land tenure "greatly affects the level of investment made by a farmer or gardener. Outright ownership is preferred, but because land values can be prohibitively high...many urban farmers and community gardeners instead lease land...from public or private organizations." (Hodgson 2011) This accurately describes the situation and opinions of Denzel Mitchell, owner of Five Seeds Farm in Baltimore. He began Five Seeds on a handful of Adopt-A-Lot sites in 2008. In 2012 he

moved to a larger site in Baltimore County, where he has a five-year lease with a private landowner. He made this decision partly based on growing space but also on the added security offered by the lease. His goal is to eventually own his own land to farm on.<sup>4</sup> However, according to a report by the Institute for Sustainable Communities, “only a small percentage of producers own (or have long-term control over) the land that they cultivate, which effectively discourages investment in land, soil assessments and water access infrastructure” (Webber, 2013). Indeed only four of the thirteen urban farms recognized in the HGB Plan own part or all of the land they farm on. The rest are in some type of land agreement with the city.

The APA report goes on to outline some other reasons why greater land tenure is preferable for urban farms:

The security of land tenure also influences the type of agricultural production and the range of suitable crops. For example, if land is available only for a finite period of time, an urban farmer may invest in fast-growing, seasonal crops such as leafy greens and tomatoes instead of long-term perennial crops such as asparagus, rhubarb, and fruit or nut trees. Uncertain land tenure may also prevent or prohibit the use of sustainable, organic production practices. Composting...is an inexpensive and sustainable method used to fertilize soil. However, composting

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<sup>4</sup> Five Seeds Farm is in negotiation to be the third farm to receive a site through the Homegrown Baltimore Land Lease Initiative. Mitchell plans to split his time between the two sites.

requires a larger initial time investment than do conventional methods, such as the application of chemical fertilizers (Hodgson 2011).

In these ways, stronger land tenure contributes directly to the environmental sustainability of an urban farm. This is exactly what happened in the case of Baltimore Free Farm. Since purchasing their two lots, the collective has begun to use that part of the farm to experiment with permaculture practices, including planting perennials and fruit trees, landscaping for water management, and creating a “sun trap” with trees to capture more light and block wind in the summer. Practicing permaculture requires a long-term commitment; it’s something the collective had dreamed of, but had not considered feasible until they owned their site.

Baltimore Free Farm is the first and only urban farm in Baltimore to successfully purchase land from the city. Rashelle Celestin, Asset Manager at the DHCD says that when the city was weighing the bids on the site, they took into account the ‘sweat equity’ the collective members had already invested in the farm.

Anytime anyone is able to submit an application to purchase land, many times we are able to use his or her sweat equity investment as justification for a lower cost. It is kind of subjective. We ask them to estimate how much money and hours were put in. On our end, the justification isn’t to

get a quantifiable amount; it's more to say 'a lot has happened here.'

(Celestin 2014)

Subjective though it may be, the 'sweat equity' pricing could set a precedent for a pathway to land ownership for urban farms.

Direct ownership is not the only path to stronger land tenure for UA. The DHCD has also strengthened land tenure for Adopt-A-Lot spaces through the creation of the Community Managed Open Space designation, or CMOS. After two and a half years in operation, a project can apply for CMOS designation, if it can prove established community stewardship and continuing landscaping efforts on-site. Designated CMOS sites are flagged 'Do Not Dispose' in the DHCD's register of properties. However, this designation is not legally binding, and while it is the DHCD policy to not sell these sites, the department retains the right to do so. Nevertheless, the designation is important, as it is the first step towards qualifying for protection under the land trust Baltimore Green Space. Sites protected by Baltimore Green Space will remain so as long as there is community support and management. This model insulates a site from development pressure, and serves as an alternative to private land ownership. This is important for UA projects that don't have the capital to purchase land or sufficient profit margins to pay property taxes. Director Miriam Avins recognizes that the process of CMOS designation is rather informal, as it typically only happens upon her recommendation, but she sees it as an example of the city placing greater value on green space. As an example of this, Avins points to an

incident in January 2014 when someone approached DHCD about purchasing city land in the neighborhood of Remington. The DHCD recognized the site as that of The Village Green, a community garden and designated CMOS. The DHCD denied the sale on the grounds of its value to the neighborhood as a CMOS. While such a story is encouraging, Rebecca Witt, staff attorney at the Community Law Center and author of the blog *The Urban Agriculture Law Project*, believes the process remains vulnerable due to its informality.

