NYC PLANNING
DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

Statement of Anita Laremont, General Counsel to the New York City Department of City Planning, before the Land Use Committee of the City Council, on their hearing on Int. Nos. 1692-A and 1661

October 26, 2017

Good afternoon Chair Greenfield, Subcommittee Chairs Richards, Koo and Dickens, and distinguished members of the Land Use Committee. Thank you for the opportunity to be here today to discuss proposed Intro 1692-A a proposed amendment to the recent law on Privately Owned Public Spaces and Intro1661 regarding urban agriculture. I am joined here by my colleagues Erik Botsford and Barry Dinerstein from DCP, and Molly Hartman from the Mayor's Office of Food Policy to testify and answer questions on these proposals.

Int. No. 1692-A sponsored by Chair Greenfield is a proposed amendment to Local Law 116 regarding Privately Owned Public Spaces. Privately Owned Public Spaces are public spaces located on private property, provided, and maintained by a private owner for public use in exchange for additional floor area or zoning waivers. In ramping up to comply with Local Law 116, the Department has hired additional staff to manage the POPS program out of the Manhattan Office. The Department has been migrating the prior database into a more advanced, modern system as well as updating the data. Once the updates are finalized, the data on the City OpenData portal will be refreshed and

also made accessible via a new interactive map on the POPS DCP website, with detailed information on each POPS as required by the recent legislation. This map is expected to be completed in early 2018. The Department is also continuously working with DOB by providing site plans and approvals for DOB's inspections when requested.

The Department does not oppose these amendments. We do, however, want to indicate that the Department has been discussing enforcement with DOB and the Law Department. Specifically, we have been exploring the City pursuing affirmative litigation against egregious violators, as well as potential ways to increase penalties for serious violations. This proposed bill establishes penalty amounts, but we will suggest amendments to ensure that we are not precluded from imposing greater or additional penalties in the future. We welcome any opportunity to work with the Council and interested stakeholders to ensure plazas are maintained and compliant. The zoning regulations governing POPS offer a valuable public benefit.

Int. No. 1661 sponsored by CM Espinal is a proposed Local Law in relation to urban agriculture in New York City. The Department and the Administration support urban agriculture as an important educational, greening, and community building opportunity in neighborhoods where community gardening is an important part of the landscape. Urban agriculture produces only a small portion of the food our city eats, but plays a critical role in communities for whom access to high-quality, affordable, fresh food is limited. Urban farming in NYC, which largely takes place at community-run gardens, provides opportunities for residents to connect with nature, improve the environment, beautify public open space, learn about growing and preparing nutritious food, and form lasting intergenerational relationships and social bonds within communities. NYC

supports school gardens in over half of the City's schools, where children are connected to the science of growing food and essential nutrition education. City's few commercial farms support the City's environmental goals and offer an economic development opportunity within a niche local food market. Many of our city's community programs, such as DYCD-funded afterschool sites, or DFTA-funded senior centers, have gardens and offer educational programs about farming, the environment, and good food. There are four food-producing farms at NYCHA developments and two more were announced thanks to an investment from City Council.

Because of the significant value that urban agriculture has for New York City's communities, the City offers a number of initiatives and resources to community gardeners and urban farmers. These programs span a range of agencies, and provide materials, support, and assistance to New Yorkers in starting and maintaining gardens and farms in their neighborhoods.

Regarding the Departments role in these efforts, the New York City Zoning Resolution (NYCZR) allows for urban agriculture in every zoning district in the City, and Use Groups 4B and 17 specifically include Agriculture, calling out greenhouses, nurseries and truck gardens. Rooftop greenhouses are now allowed by Chairperson certification under Zone Green regulations passed by the Council in 2012. Our agency has not identified any barrier in the zoning code to achieving a particular urban agriculture proposal and therefore does not believe this bill is necessary. If the concern is that the Zoning Resolution is creating hurdles, the Department encourages operators and elected officials to come and discuss such challenges with DCP and identify any hurdles they have with existing zoning. Depending on the issue, the City might be able to address the issue without the need for new legislation or zoning amendments. The Mayor's Office of Food Policy would likewise welcome a meeting with

Councilmember Espinal to discuss the intent of this legislation and ways the Administration can addressing any real or perceived barriers to fostering Urban Agriculture efforts.

We very much appreciate the opportunity to testify on these matters.

NYCPLANNING
DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

Statement of Anita Laremont, General Counsel to the New York City Department of City Planning, before the Land Use Committee of the City Council, on their hearing on Int. No. 1685

October 26, 2017

Good morning Chair Greenfield, Subcommittee Chairs Richards, Koo and Dickens, and distinguished members of the Land Use Committee. Thank you for the opportunity to be here today to discuss proposed Intro 1685 regarding application requirements for zoning text amendments. I am joined here by my colleagues Erik Botsford and Bob Tuttle from DCP to answer questions on this proposal.

Int. No. 1685, sponsored by Councilmembers Chin and Gentile, is a proposed Local Law to amend the administrative code of the city of New York, in relation to exempting certain government entities' applications for zoning text amendments from City Planning's Pre-Application rules. The Department of City Planning is opposed to exempting such applications from these requirements. The Department believes that its Pre-Application requirements add value to the overall process and outcome, on all sides, ultimately leading to a more efficient and quicker review. In order to give greater insight to the committee on why we hold this view, I would like to explain the rationale for the application process and then give an overview of that process as administered

by DCP. The Department developed its application process, called BluePrint, in 2012 to create predictability. Prior to the existence of Blueprint, there was no defined procedure to guide the application process, and no procedures governing the sequencing of the preparation of application materials. This generally resulted in protracted, indeterminate pre-application periods. In contrast, the Blueprint process established measurable timeframes for the review of land use applications and allows for the quick identification and resolution of issues encountered as applications proceed on the critical path to certification. This carefully conceived process (which was constructed with extensive stakeholder input), created clear benchmarks for moving a proposal forward, including specified review and response timeframes on DCP's part. The sequential steps also facilitate the organization of the information and material necessary to prepare complete and accurate land use applications and related environmental review documents for consideration by the City Planning Commission and other stakeholders, all to ensure that applications are sufficiently comprehensive, clear, and complete before an application is certified or referred for public review.

The application process always begins with a conversation and not a filing. Applicants meet with DCP planners for an Informational Meeting to discuss the scope of a proposal. The goal of this meeting is to gather key basic information about the proposal so that City Planning can advise the applicant on the type of land use application and the level of environmental analysis that will be necessary as part of the review. If the applicant chooses to proceed, that meeting is followed by the applicant filing a Pre-Application Statement which provides basic pertinent information about the proposal to formally begin the pre-certification process.

The Pre-Application Statement (PAS) requests basic pertinent information about a

proposed project. The PAS serves multiple goals:
It helps DCP advise applicants early in the process on what may be needed to advance their proposal. The PAS is not designed to assess the merits of the proposal. Rather, the PAS allows DCP to assign appropriate staff at the beginning of the review process and coordinate review across multiple divisions. It provides a formal starting point for the application review process and allows DCP to start tracking progress of a proposal in a fair and consistent manner.

Over a dozen types of land use application do not require a PAS. These application types, that require little or no environmental review and inter-departmental coordination, include Office Space Leases by the City, Enclosed Sidewalk Cafes and Landmarks and Historic District designations. The next step is an Interdivisional meeting, which is an opportunity for applicants to present a proposal to the relevant DCP staff from the various divisions that will be responsible for reviewing the application materials. Following the Interdivisional Meeting, DCP will provide applicants with clear, written guidance on the land use and environmental applications. The applicant can then develop a Reasonable Worst Case Development Scenario (RWCDS) memo, which sets forth the analysis framework for the environmental review.

All of this occurs before an applicant submits a Draft Land Use Application and Draft Environmental Analysis so that applicants do not put work into these highly technical documents without guidance from the Department professionals that will be reviewing those materials for completeness. These required steps add value to the process and better allocate Department resources to help achieve these ends. The process avoids re-work loops, in connection with both the land use application and environmental review,

allowing for the correction of omissions, inconsistencies and errors, which might be identified too late in the process to easily correct without undue delay.

I very much appreciate the opportunity to testify on this matter and look forward to hearing from the Council on its ideas to achieve our shared goal of a more efficient applicant process.

OFFICE OF THE BROOKLYN BOROUGH PRESIDENT

Testimony

Brooklyn Borough President Eric L. Adams

Thursday, October 26, 2017

I want to thank Chair David Greenfield and the Committee on Land Use for giving me the opportunity to provide comments at this public hearing. Additionally, I would like to commend Council Member Espinal for introducing this legislation as well as his Council colleagues for co-sponsoring this important legislation.

The impetus of this legislation stems from meeting with several urban agriculture companies during my visits to neighborhoods throughout Brooklyn. I am inspired by the entrepreneurial spirit that produces fruits and vegetables in Brooklyn using new forms of tech-focused agriculture like closed loop aquaponics and aeroponics. Unfortunately, I heard time and time again of the difficulty of receiving city agency approval for these companies, which were often being set up on rooftops and in warehouses. This frustration prompted the most logical next step, which was to bring city agencies to the table to speak with advocates and industry leaders on the issue of permits and regulations.