The [CMOS] category helps protect land, but there aren't really any criteria for how something gets put in that category. [DHCD] decides, but its not 100 per cent clear how... Lets say you have your adopted lot and you have the CMOS designation. There's nothing legally different about it, it's just a matter of the city's internal processes... It doesn't mean they can't [sell it], they just have to go through a few more steps to do it (Witt 2014).

The CMOS designation is a policy in need of more clarification. Also in need of further clarification is the way in which an urban farm could move into a land trust. Baltimore Green Space has so far only protected community gardens and has yet to officially protect an urban farm. The details of how an urban farm could be incorporated into the Baltimore Green Space land trust are still being developed, but two things are certain. First, the land trust requires a project to have been in operation for five years before being considered for protection. Currently only two of the eight recognized urban farms on city-owned land are old

enough (several will reach the five year mark in 2015). Second, Baltimore Green Space also requires strong community support and the backing of neighborhood organizations to be considered for protection. Miriam Avins sees this as a roadblock for some urban farms.

The more a farm is like a business, [the more] we'd have to look really closely to say 'well, who are you really benefiting here?' That could get so interesting, because you could have a farm doing serious job training, and churning out specialty food to sell to Whole Foods. So you've got a noisy operation, you're employing people from the neighborhood, but you're not selling food to the neighborhood. How does that fit with us as a land trust? We haven't had to answer that yet. It depends on what they're trying to maximize. And you can't maximize everything (Avins 2014).

The *Homegrown Baltimore* document begins to address this need for clarification by recognizing that not all farms are attempting to maximize the same thing. First, it draws a line between community gardens and urban farms: community gardens, it states, are places where people grow food for themselves; urban farms are places where farmers grow food for sale. It further defines urban farms as falling into two categories: "community oriented" and "commercially oriented".

**Urban Community Farms** share some characteristics with both community gardens and urban commercial farms. They are often started

on sites that are chosen because of their potential to positively influence their surroundings. For instance, they may be located on vacant sites in the center of neighborhoods where blight elimination plays an important role in promoting community stability. As farms, they are focused on production and on at least some sales, but also on community involvement, education and development. Usually, though not always, run as nonprofits, they often rely on volunteer support and at least some grant funding. Most are a half-acre in size or smaller.

**Urban Commercial Farms** are more purely production-focused endeavors. They are often started as entrepreneurial ventures. As such, they are usually started on sites chosen for being the most conducive to production farming in terms of size and amenities. In almost all cases, they are directed, or at least advised, by experienced growers. These farms may also be nonprofit or for-profit. They generally range between half an acre and three acres, and can support full-time or part-time employees (HGB 2013).

Of the thirteen urban farms recognized in the document, six are listed as community farms, and seven as commercial farms. According to these definitions, community farms are more likely candidates for inclusion in the Baltimore Green Space land trust. Commercial farms will likely need a different path towards permanence. Making this distinction is important, as it allows the

city to create policies for urban agriculture that are more appropriately tailored to the needs of different types of farms. In that way, defining these categories is a step towards treating UA as a more permanent, and valuable aspect of city life.

## BALTIMORE'S URBAN AGRICULTURE IN PRACTICE

The following case studies examine the impact of land tenure on three urban farms, and in turn, the impact of the farms on their communities. In each case, I describe how the farm functions as a form of sustainable development, and how its ability to do so stems from the security of its land tenure. Because farms of different types function in different ways, each case represents a different farm type; a community farm, a commercial farm, and a demonstration farm. The demonstration farm is not a category defined in the Homegrown Baltimore plan, but a unique category nonetheless, for the fact that in addition to the goals of both commercial and community farms, it also serves as a resource for a city-wide UA community. In all three cases, I find an aspiration on the part of the farmers to have stronger land tenure, although the form that tenure takes varies by farm type.