I hosted a roundtable in partnership with Council Member Espinal at Brooklyn Borough Hall on April 17, 2016 with 10 city agencies and over 20 urban agriculture companies and nonprofit organizations. The takeaway was clear that agriculture is only mentioned a handful of times in the zoning resolution, and city agencies were placing responsibility on one another to regulate this emerging industry, but no one was taking any clear regulatory responsibility. This resulted in more questions than answers for urban agriculture companies and no clear path for fresh food and job creation. While we have seen successful companies like Gotham Greens and Brooklyn Grange take root, many more companies have labored trying to get their business off the ground. Meanwhile, cities like Atlanta, Boston, Chicago, and Newark are plowing forward with an urban agriculture revolution. Intro. 1661 asks the New York City Department of City Planning (DCP) to take the first step in playing catch up with so many other cities by developing a comprehensive urban agriculture plan that addresses land use and other regulatory issues.

We need a plan now more than ever before. I know firsthand the issues with our food system. Not too long after the roundtable I began to experience numbness and pain in my feet and hands. I was having trouble seeing. One morning I woke up with intense abdominal pain and scheduled a doctor's visit. My test results came back positive for Type 2 diabetes. My doctor was surprised I hadn't lapsed into a coma given my A1C level was 17 percent, about three times the normal level. My doctor told me that I would have to take a litany of diabetes medication for the rest of

my life. Like my father before me and my mother now, I would have been tethered to prescription drugs as I tried to outrun the seventh leading cause of death in the United States. I refused to accept this fact and after many second opinions, I kept hearing the same thing. That is until I met Dr. Esselstyn. He said simply, follow my plant-based diet and you will reverse your diabetes. Three months later my A1C level is down to the normal level of 5.7. No medication, just diet and exercise reversed my diabetes.

Since being on this journey I have noticed how deadly our food system has become. Fast, processed foods dominate our lives. From our school lunches to our grocery stores to restaurants throughout the borough, we are killing ourselves with the foods we eat. The data amplifies the problem. According to a 2007-2010 Center for Disease Control and Prevention survey, 87 percent of adults failed to meet their daily recommended vegetable intake. That is no surprise to me considering bodegas represent 80 percent of the food source in neighborhoods in central and northern Brooklyn according to the Department of Health and Mental Hygiene's (DOHMH) analysis of their Healthy Bodegas Initiative from 2008. On average, only 10 percent of bodegas carry leafy green vegetables according to a 2006 DOHMH study. These are food deserts filled with processed foods, plain and simple.

As borough president it is my job to advocate for the health and wellbeing of my constituents. That is why I am calling for the passage of this legislation. If we can clear the way for urban and vertical agriculture, than we can begin to sow the seeds for a food revolution that provides healthy food access to communities from Bensonhurst to Brownsville.

Through the expansion of community gardens and urban farming, we can reduce transportation costs, and the negative environmental effects and other externalities associated with shipping logistics, while opening up job opportunities to the next generation of entrepreneurs. That is why I contributed $1 million in capital funding to the Brooklyn Navy Yard for the establishment of an urban agriculture tech incubator so we can foster startups to crack the high energy cost and real estate code. This legislation and the capital contribution are a win-win-win for Brooklyn and the City of New York. I hope this committee and the City Council pass this legislation, and send this to the Mayor for his signature, so we can begin the fresh and healthy food revolution.

Thank you.

####

REBNY
REAL ESTATE BOARD OF NEW YORK

TESTIMONY OF THE REAL ESTATE BOARD OF NEW YORK IN OPPOSITION TO INTRO 1685 TO EXEMPT CERTAIN GOVERNMENT ENTITIES FROM PRE-APPLICATION REQUIREMENTS FOR ZONING TEXT AMENDMENTS

October 26, 2017

Subject: Exempt certain government entities from pre-application requirements for zoning text amendments.

Sponsors: Margaret S. Chin, Vincent J. Gentile, Ben Kallos, Corey Johnson, Rafael L. Espinal, Jr.

Introduction

The Real Estate Board of New York is a trade association of 17,000 owners, builders, residential and commercial brokers and managers active in New York.

Intro. 1685 which would exempt certain elected officials from pre-application requirements for zoning text amendments is practically ineffective, and potentially undermines what has made New York a thriving, vibrant world class city—as of right development and an orderly pre-referral process.

Intro. 1685 is bad public policy and REBNY strongly opposes it.

Practically Ineffective

The practical impact of this bill appears to be to grant elected officials the ability to use a text amendment to leap frog the public review process with the goal of overriding proposals in the queue or projects about to start construction.

A few years ago rules were adopted for the pre-referral process. These formalized this process by having DCP advise applicants and assist the City Planning Commission in referring out an application. The aim of these rules was "to organize the information and material necessary to prepare complete and accurate land use applications and application for environmental review materials".

These rules provide a series of good government actions that has served the City Planning Commission, the City Council and the City well. To permit an elected official to avoid the carefully constructed steps in the rules will defeat their purpose of ensuring that applications are accurate, complete, address the relevant issues and are sufficient to inform the public in the review process.

In addition, any proposed text amendments initiated under this provision would still be subject to the requirements of the State Environmental Quality Review Act (SEQRA), the City Environmental Quality Rules (CEQR) Rules of Procedure and the State and City implementing regulations. In short, a text amendment proposed under this provision may circumvent the pre-referral process, but it must comply with the environmental requirements which could thwart the effort to expedite such an action.

Potentially Undermines Investment

New York's physical and economic growth and it success as a global capital relies on as of right development and an orderly process to introduce new planning proposals. As our city's needs changed,

from an industrial economy to a service economy, from a city with seven million residents to nine million in another decade, our zoning resolution has needed to change to accommodate this growth in a reasonable and rational manner in accordance with well-considered plan. This process has given builders and investors an opportunity to make prudent, rational decisions about their investment.

Intro. 1685 is intended to disrupt this process and would instill uncertainty into our land use process and into capital investment decisions. The result of this uncertainty would be less capital investment and new development required to meet our city's evolving needs.

Conclusion

The legislation would degrade the fairness and integrity of the planning process. It would create a class of applicants who could assert privileged status over civic organizations, industry associations, the general public, other elected officials and, it appears, the Department of City Planning itself in the application process for zoning text changes. It could allow those applicants to press ahead with zoning initiatives that are not consistent with a well-considered plan without themselves having engaged in a rigorous planning process and without a clear procedure to ensure that they can be properly vetted by the Department of City Planning.

Intro. 1685 attempts to thwart plans and projects with questionable means and ultimately undermines a fundamental aspect of the city's Zoning Resolution and land use process, namely as of right development and an orderly an rational planning process. This bill appears to be an attempt to achieve some short term political gain by doing an end run around the City's planning process.

DCP's rules adopted a couple of years ago were an important reform and play an important role in ensuring that land use applications are accurate and complete. The public and the participants in the land use process have benefited from their adoption.

The local law would seek to circumvent these requirements, with a goal of allowing land use reviews to proceed hastily without satisfying the City's standards. This would degrade the process and promote ill-considered ad hoc decision making.

This bill is bad public policy and we strongly oppose it.

Contact: Michael Slattery
Senior Vice President
REBNY
212-616-5207
mslattery@rebny.com

New York City Council
Committee on Land Use
Local Law Introduction – Developing a comprehensive urban agriculture plan
Int. No 1661-2017
October 26, 2017

New York Restoration Project Testimony
By Deborah Marton
Executive Director

New York Restoration Project (NYRP) applauds Council Member Espinal, Borough President Adams, and the 20 other elected officials sponsoring local law 1661 to develop a comprehensive urban agriculture plan.

As Executive Director of New York's only city-wide conservancy, I see the important role open space plays in our communities every day. The 52 community gardens and 80 acres of parkland under our care are, in many places, the only high quality open spaces within walking distance. They're also often one of the only sources of affordable fresh produce.

In NYRP spaces, communities decide what uses their public land should be put to, so not surprisingly, 70% of the land is dedicated to urban agriculture. Last year our sites produced approximately 89,000 pounds or 44.5 tons of produce. I don't need to tell you what access to free, fresh food does for a person's physical and mental health...and their wallets. In food deserts, concentrated in our most vulnerable communities, these connections resonate even more.

Our spaces also act as launching pads for our future environmental leaders. We've trained over 900 people through our AmeriCorps program and the network they create across our city is truly staggering. NYRP's hugely successful Garden Growers program teaches thousands of children about food growing every year. It enables young people to get their hands dirty and forge the personal connections with food that build lifelong nutrition habits.

This work has a huge impact...but we know there's so much more that we could do. We would benefit greatly from a strategy that identifies new sites for food growing as well as expand opportunities to grow education, job training, and resiliency. We would also gladly lend any expertise that we can to this important endeavor. We critically recommend that you look to the wealth of examples already being demonstrated by partners across the city. Together, we're proving that environmental innovations can be built into so many different aspects of public life.

We're also surrounded by so many opportunities to grow this work. MAS's *Public Assets* report identified more than 3,000 properties owned or leased by the city classified as having no current use. Totaling approximately 1,800 acres, opening these sites to the public would be like adding more than two Central Parks. The impact that could have on environmental equity and food growing capacity would be profound.

Int. No. 1661 would significantly increase opportunities for urban agriculture, but it's not just about food. These spaces reinforce to residents that they are part of a unique and important community. They nurture ties between people and stronger, safer, more equitable neighborhoods are the result.

Hearing of the Committee on Land Use
October 26th, 2017
Testimony of Adriana Espinoza
New York City Program Manager
New York League of Conservation Voters

Good morning. My name is Adriana Espinoza, and I'm the Manager of the New York City Program at the New York League of Conservation Voters (NYLCV). NYLCV represents over 28,000 members in New York City, and we are committed to advancing a sustainability agenda that will make our people, neighborhoods, and economy healthier and more resilient. I would like thank Chair Greenfield and all members of the Committee on Land Use for the opportunity to testify.

The New York League of Conservation Voters strongly supports the development of a comprehensive urban agriculture plan. The City Council and the Mayor have demonstrated their commitment to a sustainable food system and urban agriculture by supporting programs like Health Bucks, GreenThumb Community Gardens, educational programs in schools, and GrowNYC's Greenmarkets and Youthmarkets. Only through a comprehensive planning process, however, can we both improve the sustainability and security of our food systems while ensuring equitable access to fresh, local, and healthy produce in low-income neighborhoods.

The need for a comprehensive approach to urban agriculture policy is demonstrated by the maze of city agencies who oversee our sustainability goals--Mayor's Office of Sustainability, Department of Environmental Protection, and the Mayor's Office of Food Policy--and those who manage regulation and approval of urban agriculture projects--including the Department of City Planning, Department of Buildings, and the Fire Department. There does not currently exist a centralized place for urban agriculture programs and processes. We are pleased this is one important question that the proposed plan would address.

Cultivating urban agriculture in New York City is inherently challenging given our heavily developed, densely populated city environment, but these challenges can be exacerbated by lack of clarity in zoning and regulations. We need a clear, modern, and streamlined approach to urban agriculture policy. Through my testimony I hope to highlight key elements of a strong urban agriculture plan.

Perhaps the most critical component for the plan to examine are amendments to the zoning code that clearly define permissible urban agriculture practices for both individual and commercial interests in each zoning district.

Other specific zoning resolution, building code and fire code changes that should be explored include:

- The feasibility of allowing urban agriculture in all districts via permitting process. It is currently unclear whether indoor farming is allowed in building basements, for example. Similarly, rooftop farming is currently limited to non-residential buildings in residential, commercial, and industrial zones, as well as on top of school buildings.
- Lifting the prohibition on selling produce on the same lot on which it was grown, regardless of zone.
- Expanding "as of right" use for small-scale projects.
- Simplifying the permit application and regulatory processes for conditional uses such as rooftop or vertical farming projects.

Int. 1661 also calls for cataloging existing and potential urban agriculture spaces. NYLCV encourages attention to several externalities unique to NYC when identifying appropriate areas for urban agriculture:

- Given the City's rich industrial history and poor environmental safety practices of decades past, soil quality and remediation must be taken into consideration when cataloguing potential ground-level urban agriculture spaces, especially in the outer boroughs. The plan should also consider providing education on appropriate soil management techniques to ensure that urban gardens are safe environments to grow healthy food.
- Additionally, in a city grappling with an affordable housing crisis, filling every vacant lot with a community garden is not the most economic or sustainable use of space, but this comprehensive plan can and should take into account lots where development isn't economically feasible and identify more space-efficient approaches to urban agriculture unique to our city environment.

Yet another critical component of Int. 1661's comprehensive plan is exploring how urban agriculture can be used to address communities where access to healthy food is scarce or prohibitively expensive. A solid urban agriculture policy should not just address the needs of large-scale projects for commercial interests, but use the planning process as an opportunity to think creatively about how a urban agriculture plan can be used to address food disparities in many low-income neighborhood across the city.

The most efficient way to mitigate these disparities is not necessarily through ambitious financing initiatives to build new grocery stores, but by allowing them to grow and sell their own produce, bringing these communities closer to the food cycle. The following components of a comprehensive urban agriculture plan could support this aim:

- Providing adequate and easily accessible information on how to grow your own food.
- Promoting community gardens and, where possible, adaptive re-uses of space such as in vacant buildings.
- Designating more farmers markets with a strong emphasis on local youth employment.

There are many environmental benefits to reducing the physical space between cultivation and consumption of fresh food--fewer emissions and less reliance on fossil fuels by curtailing transportation needs, for example. A more sophisticated approach to urban agriculture does not replace the need to invest in the protection of our regional foodshed, but so long as attention is paid to energy intensity of large-scale operations, a robust urban agriculture industry can contribute to a more sustainable food system, increase access to fresh produce overall, and potentially increase demand for fresh, sustainable and locally sourced food from regional producers.

Adriana Espinoza
NYC Program Manager
aespinoza@nylcv.org

Claudia Joseph : 30 year community gardener, NYBG Instructor, Permaculture teacher, designer and consultant. Director of Environmental Education: The old stone house

NYC Council Committee on Land Use 11am, Committee Room, City Hall
David G. Greenfield, Chair Members: Vincent J. Gentile, Annabel Palma, Daniel R. Garodnick, Darlene Mealy, Rosie Mendez, Ydanis A. Rodriguez, Peter A. Koo, Brad S. Lander, Stephen T. Levin, Jumaane D. Williams, Deborah L. Rose, Donovan J. Richards, Inez D. Barron, Andrew Cohen, Ben Kallos, Antonio Reynoso, Ritchie J. Torres, Mark Treyger, Rafael Salamanca, Jr. and Barry S. Grodenchik

Urban Agriculture

An all of the above strategy will be needed to meet the food needs of our growing population. That said, I am here to advocate strongly for the financial and zoning support of in-ground farming & gardening operations.

In-ground food growing ~~will be~~ is the best option for meeting our food security needs, re-gain our personal health and empower our communities to mobilize in times of disaster. A decentralized gardening network ~~will be~~ is the most resilient option in the face of the unknowns ahead - fluctuating weather conditions, potentially rising costs of petroleum-based systems, and the cyclic probability of economic hardship.

In-ground gardens are economically advantaged because nature is such a thrifty partner. By utilizing organic waste streams and other onsite materials, costs can be kept low and access to healthy food can be expanded in all communities regardless of their ~~disposable~~ income. High cost artificial ingredients in constructed systems can lead only to an economic equation that is dependent on outside resource streams and delivers only produce. An in-ground garden builds community stewardship and pride, increases cooperation among neighbors, offers exercise and social interaction, creates skills training opportunities and produces an array of food, medicine, nature connection and flood mitigation benefits.

In addition to community gardens, Libraries, Schools and Parks can be planted as Foodscapes, Foodways and Food Forests that offer resilient responses to climactic uncertainty. Drought tolerant shrubs, herbs and flowers can also provide for birds, bees and butterflies, be used as craft materials and offer nutrient rich foods and medicines. Utilizing our public spaces would come at low cost and offer significant cropping opportunities that have been until recently overlooked.

~~On the job~~ Training programs can create jobs + ~~health~~ in communities that have struggled with shortages of fresh food, suffered flood or been beaten down by urban blight. Foodways, besides being beautiful, can make our communities safer by buffering the water's edge, soaking up storm water and holding soil in place. Every woody shrub we plant that might also offer food, is a carbon sink, sequestering CO_2 in its bark and roots. Becoming aware that soil is alive and is one of our greatest potential storage places for carbon, is a revelation to many non-gardeners but is a familiar fact to most anyone who has their ~~gardens.~~ hands in the soil. By gardening simply, we can return fertility and abundance to the unlimited nooks and odd lots of NYC as well as to the larger parcels that are available to farm. Outdoor gardening offers three seasons of food with only slight modifications for protection and buffering. Diverse gardens are the most economical and the most resilient and offer the greatest number of benefits at the lowest cost.

#1661
Section 1. Comprehensive urban agriculture plan.

a. The department of city planning, in cooperation with relevant agencies and stakeholders, including but not limited to food policy educators, representatives from community gardens and urban farming businesses, shall prepare a comprehensive urban agriculture plan. Such comprehensive urban agriculture plan shall address, but not be limited to, the following issues related to urban agriculture:

b.

(i) cataloguing existing and potential urban agriculture spaces,

(ii) classification and prioritization of urban agriculture uses,

(iii) potential land use policies to promote the expansion of agricultural uses in the city,

(iv) an analysis of those portions of the zoning resolution, building code, and fire code that merit reconsideration to promote urban agriculture,

(v) expanding the availability of healthy food in low-income neighborhoods,

(vi) the integration of urban agriculture into the city's conservation and resiliency plans,

(vii) youth development and education with regard to local food production;

(viii) direct and indirect job creation and impacts from urban agriculture production;

(ix) the feasibility of creating an office of urban agriculture.

DESIGN TRUST
FOR PUBLIC SPACE

UNLOCKING THE
POTENTIAL OF
NYC'S PUBLIC SPACES
SINCE 1995

2017 NATIONAL DESIGN
AWARD WINNER

Design Trust for Public Space Testimony
Intro #1661 in the Committee on Land Use
October 26, 2017

Thank you to the City Council Members of the Committee on Land Use for the opportunity to speak on the proposal for a comprehensive urban agriculture plan.