### **Whitelock Community Farm**

In 1994, Baltimore City demolished what was left of a once-vibrant commercial center on Whitelock Street, the heart of the Reservoir Hill

neighborhood. After decades of decline, the strip was mostly vacant and had become notorious as an open-air drug market. Residents at the time hoped the street would be rebuilt, but in the interim, a handful of neighbors started the Whitelock Community Garden in one of the lots left vacant by the demolition. In 2009, Elisa Lane and her husband moved to the neighborhood from Philadelphia and took a plot in the garden. A year later, Lane and some neighbors decided to create a larger farm project next door to the garden. In 2010, Lane established Whitelock Community Farm and has managed it since.

As recently as 2002, the Reservoir Hill Improvement Council (RHIC) published a neighborhood plan that identified the redevelopment of Whitelock Street as a priority for the area. RHIC staffer Teddy Krolik described the street as a 'phantom limb' for residents in the neighborhood, meaning many still hope for it to be rebuilt as a commercial center. Lane describes some initial resistance to the farm happening instead:

We got a little resistance from neighbors when we first started farming, because [they] held to the idea that the stores were going to come back. But most people [supported] what we were doing. Since we've been there for three years, the folks who were originally opposed have come around, and they're now our biggest advocates...[They] see this as the place for greening to happen in the neighborhood and they really like that now. The idea now is that when business comes back it'll be further north

on Druid Lake Drive. That's where people have identified that should go (Lane 2014).

The farm's presence has indeed catalyzed a greening effort on Whitelock Street. In 2011, a massive volunteer effort renovated a park and playground adjacent to the farm. This year, a new community park is being built across from the farm, who themselves are expanding onto two other parcels. Even the neighboring community garden has become more popular; in 2007 the garden had about eight plots in production, and now has a wait list for all 30 plots.

As a result of this greening and the increased activity on Whitelock Street, the farm has contributed to revitalization in the neighborhood as well. Martin Cadogan is co-owner of two apartment buildings across the street from the farm, both of which he purchased and renovated in the last five years. Cadogan sees the farm and the new park as appealing amenities for the neighborhood, and cites them as selling points to prospective tenants. He says that most of his tenants agree, and that roughly a quarter of them were already familiar with the farm before moving in (Cadogan 2014). Although it was only twelve years ago that the Reservoir Hill Community sought the redevelopment of Whitelock Street, the farm's presence seems to have changed that priority. RHIC Housing Coordinator Carl Cleary believes that future commercial development in Reservoir Hill is now more likely to happen at the northern and southern edges of the neighborhood.

Lane hopes Whitelock Community Farm can serve as a social center for the neighborhood, if not a commercial one. In fact, neighborhood engagement is a large part of how she defines success for the farm, and part of the reason Whitelock is considered a community farm by the city. The farm's programming includes monthly potlucks for neighbors to get to know one another and an annual cook-off that highlights the diversity of the neighborhood. The farm runs a weekly farm stand on Saturdays where residents meet and sometimes exchange recipes. They encourage neighbors to work on the farm in exchange for food. To the extent that they can, the farm also takes requests from neighbors about crops they'd like the farm to grow.

In short, the Whitelock Community Farm model is not geared towards maximizing profit. According to Lane, the farm's annual budget breaks down to about 50% revenue from produce and 50% grant funding. Even that however, barely covers their staffing requirements. She hopes the expansion will allow them to be more self-sufficient financially but admits it's unlikely they will ever be completely so. Instead, the farm has committed to maintaining its value as a community asset and seeking grants for that purpose.

Whitelock Community Farm's land tenure is unique among urban farms in Baltimore. They are technically within the Adopt-A-Lot program but managed to negotiate a five-year right-of-entry agreement with DHCD, with the help of Baltimore Green Space. The farm has also received the Community Managed Open Space designation. Lane hopes that when Whitelock Community Farm's agreement with the city lapses in 2015, Baltimore Green Space will acquire their

site, making it the first urban farm to be protected by the land trust. Lane believes that buying the land themselves would be too expensive for the farm's limited budget.

Nonetheless, the combination of the five-year right-of-entry, the CMOS designation, and the hope for eventual land trust protection have made the farmers at Whitelock confident of their ability to remain at their site for the foreseeable future. As a result, they've invested in a hoop house, a greenhouse, and a toolshed, all of which allow the farm to be more productive and generate more revenue. They have also been able to invest in environmental best management practices such as a robust composting operation and rainwater capture equipment on all three of their structures. Their continued presence in the neighborhood has made neighbors more trusting and increased volunteer turnout. Data tracked by the Farm Alliance of Baltimore shows that Whitelock hosted 635 visitors and volunteers on the farm in 2013 (FAB 2013), making them the second-most visited farm in the city.<sup>5</sup> All of this suggests that Whitelock Community Farm has been very successful as a tool for sustainable development in the Reservoir Hill neighborhood. However, the area most clearly in need of improvement is the economic model. It remains to be seen how much the farm expansion will increase revenue, but it's unlikely the increase will completely cover their operating costs, the biggest of which is staffing. If the

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<sup>5</sup> This number is second only to an aquaponics project elsewhere in the city whose novelty attracts agro-tourists from the entire region.

farm is to be truly economically viable, it will have to find a way of freeing itself from the unpredictable support of grant funding.

### **Big City Farms / Strength To Love Farm**

Big City Farms is likely the most commercially oriented urban farm in Baltimore City. They began growing in six hoop houses on an industrial waterfront site owned by the National Aquarium in 2011. The hoop houses and a precisely timed growing schedule allow them to produce salad greens and starter seedlings year-round. Big City Farms is a 'social benefits', or triple-bottom-line corporation whose mission is to make UA an economically viable job creator. At Big City Farm's heart is not a site-specific project but rather a replicable model that could feasibly be installed anywhere with enough space and sunlight.

Big City Farms has taken a business approach from the start. Instead of relying on volunteer labor to get off the ground, they have used venture capital investment to build their hoop houses, buy their equipment, and hire a farm manager and a business manager. Director Ted Rouse and his team have plans to replicate their original site all over Baltimore. Last year they began this process through a partnership with a nonprofit called Strength To Love, whose mission is job placement for ex-offenders. Both organizations had applied to the Homegrown Baltimore Land Lease Initiative, but Strength To Love was originally denied due to lack of farming experience. While Big City Farms had been accepted by the city, the surrounding community of their first proposed site

rejected the idea, citing the unappealing and industrial look of the multiple hoop house model. The two organizations formed a partnership that was finally approved by the city: Big City Farm's technical support and growing and distribution models, combined with Strength To Love's staff and training. Their Sandtown farm was the first Land Lease Initiative project to break ground.<sup>6</sup> Rouse sees the need for more such partnerships, and believes the success of the Strength To Love site will be critical to further replicating the Big City Farms model.

It's important that we continue to make the Strength To Love farm a success, and create a critical volume of Big City owned farms so we have the infrastructure to support other smaller farms in other locations. And there are lots of community groups that want to have farming. It's a matter of getting on the same page and bringing money to the table (Rouse 2014).

Because Big City Farms is seeking to expand and replicate its model, finding new sites with secure tenure has been at the forefront of its agenda. In April 2014, Big City Farms closed on a deal to purchase a five-acre site tucked against Leakin Park, on Baltimore's west side. However, Rouse still sees property taxes as a drawback to owning their own land. He says that the farm

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<sup>6</sup> The groundbreaking for this site was where Mayor Rawlings-Blake was questioned about the BFF eviction.

has been lobbying the state to provide property tax breaks for land being used for urban agriculture, the same way it does for agriculture in rural areas. Such legislation recently passed at the state level but has not yet been enacted by Baltimore City.