I am Luisa Santos, Equitable Public Space Fellow with the Design Trust for Public Space, a nonprofit dedicated to the future of public space in New York City. Design Trust projects bring together city agencies and community groups to make a lasting impact – through design – on how New Yorkers live, work, and play.

Our projects over the past 20 years have included saving the High Line with our feasibility study, and developing the sustainability guidelines that became the precursor to NYC's Local Law 86 and now OneNYC.

40 WORTH STREET
SUITE 603
NEW YORK, NY 10013
(212) 695 2432
@DESIGNTRUSTNYC

Our project on urban agriculture, Five Borough Farm, was a multi-phased project conducted in partnership with Added Value, NYC Parks, and Farming Concrete. Five Borough Farm offered a roadmap to farmers and gardeners, City officials, and stakeholders to understand and weigh the benefits of urban agriculture, and made a compelling case for closing resource gaps to grow urban agriculture throughout the five boroughs of New York City.

The first phase of the Five Borough Farm project resulted in policy recommendations, including for the creation of an urban agriculture plan, that would:

- establish goals, objectives, and a citywide land use scheme for garden and farm development
- integrate urban agriculture into existing plans, programs, and policy-making processes in city government
- address disparities in access to funding, information, and other resources by creating more transparent and participatory processes to enable gardeners and farmers to influence policy and decision-making.

Our recommendations, released in 2012, align with the current proposal that Brooklyn Borough President Eric Adams and Council Member Rafael Espinal have introduced for an urban agriculture plan. However, systems of accountability are essential to maximizing the benefits of the Plan for all New Yorkers.

The Plan must apply not only to commercial urban agriculture, but also to community gardens, school gardens, permaculture gardens, vertical farms, and all other forms of gardening and farming practice.

We urge the City Council to incorporate the following three means to ensure accountability in the generation and execution of the Plan:

1. a citywide task force—composed of City agencies, support organizations, and gardeners and farmers representing a variety of types—for reviewing the development and implementation of the Plan. This task force would build off of the Urban Agriculture Task Force with NYC Parks established through Five Borough Farm, and the roundtable convened by Brooklyn Borough President Adams in Spring 2016.
2. open forums at many points in the Plan's development process, including input-gathering in each borough at spring gardening and farming events, such as GrowTogether and Making Brooklyn Bloom.
3. communication within the City and with gardening and farming support organization and advocate networks, including GreenThumb, NYCHA's Garden and Greening Program, 596 Acres, and the New York City Community Garden Coalition.

We recognize, given the July 2018 proposed deadline for completion of the Plan, that this is an aggressive time frame to carry out these systems of accountability; nonetheless, this process will be critical to ensuring the effectiveness of the Plan. We are happy to connect developers of the Plan to community garden and urban farm stakeholders.

I leave you with a quote from a community gardener who contributed to the Five Borough Farm project. Over five years ago, they said,

> "Right now urban agriculture is on everyone's lips, and it sounds good. Yet, are people in power then making policy? Are they thinking of it as, 'Oh, it's a new wave and it will go away?' Or do they really believe in what they're saying: that as the city goes into the next decade or so and even further, that community gardens and urban farms must be part of the landscape when it comes to urban planning?"

We are still within the decade. Let's make sure that the needs of all gardeners and farmers are included in a citywide, comprehensive urban agriculture plan.

Statement by Betty Mackintosh

about Intro #1661, Legislation for a Urban Agriculture Plan

City Council Committee on Land Use Public Hearing October 26, 2017

Good afternoon Council Members. My name is Betty Mackintosh. I enthusiastically support the proposal to develop an urban agriculture plan. I have been volunteering for the last seven years at a rooftop farm in Hell's Kitchen; all the produce is donated to a local food pantry. I also am a member of Manhattan Community Board 4 which covers Chelsea and Hell's Kitchen. I am speaking as an individual.

An urban agriculture plan which facilitates farms that grow food is urgently needed for several compelling reasons:

- To provide free or low cost fresh vegetables to people who can't afford them
  - One in six people are hungry in the city
  - Eating fresh vegetables is essential for good health

- To help improve the air quality in many neighborhoods
  - For example, MCD 4 has the third worst air quality in the city
  - Particulate matter, due to heavy vehicular traffic, causes serious health problems

- To promote environmental sustainability

- To educate youth about food production, nutrition and food justice.

I suggest the following:

1. Work closely with local communities, neighborhood organizations, community boards and elected officials at every stage in developing the plan.

2. Create structures for the running of new farms that involve local organizations and residents.

3. Develop a program that provides start-up funding for new farms
   - Both in ground and on roofs
   - For vacant lots, existing and new buildings

4. Identify appropriate sites for farms and aggressively approach property owners, particularly non-profits, to develop farms.
   - Provide financial incentives.

- Revise regulations as needed.

5. Identify urban farm experts and support them to assist in developing new farms.

6. Provide zoning incentives for new buildings to provide space for farms
   - Consider floor area bonuses and other zoning mechanisms
   - To take advantage of these incentives, the sponsor of these new farms would need to donate a significant percentage of produce to low-income households; a smaller percentage of produce could be kept for building residents or commercial uses (such as restaurants).

7. Ensure that new buildings do not create shadows over existing and new farms.

8. Provide resources to every school to develop a farm on its grounds or in the nearby neighborhood.

   - Hands-on-farm experience, farm-grown food in the lunch room and farm-related curriculum would become part of every school program.

I look forward to a creative, inclusive and exciting comprehensive urban agriculture plan for the city.

Thank you.

Statement for the Record

NYC Council, Committee on Land Use

Hearing on Int 1661-2017

October 26, 2017

Chairman Greenfield, Members of the Committee:

My name is Henry Gordon-Smith, and I am the founder and managing director of *Agritecture*, an urban agriculture consulting firm located in East-Williamsburg. We work with entrepreneurs and mission-driven organizations to turn their urban agriculture dreams into realities. From this vantage point, we have seen the enormous passion and opportunity that exists for this space in New York City. But, at the same time as we have seen this industry blossom, we have also been made keenly aware of the challenges and barriers that our clients face every day.

As we further realize with every new study, the benefits of urban agriculture to our city are far ranging and multifaceted. The commonly reported benefits include the more easily quantifiable: thousands upon thousands of pounds of nutritious fresh produce every year, reduced peak summer temperatures, storm water retention, and building energy savings—to the less quantifiable but no less impactful benefits: a local and resilient food system, more vibrant and healthier communities, and re-empowering residents of underserved areas.

While I wholeheartedly agree with these many benefits, my experience has led me to see an additional reason NYC should support and promote urban agriculture: economic opportunity. Commercial urban agriculture is a young industry that continues to grow rapidly every year. Just this year to date, U.S. urban farming startups have raised a record over USD 285 million in capital, and that doesn't include the many millions more that have gone towards urban farming technology companies that are part of the urban agriculture ecosystem.[1] For fresh produce alone, the U.S. market potential for urban agriculture is estimated as USD 9 billion.[2] This money translates into new development of underutilized spaces, a diversity of well paying jobs across skill ranges, and spill-over into related industries. And of course, it brings revenue to the cities where it is located.

NYC's urban agriculture movement has great momentum, and insiders often remark that it is the strongest in the nation. Within the past 5 years, we've seen the launching of innovative local farming operations such as Farm One, Sky Vegetables, Square Roots, Gotham Greens, Smallhold, Edenworks, Brooklyn Grange, and Hellgate Farms—and more are on the way. Literally every week I talk with entrepreneurs and investors who have flocked here from all over the country with the dream of starting their own farm or agriculture business.

---

[1] David, V. (2017). *How to Invest in Leafy-Green Indoor Agriculture*. Retrieved from: https://agfundernews.com/how-to-invest-in-leafy-green-indoor-agriculture.html

[2] Newbean Capital. (2017). *Indoor Crop Production: Feeding the Future.*

But alongside all this growth and passion, there is another story of missed opportunities. Many of the same entrepreneurs and investors who want to be a part of NYC's urban agriculture environment are taking their business plans and financial capital to other cities. And this is for the simple reason that many other municipalities, including Boston, Chicago, Philadelphia and even Newark right next door, have comprehensively incorporated urban agriculture into their policy frameworks, while New York City still has not. Talking with clients and members of our NYC Ag Collective (farming.nyc), I often hear how difficult it can be to secure a growing space in the city. And it's not because those spaces don't exist. To the contrary, a detailed study by Columbia University's Urban Design Lab identified 5,000 acres of suitable vacant land within the city, and 3,000 more acres of suitable rooftop space—and that's not including any of the potential indoor space.[3] Instead, zoning, building and fire codes, permitting requirements, and other regulatory hurdles make it extremely challenging to find appropriate spaces, and significantly increase start-up costs.

Since former Council Speaker Quinn released her *FoodWorks* assessment in late 2010, the question has moved from *if* food policy should play a major role in our sustainability agenda, to *how*. As a city, we have made steady progress in promoting fresh food vendors, and building our relationships with upstate farming communities. Now, we have to take the next important step and focus on our own food producers right here in New York City.