Without the opportunity provided by the Land Lease Initiative, it's possible that the Big City Farms collaboration with Strength To Love may not have happened. In this way, the program facilitated both the expansion of UA as well as the creation of a new workforce development opportunity for a critically underserved population. The de-facto seven-year lease was long enough to make it worthwhile for the farm to install a rainwater collection system for their hoop houses. Although the jobs the farm has created are also a much-needed form of community development, the farm doesn't function in the community in the same way as Whitelock Community Farm does. For starters, the food grown here is almost all sold to institutions and restaurants outside the neighborhood, effectively exporting any public health or nutrition benefits. The farm is also at the edge of the neighborhood, not the center. It actually serves as a buffer between a neighborhood and an industrial asphalt plant. This means the site has less foot traffic, and therefore a lower public profile in the neighborhood. Additionally, all the work happens under the opaque plastic cover of hoop houses, limiting the informal interactions that can happen between farm workers and neighbors. Not that such interaction would even be desirable under this model: the intensive growing schedule doesn't allow time for community engagement of the type practiced at Whitelock Community Farm. Given that the

farm is still so new, it remains to be seen what kind of impact it will have on the neighborhood. It's unlikely though that it will be considered by residents to be the same kind of amenity as a community farm.

What the Big City Farm model does allow however, is for the farm to be economically self-sustaining while also employing neighborhood residents. These jobs are theoretically guaranteed in the neighborhood as long as the farm is around and there is demand for its product. This of course is contingent upon the city continuing to deem the farm the "highest and best use" for the site in the future. Owning the land at Leakin Park will eliminate this uncertainty from their next location, meaning the jobs created at that site will not be vulnerable to a changing real estate market.

### **Real Food Farm**

Real Food Farm is an eight-acre vegetable farm in Clifton Park, on Baltimore's East Side. They grow on two fields and in seven hoop houses, allowing for year-round production. The farm also includes an office, storage shed, greenhouse, covered meeting space, post-harvest cleaning area, and a walk-in refrigerator. Real Food Farm began in 2009 as a project of Civic Works, a non-profit focused on community improvement and workforce development. Since then, it has steadily grown in size, production, and programming each year. In the words of farm manager Tyler Brown:

The mission of Real Food Farm is to improve and work towards a just and sustainable food system. We grow the food, demonstrate how you could viably have a farm business in the city, make the food available to the people in the neighborhood through our CSA and mobile market, and we use the farm as a teaching tool (Brown 2014).

The idea that Real Food Farm is a demonstration farm is key to its mission. Not only do they aim to demonstrate the viability of urban farming as a business (in 2013, they covered 80% of their operating costs through produce sales), but they also host a number of educational programs for youth and adults throughout the year. Although the farm is in a public park, much of their programming is geared towards the communities that border the park. This includes a mobile market and CSA program targeted at those neighborhoods, as well as a number of internship and after-school programs geared towards local youth. In 2013, the farm employed five staff members and over two-dozen interns and Americorps workers. Maya Kosok worked for Real Food Farm until 2011 when she left to start the Farm Alliance of Baltimore, an urban farm aggregation and resource-sharing network. She says the Farm Alliance emerged in part out of the culture at Real Food Farm.

A lot of people that were starting new farms had either worked [there] in the past or had some existing relationships... It was definitely a hub for people wanting to learn things, or just buy extra materials. There was

already a lot of collaboration happening, just in a more informal way (Kosok 2014).

Also in 2013, Real Food Farm constructed two on-site storm water management projects: a bioswale and a rainwater capture system for their hoop houses. The projects were supported with funding by USDA and the Chesapeake Bay Trust. In 2012, they applied for and were awarded a second site through the Homegrown Baltimore Land Lease Initiative. This site lies just outside Clifton Park on a street called Perlman Place, roughly a five minute walk from the current location. Preparation on it has begun, and ground will be broken in the spring of 2014. Because the Perlman Place site is in a more residential area, Brown says the planning process has involved far more community input than the Clifton Park site did.