Our current policy approach to urban agriculture is disjointed at best. A few city entities, such as NYCHA, GreenThumb, and DEP's Green Infrastructure Program play a role in promoting urban farming, but there is little to no coordination between them. In order to systematically address the roadblocks that social enterprises, entrepreneurs, and investors are facing, and to reap the enormous potential of this industry, we need a comprehensive urban agriculture plan that defines broad city goals and the role that each agency must play towards achieving them.

From my vantage point, five of our most pressing needs from policymakers are:

(1) **An Office of Urban Agriculture**. Once we have created a comprehensive set of urban agriculture policies, the Office of Urban Agriculture will be instrumental in coordinating efforts among city agencies, maintaining stakeholder engagement, and providing progress reports back to the Council and public. The Office of Urban Agriculture will also be key in managing an extensive amount of local data, including on industry best practices and models of success, as well as an inventory of suitable urban agriculture spaces.

(2) **An Urban Agriculture Land Inventory**. This will be a comprehensive inventory of existing urban agriculture operations, as well as suitable spaces across all five boroughs, that city agencies and the public alike could access via an easy to navigate website. Much work on documenting these spaces has already been done. The Office of Urban Agriculture, therefore, will be responsible for centralizing this data, directing

---

[3] Urban Design Lab. (2012). *The Potential for Urban Agriculture in New York City: Growing Capacity, Food Security, & Green Infrastructure.*

further research, and maintaining this inventory over time. Above all, spaces that are not appropriate for housing should be considered for producing fresh and local foods for NYC residents.

(3) **Amendments of the zoning, building, and fire codes**. Currently, urban agriculture is not sufficiently addressed in any of these city codes. This creates many hurdles, such as: (a) a lack of clarity concerning which zoning districts urban agriculture can be located; (b) unused residential building space that cannot be used for commercial farming; (c) uncertainty as to safe floor layouts for indoor growers. In addition to amending these codes to include urban agriculture, the permitting process for urban ag with DOB should also be streamlined to reduce costly wait times.

(4) **Incentives and tax abatements**. Establishing proper incentives for urban agriculture will ensure that it creates as large a positive impact as possible. Tax abatements must be available to urban farmers, and credits should be created that incentivize property owners and developers to consider urban agriculture for underutilized spaces. "Urban Agriculture Incentive Zones"—land areas with particularly favorable incentives—should also be considered.

(5) **Urban Agriculture Incubator**. Having a dedicated incubator space would ensure NYC is the go-to location for urban agriculture by providing new entrepreneurs what they crave most: a place where they can connect with other like-minded individuals, as well as to test their business models on a smaller scale without the high capital costs that would otherwise be unavoidable. The incubator would also be a public resource by providing much needed industry data to the Office of Urban Agriculture for the city to use in future planning and policies.

I look forward to maintaining a strong line of communication with the City Council and Department of City Planning in the weeks and months to come. Please do not hesitate to reach out to me with any further questions, and to include me in stakeholder engagements.

Sincerely,

Henry Gordon-Smith

Founder & Managing Director
Agritecture Consulting
40 Bushwick Ave, Brooklyn NY
Henry@Agritecture.com
(347) 709-7587

Testimony before the New York City Council Committee on Land Use on Int. No. 1661: Legislation to Create a Comprehensive Urban Agriculture Plan

Nevin Cohen, Ph.D.
Associate Professor, CUNY Graduate School of Public Health and Health Policy
Research Director, CUNY Urban Food Policy Institute
October 26, 2017

Dear Chairman Greenfield, Council Member Espinal, and Committee Members. My name is Nevin Cohen, and I am an Associate Professor of Health Policy at the CUNY Graduate School of Public Health and Research Director of the CUNY Urban Food Policy Institute. The CUNY Urban Food Policy Institute advances urban food equity by engaging with students, government officials, and advocates to produce evidence-based research, innovate new collaborative solutions, and provide policy guidance.

I have studied and written about NYC's urban agriculture system for the past ten years. As the Policy Fellow of the Design Trust for Public Space I co-authored the report *Five Borough Farm*, the first comprehensive assessment of urban agriculture in New York City. I also co-authored the book *Beyond the Kale: Urban agriculture and social justice activism in New York City*, a study of the potential for urban agriculture to address racial, gender, and class disparities. I am currently leading a three-year evaluation of the *Farms at NYCHA*, an innovative public-private partnership that trains NYCHA youth while growing fresh produce for its residents.

I would like to express my strong support for Int. No. 1661. The need for an urban agriculture plan is detailed in the policy section of the *Five Borough Farm* report, which is appended to my testimony. Since 2012, when the report was published, new developments have only increased the importance of a plan:

- New initiatives have been launched to make New York City healthier, just, and more resilient: Building Healthy Communities; Next Generation NYCHA; Housing New York; Age Friendly NYC; Zero Waste; Green Infrastructure; and others. Urban agriculture can contribute to achieving the goals of these programs, but only if it is fully integrated into program design. An urban agriculture plan would require conformity with these and other city plans, giving stakeholders the opportunity to identify how to integrate food production in programs that might otherwise not be viewed as relevant to urban agriculture.
- Continuing conflicts between urban agriculture and competing land uses, most recently around HPD's affordable housing initiative, highlight the need for a public process to decide how much urban agriculture is appropriate for NYC, where new urban farms and gardens should be located, methods to protect existing gardens and farms, and a process for supporting current and new farming and gardening activities.
- As *Beyond the Kale* shows, the benefits people usually attribute to urban agriculture -- fresh food, green space, job training -- can mask and even exacerbate structural inequities. A planning process would involve the public in identifying and addressing disparities within the urban agriculture system, particularly disparate access to financial resources and land.
- New forms of commercial urban agriculture – practiced indoors, in shipping containers, on rooftops – require reassessing zoning and related codes and regulations to ensure that these innovations are supported while also protecting community health, safety, and quality of life, with fair wages and working conditions for farmworkers. Council Member Espinal and Borough President Adams have committed substantial resources to agro-entrepreneurship, and a plan will identify and address obstacles to this emerging business sector.

- Efforts to sustain regional agriculture, particularly in the Hudson Valley, have created opportunities for innovative links between peri-urban and urban farms. Incorporating regional agriculture in the urban agriculture plan would identify common needs and opportunities for shared infrastructure and supportive policy.

The following specific revisions would strengthen the legislation and resulting urban agriculture plan:

- Identifying relevant agencies in Section 1(a) (e.g., HPD, EDC, DOB, DEP, DOH, and DOS) that have significant effects on gardens and farms, yet often are considered peripheral to urban agriculture, would ensure that the plan is developed with *all* agencies that influence land, infrastructure, public health, and organic waste. Agencies that address regional agriculture, like NYS Agriculture and Markets, should be involved as well.
- The catalog of existing and potential urban agriculture spaces required in Section 1 (a) (i) should include public *and private* spaces, and should be easily accessible online.
- In Section 1 (a) (ii), the classification and prioritization of urban agriculture uses should be based not only on food production potential but also on community needs and objectives (e.g., for open space) and the potential for agriculture to contribute to non-food municipal goals (e.g., physical activity, environmental management, job development, age-friendly spaces).
- Existing and potential land use policies are required by Section 1 (a) (iii) to be evaluated for their ability to expand urban agriculture, but the term "land use policies" should include not only zoning but also related policies such as the uniform land use review process (ULURP) and the City Environmental Quality Review process (CEQR).
- Section 1 (a) (iv) should be clarified to require DCP to consider the impacts of *all* relevant codes on urban agriculture, including but not limited to the three listed. Sanitation, water, transportation, vector control (e.g., the use of rodenticides) and other codes are potential hindrances to urban agriculture that should be reviewed.
- Urban agriculture's role in expanding access to healthy food, required in Section 1 (a) (v), should not be construed as limited to the *production* of healthy food, but also to the potential for urban agriculture sites to serve as *healthy food spaces*, e.g., distribution points for farmers markets, CSAs or box schemes, and hosts for activities such as nutrition counseling or cooking instruction.
- As noted above, Section 1 (a) (vi) should require the integration of urban agriculture into *all* relevant plans, including but not limited to conservation and resiliency plans.
- The urban agriculture plan should link urban agriculture to the regional food system, parts of the food supply chain often regarded as separate, and requiring DCP to convene stakeholders to recommend opportunities for the plan to support regional food production and distribution along with urban agriculture.
- DCP should formally adopt the urban agriculture plan, and not simply write a planning report that lacks the authority of formal plan. One procedure for doing so is Section 197-a of the City Charter. Though commonly used to plan specific neighborhoods, the 197-a process can address broad topics and geographic areas. Plans are more complex because they require more extensive public reviews, but the review processes will ensure wide participation and broader support.
- The bill requires the plan by July 2018, yet does not include a provision for review and revision. Urban agriculture is changing so rapidly that regular updates are essential and should be required.
- Finally, urban agriculture is so diverse that the legislation should establish a community advisory board to provide input to the planning process, and to review and recommend changes to ensure that the plan continues to address the needs of different stakeholders over time.

These modifications will ensure that the plan is well-crafted, has an impact, and remains relevant for years to come. My colleagues at the CUNY Urban Food Policy Institute and I welcome the opportunity to provide further input as the bill is considered by the Committee and the Council, and as the plan is developed.

Re: Int 1661
Testimony from Jason Green, CEO + Cofounder at Edenworks
October 26, 2017

Good afternoon,

Thank you all for holding this hearing.

My name is Jason Green and I'm the CEO and Cofounder at Edenworks. Edenworks is vertical aquaponic farming company based in East Williamsburg, Brooklyn. We grow leafy greens and fish that are sold within our community through partners like Whole Foods Market and the Bushwick Food Coop.

I'm testifying today to both the opportunity and the challenges for New York's urban agriculture industry. In particular, the vertical farming or indoor agriculture sector represents an exciting area of growth that straddles food manufacturing and advanced manufacturing.

I'll begin with the opportunity. New York City has a goal of 100,000 new, well paying jobs by 2030. Manufacturing, food manufacturing specifically, is essential to meeting this goal.

Over the past 5 years, US jobs overall have grown by 2.5% while national manufacturing jobs have grown by 6.5%. Despite the substantial effort to spur New York State's manufacturing sector, jobs have actually shrunk by 3%. Food manufacturing has been the rare bright spot in New York State, growing by 10% in the past 5 years -- 50% faster than US manufacturing jobs and four times the rate of US jobs overall. New York City accounts for one third of New York State's food manufacturing jobs, more than any other region.

Food manufacturing is responsible for not just growth in employment rates but also in wages. Manufacturing wages are $15k higher than the national average and food manufacturing wages have grown by 12% more than manufacturing at large.

My company, Edenworks, has grown from 3 cofounders to now 10 full time and 4 part time employees. We have a mix of engineering jobs for the technology we develop and farming jobs for the farm we operate. Over the next year, we expect to double the size of our engineering team and more than triple the size of our farming team.

There are, however, challenges to growing New York City's indoor agriculture industry.

Energy costs in New York City, even with incentives, are twice the rate of energy in New Jersey or upstate New York.

Certain legislation creates regulatory uncertainty and actually disincentivizes green industries. A striking example of this is the New York City Energy Conservation Code, which I realize is a State law. The Energy Conservation Code creates blanket insulation requirements that can add millions to project costs, require a huge investment from an "embodied energy" or carbon cost perspective, but not actually improve the energy efficiency of the project. This is a nuanced technical area that my team is happy to discuss in a different forum.

A lack of precedent of these projects in New York, combined with New York's building code, which has been slow to adapt to modern needs, means that operators have to be prepared for extended permitting periods and costs.

New York City remains an extraordinary place to live and work and I applaud the effort that New York has done to incentivize real estate development and increase the supply of residential and commercial space.

Where there has been a lack of attention is in also addressing hurdles and incentives to attract operators, especially in manufacturing. Often, manufacturers are operating in leased space and investing in equipment rather than to the assessable value of the building. So while operators may be investing millions or tens of millions in projects, they fall outside most of the traditional incentive structures for development.

It is because of New York's dynamism and demand for great food that companies like Edenworks want to continue to grow in New York, but there are very real hurdles that the City can help to clear. What I've mentioned today are just a few of the items that we think could help New York City to create a stronger, more dynamic economy through an industry that will give us a more delicious and resilient food supply.

I look forward to the continued conversation and discovery process leading to legislation that will address the needs of the City and of this industry.

Thank you to Council Members Espinal, Torres, Greenfield, and Salamanca for introducing this legislation. I especially want to thank Borough President Adams and Council Member Espinal for the support and energy that they and their teams have invested in the success of this industry and my organization.

Dear Member of the Council,

I am proud to say I have been a part of this urban food movement here in New York City for several years. I was so taken by its transformative potential that I returned to school to study this at a more macro level at Brooklyn College. I believe in the benefits it can bring from improving food access to potential jobs and community development; to the improvements to waste reduction and stormwater management. There are more to list and I'm sure you will hear them in detail. But in the brief period I have your attention I wanted to focus on the issue of green gentrification.

It is undeniable that urban greening projects from the Highline to Prospect Park help increase real estate value and in turn rent prices. These green "amenities" become a driving mechanism for incoming residents while pushing out those who can no longer afford to live in their neighborhood. So those people who helped start a community garden or green project now may not be able to enjoy the benefits it brings to the community; more urban greening can only further exacerbate the problem. Which is why I believe the current housing/land crisis that is occurring in New York needs to be addressed in conjunction with the expansion of Urban Agriculture.

As I prefaced before, I firmly believe in the benefits of Urban Agriculture and have dedicated my life to working within at as a farmer and studying it as a sociologist. But it is my belief body and soul that in order to make this expansion of Urban Agriculture in New York equitable for all New Yorkers issues of land access and land rights must be addressed.

Therefore, I recommend to the council to look closer at Community Land Trusts as a potential solutions for both housing and Urban Agriculture. Our Comptroller has already put these ideas in motion with the proposal of a New York City Land Bank. That is the framework

that needs to be around this debate. We don't need public/private partnerships there are boots on the ground ready to do the work once we know that land access and security are available. We are at a historic precipice where we can look back and mark where we made the effort to get it right and make this a greener more equitable city. Thank you.

Barry Rothstein

Urban Farmer

166A 22nd Street
Brooklyn, NY 11232 | NYC-EJA.org

On the ground – and at the table.

New York City Environmental Justice Alliance testimony to the New York City Council Committee on Land Use in support of Int. 1661 in relation to the development of a comprehensive urban agriculture plan.

October 26, 2017

Good morning Chairperson Greenfield, Councilman Espinal, and Members of the City Council. My name is Annel Hernandez and I am here to testify in support of Int. 1661 on behalf of the New York City Environmental Justice Alliance (NYC-EJA). Founded in 1991, NYC-EJA is a non-profit citywide membership network linking grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental justice. NYC-EJA empowers its member organizations to advocate for improved environmental conditions and against inequitable environmental burdens. Through our efforts, member organizations coalesce around specific common issues that threaten the ability of low-income and communities of color to thrive, and coordinate campaigns designed to affect City and State policies – including community gardens, green infrastructure, and urban agriculture directly benefiting these communities.

Our organization has been a longtime advocate of community gardens, and we support this Intro. 1661 that requires the City to develop a comprehensive urban agriculture plan that addresses land use policy and other issues to promote the expansion of urban agriculture. NYC-EJA member organizations come from communities overburdened by polluting infrastructure, lack of green and open space, and lack of access to healthy foods. NYC-EJA recognizes urban agriculture as a key community resiliency strategy.

Our NYC Climate Justice Agenda is a multi-year research and advocacy campaign to address the need for a comprehensive community-based approach to climate adaptation and community resiliency. In 2017, we released a report which analyzed Mayor de Blasio's OneNYC plan and made several concrete recommendations to strengthen the City's policies in environmental justice communities. We highlighted that community gardens are a much needed piece of green infrastructure to mitigate climate change, and a valuable asset for vulnerable communities. For example, a comprehensive approach to the growing threat of extreme heat should also take into consideration the multiple co-benefits associated with green spaces. While the City has provided support for community gardens and urban agriculture, we are troubled by news that several community gardens sites may be offered up for the development of housing.

Urban agriculture is also an important piece of food resiliency. In the City's recently released Five Borough Food Flow report, they flagged that in the event of an emergency low-income, geographically isolated consumers face additional vulnerabilities, particularly if they have limited food choices under normal circumstances. This increases the need for comprehensive food mapping at the community level, so that emergency food supplies are readily accessed by the City's most vulnerable populations during hurricanes, blackouts, and other emergency scenarios.

NYC-EJA commends the New York City Council's Committee on Land Use for holding a hearing on Int. 1661 creating an opportunity for public comment on this important strategy to increase community resiliency. We urge the passage of Int. 1661, and look forward to continued collaboration with the City in this regard.

FOR THE RECORD

October 26, 2017

Testimony before City Council Regarding Urban Agriculture Bill Intro 1661

By Greg Todd, member Organics Committee, Brooklyn Solid Waste Advisory Board

and facilitator of Imani Garden, 1680 Pacific Street, Brooklyn

About a month ago a view from the south of Spain went viral on Facebook. It was an aerial photograph of a valley floor completely covered with plastic greenhouses. These greenhouses used hydroponics to produce vegetables for the restaurants and supermarkets of Europe. The chemical run-off of these greenhouses was destroying the ground water of the valley and polluting the adjacent Mediterranean, which was awash in plastic sheeting cast off by the greenhouses.

This is not the future we at the organics committee of the Brooklyn Solid Waste Advisory Board see for urban agriculture. The urban agriculture we would support is one rooted in raised beds growing nutrient dense vegetables organically in real soil. This soil would be augmented with compost derived from food scraps collected in the community around the raised beds. These food scraps would be converted to compost in neighborhood organics processing centers, not centers in Dutchess or Suffolk counties.

Nutrient dense food is key to a healthy diet. Americans lacking this type of food are increasingly reliant of supplements and chemicals to replace what once was in their food. My father was raised on a farm in southern Michigan where cows, pigs and chickens generated manure which, along with the food scraps from the family kitchen, recycled nutrients back into the soil where they raised they own vegetables. Since then modern industry has broken this chain of nutrient recycling. Commercial farms employing hydroponics lack trace elements available in natural fertilizer and cannot deliver the full spectrum of nutrients that humans need to remain healthy. They also generate vast amounts of waste that is lost to the food production system. My father's farm captured all of the nutrients in the animal waste it generated. Modern commercial farms leave the landscaped cluttered with waste lagoons, soil run off, plastic debris and many other wasteful off casts.