Part of the farm's original site is on land owned by the Baltimore City School System. The other part of the land is owned by the Baltimore City Department of Recreation and Parks. The city charter forbids development on either public school or public park sites, making the farm's placement there secure. According to Brown, this situation has encouraged Real Food Farm to make significant investments in on-site infrastructure, some of which are shared with other members of the Farm Alliance. Member farms use Real Food Farm's greenhouse to start seedlings, and use their walk-in refrigerator to store harvested produce before market. In this way, Real Food Farm has used its secure situation in a city park to bolster not only its own capabilities, but those of

its network partner farms as well. Many of these partner farms do not have secure land tenure, and therefore could not or would not build this kind of infrastructure for themselves.

Secure tenure on the Clifton Park site has also helped the farm receive certain grants. The USDA Environmental Quality Incentive Program (EQIP) is a grant program that helps farms undertake environmental conservation projects. It requires recipients to have control of their land for the duration of the granted project. Real Food Farm received an EQIP grant to build a number of their hoop houses in 2012. To date, the USDA has only given grants to two other urban farms in Baltimore; one farm owns its land, and the other operates on public school property.

Real Food Farm's second site is on a lease with the DHCD through the Land Lease Initiative. It is a five-year lease with a two-year notice to vacate clause, making it a de facto seven-year lease. Brown considers this lease to be short-term. Already the farm has come up against a limitation because of this: they sought funding from The Chesapeake Bay Trust in order to undertake an impervious surface removal project there. However, the trust requires at least a ten-year lease to fund this sort of project. The farm is currently in negotiation with the trust and the city in hopes of resolving this issue.

As a demonstration farm, Real Food Farm blends the best traits of the community farm and commercial farm models, while also carrying out the mission of promoting urban agriculture as a practice. The opportunity to accomplish all this is directly tied to their location in a city park. For starters, the

size of the space available allows them to grow enough food to be financially self-sufficient. Even the large plots available through the Land Lease Initiative can't match the eight acres that were available in Clifton Park. Before the farm was started, the land it now uses was un-programmed and overgrown, meaning their presence didn't come at the cost of another activity. Additionally, the farm was able to build on the pre-existing relationship of the park to its surrounding neighborhoods. Clifton Park was already an asset to its bordering communities by nature of proximity. Real Food Farm utilizes that park/neighborhood relationship by hosting educational programs to draw people from many neighborhoods into the farm, while at the same time extending its presence into these neighborhoods through the CSA and mobile market. This creates a larger scale of community engagement than is possible at a community farm like Whitelock. Finally, like the community gardens in the City Farms program, Real Food Farm's location in a public park has insulated the farm from development pressure, allowing them to invest in the environmental practices and shared infrastructure that makes Real Food Farm a hub of information and resources for other urban agriculture projects in Baltimore City. All of this makes Real Food Farm the type of sustainable development possible when urban agriculture is given the opportunity to be a permanent feature of city life.

## FINDINGS

These three farms represent different types of UA emerging in Baltimore and other U.S. cities. Community farms, commercial farms, and demonstration farms all contribute to the causes of sustainable development and neighborhood revitalization, albeit in different ways.

Community farms promote equity through hyper-local fresh food access and education opportunities in under-served areas. When using ecologically sound practices, they are an environmental boon to a neighborhood and can even inspire further grassroots greening efforts. They are viewed as an amenity when well kept and open to the public, thereby improving perceptions of a neighborhood, and with that, the value of its real estate. What they lack at present, however, is a sustainable economic model that allows for sufficient, ongoing staffing. Commercial farms have this, and are using it to create entry-level jobs and training opportunities in areas of need. But they so far fail to engage their immediate community either with education, community building events, or fresh produce. Their reliance on hoop house production gives them an industrial veneer that can be undesirable in residential areas. Demonstration farms provide the fresh food, education, and environmental benefits of a community farm, but focus much of their energy on programming that engages a broad audience and supports a citywide community of urban farmers.

All three farms profiled have experienced tangible benefits of longer-term land agreements with the city, although both Whitelock Community Farm and Big

City Farm still seek greater land security. In the case of Whitelock Community Farm, a five-year right of entry allowed them to make the initial investments in site infrastructure and environmental practices that allowed them to operate at their highest desired capacity. They see the opportunity of land trust protection as key to solidifying their presence as an asset to the community, and the most likely path to permanence, given their financial constraints. In the case of Big City Farms, the de facto seven year lease allowed them to make the investments in the hoop houses and rainwater collection systems that make their business profitable and environmentally sound. However, they sought land ownership as a way of attracting investment and ensuring the jobs they have created won't end with the lease period. In the case of Real Food Farm, location in a city park has insulated them from development pressure, thereby encouraging the investment in infrastructure that has allowed them to function as a resource to a broader UA community. The secure tenure of the Clifton Park site has also allowed them to gain funding for and construct two significant environmental quality projects there. The five-year lease at their second site, however, wasn't long enough to qualify them for the grants necessary to construct similar projects there.

## CONCLUSIONS

Urban agriculture in the 21<sup>st</sup> century is in a unique position to become more productive, widespread, and sustainable than ever before. Because of the shift within UA towards commercial farming, UA is becoming a new form of

economic development. This shift has garnered the attention and support of city leaders who have historically not been engaged with UA, but are interested in its role as a job creator and money-making enterprise. At the same time, a growing commitment on the part of cities to embrace sustainable development means that UA does not have to justify itself through economic means alone; its environmental and social benefits are seen as valuable enough that cities are incorporating UA into their sustainability planning efforts and creating land use programs specifically to support it. In Baltimore, Adopt-A-Lot and the Homegrown Baltimore Land Lease Initiative have encouraged a flourishing of new UA projects, out of which three distinct types of urban farms have emerged. This articulation will allow for more targeted and effective policy development in the future.

However, as my research and case study findings suggest, all three types of urban farms can be more sustainable when UA is treated as a permanent land use. The city of Baltimore has stopped short of doing this because of a reluctance to “tie land up” that could be used in the future for more traditional development that would likely bring in more property tax revenue. This reluctance is misguided for two reasons. First, the scale of vacancy in the city is so great, that the demand for land for UA is tiny in comparison. In fact, targeted demolitions through the Vacants To Value program are creating more vacant land every day. Setting aside a small portion of this land for long-term UA projects would only require a small forfeiture of hypothetical future property taxes. Secondly, what the city seeks in property tax revenue, is not the revenue

itself, but rather the services it enables the city to provide. Non-profits are exempt from paying property taxes because they are perceived as providing special services to their communities. As demonstrated through the case studies, urban farms can provide a unique suite of ecological, economic, and social services for the city that few other land uses are capable of. Instead of thinking of UA as property tax lost, the city should think of it as a set of sustainable services gained.

In the following recommendations, I outline a number of ways the city of Baltimore could go about treating UA as a permanent land use. Some have precedent in other cities, some have precedent in Baltimore itself. Each has its own distinct advantages, but taken as a whole they could transform UA in Baltimore, and ensure it does not fade away with the next economic rebound.

**Recommendation 1: *Zone for urban agriculture.***

Zoning land exclusively for urban agriculture would insulate it from development pressure, and give the city some amount of authority over where urban farms should go. Given that commercial farms and community farms impact their surroundings in different ways, different zoning categories could help the city to site them appropriately. Where a farm would create a buffer between industrial and residential areas, zoning for commercial farm operations would be appropriate. Such areas already have lower development value, and creating a buffer may increase the value of the residential side. Priority could be given to vacant land in flood plains, linking it to strategies for climate change adaptation.

Where a farm could address blight in a residential area or provide fresh food access in a food desert, zoning for community farms would be appropriate. This would likely be considered a “downzoning” and so make the property less valuable. This has the benefit of making the land more affordable for direct purchase by a community farm. However, such a zoning change should be used only on city-owned land, so as not to be considered a taking from a private property owner. Further, using community farm zoning to address blighted areas could also have the effect of raising property values, and therefore property taxes, in the neighborhood. An area for further research to support such an initiative might be a replication of the work done by Voicu and Been to assess the effect of community gardens on neighboring property values in New York City. Such a study in Baltimore could be done in partnership with the Johns Hopkins Center for A Livable Future, and would inform decision-making at the city level about where future community farms might be a boon to property values. The city of Cleveland’s efforts at zoning for UA could also be studied for guidance on how to best site such zoning changes.