In short, we need food produced locally that will not be interrupted by calamities in far away farms related to hurricanes, wild fires and earthquakes and that delivers the full complement of nutrients that our bodies need to be healthy. If this is the type of urban agriculture envisioned by Intro 1661, we fully support this legislation.

NEW YORK CITY COUNCIL, COMMITTEE ON LAND USE
OCTOBER 26, 2017 HEARING ON INTRO 1661-2017:
A LOCAL LAW IN RELATION TO DEVELOPING A COMPREHENSIVE URBAN AGRICULTURE PLAN

Testimony of Raymond Figueroa, Jr.
President, New York City Community Garden Coalition
Faculty, Graduate Center for Planning and the Environment, Pratt Institute-Graduate School of Architecture
Taconic Fellow, Pratt Center for Community Development
Director, Alternatives-to-Incarceration Initiatives, Youth Community Farm, Friends of Brook Park

Thank you Chairman Greenfield, Council Member Espinal, Land Use Committee Members, and Brooklyn Borough President Adams for your collective leadership on the development of a comprehensive urban agricultural plan. And, thank you for this opportunity to submit my testimony in this regard.

The City Council, Committee on Land Use should thoughtfully consider incorporating the following recommended mechanisms in regards to ensuring and maximizing the successful development of a *genuinely* comprehensive urban agriculture plan (please note that a number of the following recommendations are drawn from my previous testimony in 2013 before the City Council's jointly convened Hearing by the Committee on Government Operations and the Committee on Contracts in relation the City Council's FoodWorks Plan – a plan for which I served as an adviser to the City Council Speaker's Office – said testimony is appended here as an attachment to my presently submitted testimony):

NEW YORK CITY COUNCIL, COMMITTEE ON LAND USE
OCTOBER 26, 2017 HEARING ON INTRO 1661-2017:
A LOCAL LAW IN RELATION TO DEVELOPING A COMPREHENSIVE URBAN AGRICULTURE PLAN

Testimony of Raymond Figueroa, Jr.
President, New York City Community Garden Coalition
Faculty, Graduate Center for Planning and the Environment, Pratt Institute-Graduate School of Architecture
Taconic Fellow, Pratt Center for Community Development
Director, Alternatives-to-Incarceration Initiatives, Youth Community Farm, Friends of Brook Park

1. Call on the current administration to re-convene and continue the previous administration's Inter-Agency – Community Stakeholder Urban Agriculture Taskforce (first begun under the Bloomberg administration) this time focused on collaborating with the Department of City Planning on the Development of a Comprehensive Urban Agricultural Plan.

    a. A very exciting outcome of this Inter-Agency – Community Stakeholder Urban Agriculture Taskforce has been that agencies have begun looking internally as to how they can cost-effectively deploy/re-deploy their respective institutional resources as well as leverage outside resources in the service of promoting urban agricultural development in New York City.

    b. Among the ongoing agenda items for such an Urban Agriculture Taskforce would be addressing the policy infrastructure for urban agriculture in specific, including:

c. consider development of a streamlined application process for developing community-based urban farms for local communities throughout the City of New York

d. consider coordinating with local communities for the development of commensurate zoning

i. In this regard . . . . .

2. adapt the F.R.E.S.H. – i.e., Food Retail Expansion to Support Health – initiative as a policy template:

a. utilizing its current set of criteria (for geographically siting supermarkets) for geographically siting community-based urban farms

b. utilizing its incentives for local investment in supermarkets and making these same incentives available to urban food producers, including:

i. re-zoning and land use regulatory variances;

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

ii. long-term lease agreements;

iii. tax incentives, and/or other appropriate fiscal resource incentives, i.e., in the case of community-based non-profit community gardens / community farms

c. consider calling for new language within F.R.E.S.H. that stipulates that, in return for government incentives, supermarkets (as well as any other food retail outlet) must source a given percentage of food from NYC community-based farmers in addition to their hiring from the local communities in which they are located;

E.G.) THE PEPPER-GROWING COLLECTIVE OF SOUTH BRONX COMMUNITY GARDENS GROWING THE PEPPERS FOR mehotsaucecompany BRONX HOT SAUCE

i. in this regard, the City Council's Plan, FoodWorks' - "NYC Eats" proposal is on target in addition for its calling for procurement by local institutions

ii. collectively these "zoning" "sourcing" and "procurement" policies will help to develop what I have strategically conceived of as "MICRO FOOD HUBS" (more elaboration on this concept

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

later in this testimony) wherein local communities – and by extension the city – can maximize the local economic development potential of community-based urban agricultural by circulating and re-circulating income locally

iii. in order for the City of New York to develop and implement a comprehensive urban agriculture plan, it must comprehensively reconcile the implicit competition with its "Re-zoning for Affordable Housing" plan – the City must, in the interest of rightfully promoting the Public Good in the fullest sense, thoughtfully consider the following:

1. just as it can (and must) adapt the F.R.E.S.H. initiative incentives, the City of New York can and must implement a redeployment of its re-zoning and tax incentives currently earmarked for affordable housing development and consider additional rezoning and tax incentives for housing development that includes the development of community-based urban agriculture – and, further, it must do so, in particular, where such housing

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

plans overlaps with a) the City's F.R.E.S.H. geographic criteria and b) the City's Department of Environmental Protection's geographic designation of "Combined Sewer Overflow Tributary Areas"

2. for in regards to the latter, new housing development will, no doubt, create added pressure on the City's already increasingly aging and overwhelmed Sewer Infrastructure, which as Super Storm Sandy brutally demonstrated, makes the City particularly vulnerable to the new normal of extreme weather events.

3. To be sure, in this regard, not only do Community Gardens / Community Farms collective constitute both an already built-up and cost-effective infrastructure for urban agriculture, but they bring the added value of providing an already built-up and cost-effective *green infrastructure* for mitigating storm-water flooding and runoff mitigation in addition to providing other vital ecosystem services,

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

NEW YORK CITY COUNCIL, COMMITTEE ON LAND USE
OCTOBER 26, 2017 HEARING ON INTRO 1661-2017:
A LOCAL LAW IN RELATION TO DEVELOPING A COMPREHENSIVE URBAN AGRICULTURE PLAN
Testimony of Raymond Figueroa, Jr.
President, New York City Community Garden Coalition
Faculty, Graduate Center for Planning and the Environment, Pratt Institute-Graduate School of Architecture
Taconic Fellow, Pratt Center for Community Development
Director, Alternatives-to-Incarceration Initiatives, Youth Community Farm, Friends of Brook Park

a. and it is the raised planting beds dedicated to urban agriculture whose soils are amended with compost that exponentially increase community gardens'/community farms' capacity to mitigate flooding and storm-water run-off into our Combined Sewer infrastructure

b. In fact, in 2015, the Governor's Office of Storm Recovery awarded the New York City Community Garden Coalition a two million dollar grant for the enhanced utilization of local community gardens as a strategic form of Green Infrastructure – working to mitigate localized flooding and storm-water run-off into the City's Combined Sewer infrastructure and overwhelming that form of built Grey Infrastructure.

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

4. Finally, the simultaneous and strategic deployment of, "Transfer of Development Rights" and/or "Purchase of Development Rights" and the related utilization of "Community Land Trusts" can allow for the following three goals to be accomplished, including a) the development of the community-based urban agriculture Infrastructure of MICRO FOOD HUBS, b) the development of the community-based urban agriculture Green Infrastructure for mitigating the City's vulnerability to extreme weather events, *and* c) the development of affordable housing –

iv. Collectively, the incorporation and implementation of these strategic policy and fiscal considerations constitutes the development a truly comprehensive plan for the City of New York that ensures the TRIPLE BOTTOM LINE – Social Resiliency, Environmental Sustainability, as well as Financial Vitality – as a polity, we can and must do no less – the viability of future generations is depending on us and on what we do today.

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

3. Adapt the investment template for the business incubator of La Marqueta's Hot Bread Kitchen.

4. Deploy fiscal resources for a census of community gardens / community farmers

    a. They can be included in an updated and expanded census count a là Five Borough Farm/Farming Concrete (please see link http://farmingconcrete.org/mill/) in order to demonstrate the local community economic development potential of NYC community-based urban agriculture; and, eventually,

    b. Community Farms must be included in the next USDA/NASS Census for the same reason.

        i. This will ensure that the commensurate level of agricultural dollars and resources from the Federal, State, and Local levels are placed in communities that are currently underserved in this regard.

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

NEW YORK CITY COUNCIL, COMMITTEE ON LAND USE
OCTOBER 26, 2017 HEARING ON INTRO 1661-2017:
A LOCAL LAW IN RELATION TO DEVELOPING A COMPREHENSIVE URBAN AGRICULTURE PLAN
Testimony of Raymond Figueroa, Jr.
President, New York City Community Garden Coalition
Faculty, Graduate Center for Planning and the Environment, Pratt Institute-Graduate School of Architecture
Taconic Fellow, Pratt Center for Community Development
Director, Alternatives-to-Incarceration Initiatives, Youth Community Farm, Friends of Brook Park

c. The over-arching impetus for such a count is that of ensuring government support for *and* long-term investment in the economic development of the community-based urban agricultural infrastructure and related jobs.

   i. In this regard, there is a need for supporting commercial kitchens and related facilities, including: washing stations, food processing and storage facilities, marketing, and distribution in addition to direct support for agricultural food production.