Additionally, UA should be an allowed use in industrial zones, which it currently is not. The idea behind this exclusion is to prevent UA from competing for space with industrial uses that may offer more in the way of economic development. But this is a potential conflict best left for the market to decide.

**Recommendation 2:** *Expand the City Farms program to include space for demonstration farms in city parks.*

City Farms is a popular and longstanding community garden program that has made UA accessible to citizens all over the city. However there is still more demand than supply for plots, and relegating the program to community gardens misses out on the economic development potential of urban farms. As demonstrated by Real Food Farm, being sited in a park allows for greater land security, and therefore investment, in a project. City Farms could expand its program to include demonstration farms in all of the city's major parks. These could operate as public/private partnerships with the Department of Recreation and Parks, where DRP provides land and soil inputs, and partners provide labor, programming, and site maintenance. Such projects would bolster local food production in a significant way, bring more visitors to the City's underutilized park system, and decrease maintenance costs to the City.

An expansion of City Farms would require a significant effort at stakeholder engagement to determine where future farms wouldn't conflict with present uses. One potential roadblock to this might be the staffing needed to carry this out. Currently, City Farms is managed by one part-time Department of Recreation and Parks employee. An expansion of the program might require the position to become full-time, or the addition of a second part-time employee. A partnership with the Farm Alliance of Baltimore may be a way to secure a grant-funded position to assist in this effort.

**Recommendation 3:** *Create a process for selling city-owned land to urban farms.*

The Homegrown Baltimore Land Lease Initiative provides access to land for urban farms, but not long-term tenure. However, two of the three farms participating in the program expressed the preference for owning their own land, citing the advantages of ownership as equity for loans and the ability to invest in infrastructure. The sale of land to Baltimore Free Farm has already demonstrated a willingness on the part of the city to support land ownership for urban farms, but the ‘sweat equity’ pricing approach is too subjective to be reliable. The city should set up a program to sell land to urban farms with predictable pricing models. This could take the form of a second version of the Land Lease Initiative, following a similar example in Boston.

In the spring of 2014, Boston sold three city-owned sites to an “urban farm developer” for \$100 per parcel. This occurred three years after a pilot program to lease city-owned land to urban farms proved successful. In choosing the sites, the city worked with local communities and the Department of Neighborhood Services to identify areas that were not in need of housing, and had support from the community to be developed as farms. They determined the \$100 price as reasonable on the grounds that development pressure was low and the farms would provide a community benefit. However, the sale contract included a reverter clause that would return the property to the city should the farm cease to operate or be found in non-compliance with city or state ordinances. The city is now in the process of selling the original urban farm lease sites in a similar

fashion. In so doing, Boston is establishing siting and pricing precedents for land sales to urban farms. This predictability will encourage investors and streamline the city's process in the future. Boston has far greater housing demand and far less vacancy than Baltimore. If Boston can find room in its real estate market to commit land to urban farms, surely Baltimore can as well.

## AREAS FOR FURTHER RESEARCH

Given that urban farms as commercial businesses are still such a new phenomenon, there are plenty of questions about their role in cities that remain unanswered. For starters, does the work done by Voicu and Been that demonstrates the positive impact of community gardens on neighboring property values apply to urban farms? If so, does it apply to commercial farms, community farms, and demonstration farms in the same way?

Another type of research might explore the role race and class plays in the development of UA. Although urban farms are often cited in low-income communities of color with poor healthy food access, urban farmers themselves are often white and middle-class. A study of perceptions of urban farms among people of different race and class groups may reveal why this is the case.

Lastly, the ability of urban farms to be financially self-sufficient is critical to their success in the long term. A study of the applicability of different business models to UA (for instance cooperatives or online sales) may reveal ways that urban farms could increase revenues and rely less on grants.

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