Respectfully submitted,

Raymond Figueroa, Jr.
President

New York City Community Garden Coalition, 232 East 11th Street, New York, NY 10003, www.nyccgc.org, nyccgc@gmail.org
The New York City Community Garden Coalition is a non-profit organization founded in 1996. Our mission is to promote the preservation, creation, and empowerment of community gardens through education, advocacy, and grassroots organizing.

Ricky Stephens | Co-Founder | AgTech X
Int. 1661 Public Hearing Testimony
October 26, 2017

My name is Ricky Stephens; I'm a founder of AgTech X, a Brooklyn-based startup. At AgTech X, we serve as a hub for learning, inspiration, and collaboration within the Urban Farming & AgTech world, and we currently run NYC's only Community Urban Agriculture Lab.

In 5 short months of running our space, we've hosted classes, tours, workshops, & open houses for individuals curious about the application of farming in cities, bringing together hundreds of enthusiastic visitors and quickly expanding our digital network into the thousands. This is not to say that we are expert advertisers or marketers – in fact, we've yet to spend a dollar on advertising since opening the lab – but rather to highlight the fact that there is a real desire out there to engage in the world of urban ag that we are helping to fill.

Using our space as a hub to connect into the industry, our visitors are primarily NYC residents, but others have come from all over: Brazil, France, Japan, and Australia, to name just a few. Their ambitions vary, too – many young, local professionals are seeking jobs in a more sustainability- and impact-driven field, while some of our international visitors have come to size up the opportunity for bringing their existing businesses here.

All of these visitors consider NYC to be at the forefront of innovation when it comes to food, technology, and urban design: the foundations to encourage rapid business growth in the urban agriculture field. My fear, however, is that as these enthusiastic professionals uncover the more hidden barriers to entry and their associated risks and costs, they will flee for greener pastures – literally.

Chicago – in 2011; Boston – in 2013; and Los Angeles – in 2015, are just a few of the many US cities that have already adopted comprehensive urban agriculture plans or made supportive amendments to zoning policies to spur the growth of this industry. New York City has been behind the curve; let's use this bill to change that. Thank you.

Growing a Garden Community

Garden Stories: Leadership Workshop & **Art Loisaida Foundation** completed four interdisciplinary workshops for 48 third graders from the **Children's Workshop School** during September and October 2017. The workshops were held at the **Campos Community Garden.**

Workshop Objectives:

- Heighten the children's curiosity about gardening and nature
- Promote healthier life styles by learning more about food sources
- Increase children's self-confidence and ability to collaborate with others
- Strengthen the ties between the school children, their parents, the broader East Village community and the Campos Garden

Throughout the workshops the children kept journals so they could document their own garden experience.

Workshop Sponsors:

CITIZENS COMMITTEE FOR NEW YORK CITY

ART LOISAIDA FOUNDATION

Hospitality | Retail
TOWER BROKERAGE, INC.
LICENSED REAL ESTATE BROKERS

In-Kind Sponsors:

Gnocco Restaurant, 337 E. 10th St., NYC, NY

materials for the arts

Contact information: gardenstoryworkshop@gmail.com 212-920-9320

Workshop Descriptions

Workshop 1: Incredible Insects, Sept. 13 & 14
Objectives: The children working in pairs created incredible insects from recycled plastic bottles and gave them special powers to help the garden and community.
Instructor: *Gladys Cortez Feliciano, Licensed Creative Art Therapist*

The Incredible Insects exhibited at the LUNGs Arts Festival on Sept. 23 and again as part of the School's fall festival on October 15.

Outcomes: The school principal has requested that the Incredible Insects be displayed as a mobile in the school library.

Workshop Descriptions

Workshop 2: What is a Community Garden and Introduction to Garden Basics, September 27 & 28

Objectives: The children working in teams explored the garden using a guide sheet utilizing sight, touch, smell to differentiate the different vegetables and flowers found in each plot. The children also planted a winter crop of kale and carrots.

Instructor: **Carolyn Zezima**, President of NYC Foodscape

Outcomes: On subsequent visits to the garden the children "adopted" certain areas that they revisited to see how the garden had changed.

Workshop Descriptions

Workshop 3: Garden Harvest Cooking, October 11 & 12
Objectives: Working in teams of six, the children created delicious, inventive bruschetta from vegetables that could grow in the garden. The bruschetta were prepared for another team.

Instructor: Carolyn Zezima, President, NYC Foodscape

Outcomes: The children discovered that vegetables are delicious. They also enjoyed presenting and sharing their bruschetta with the other teams was a lot of fun. A few children reported that they helped their parents prepare dinner.

Workshop Descriptions

Workshop 4: How do we build a community with others? October 18 & 19

Objectives: The concluding workshop focused on building awareness among the children on the different types of communities. The children reflected on their experiences in the garden by creating a team story which they performed for each other.

Instructor: Linda Gelman, Master Storyteller and Producer, Chicago City Limits

Outcomes: The children created stories based on their garden experience and recorded them in their journals.

Workshop Producers

Art Loisaida Foundation is an arts and cultural organization founded in 2008. promote the arts of the residents of the Lower East Side of Manhattan. The organization is focused on developing visual and performing arts events and workshops at Community Gardens for artistic, cultural, environmental, and education purposes.

Garden Stories: Leadership Workshops launched in 2016 offered an eight week workshop for children at the University Settlement's Cornerstone Program at Campos Plaza. We are now partnering with **Art Loisaida Foundation** to offer interdisciplinary workshops for children focusing on gardening, protecting the environment, developing healthier food choices and discovering real joy in working creatively and collaboratively to build essential life skills.

Holly O'Grady, gardenstoryworkshop@gmail.com, 212.920.9320
Founding Director, Garden Stories: Leadership Workshops
http://www.gardenstoriesworkshops.com/

Carolyn Ratcliffe, carolynratcliffe@icloud.com, 347.458.8940
Artistic Director, Art Loisaida Foundation

Special thanks to following:

Gary Morston, art teacher, and Toni Capers, science teacher, at the Children's Workshop School for their wonderful support throughout the workshops. Maria Velez-Clarke, Principal and Dorothy Cantwell, librarian, at the Children's Workshop and videographer, for their involvement and support in helping us realize these workshops.

Campos Community Gardner's for their support of this workshop and their ongoing commitment to the community.

GNOCCO-Gian Luca Giovanetti-for his support and donation of supplies for the cooking. project.

TOWER BROKERAGE-Bob Perls- and Ariel Palitz for funding support.

CITIZENS COMMITTEE OF NYC-Primary funder of this project

united community centers

INCORPORATED

Ph: (718) 649-7979
Fx: (718) 649-7256

613 NEW LOTS AVENUE
www.ucceny.org

BROOKLYN, NY 11207

To: Committee on Community Development, New York City Council

Re: Int. 1661, *A Local Law in relation to developing a comprehensive urban agriculture plan*

I am testifying on behalf of *East New York Farms!*, a food justice and urban agriculture project in East New York, Brooklyn. Since 1998 we have been working with East New York residents to grow food, run farmers markets, and start and maintain community gardens and farms. We provide things like seeds, soil, plants, and other supplies to over 300 gardeners in the neighborhood who grow in 30 community gardens, plus backyard gardens. Fifty (50) of those gardeners sell food at our farmers market, one of the largest youth-run markets in a low-income community. We employ 35 young people from East New York in our intensive Youth Internship Program, some of whom come back to work on staff with us. We operate a ½-acre farm at the Louis H. Pink Houses, a NYCHA development in East New York, with all of the food given away free of charge to Pink Houses residents. We partner with Green City Force to operate another farm at the Bay View Houses in Canarsie, with all of the food distributed free of charge. Through our East New York Compost Project, we collect food scraps at 6 farmers markets and farm stands in the neighborhood, and process that food waste into compost supporting local farms and gardens.

We believe that growing food in our community is a powerful act, providing not just nutrition, but also education, cultural preservation, environmental benefits, and a stronger sense of community. Suffice to say, we were pleased to hear about the proposed amendment to create a comprehensive urban agriculture plant and wish to share some of our thoughts of how we can ensure that this plan can further the needs of communities like East New York that are reshaping their local food systems.

Most importantly, we want to make sure that community gardens remain in the forefront of any conversation about urban agriculture in New York City. While any single garden may not look as impressive as a rooftop farm or a hydroponic greenhouse, when taken as a whole, community gardens constitute a much larger part of our local food system than any of the more high-visibility farm projects. Community gardens are also an important part of the legacy of land stewardship in some of the communities hit hardest by redlining, arson, abandonment, and neglect. Community gardens bring together residents of all ages and all backgrounds--in East New York you will find gardeners from the American South, the Caribbean, West Africa, and Bangladesh, all working together in the same space to feed their families and neighbors. Any urban agriculture plan must work to preserve these spaces for local food production by community residents, and create opportunities for expanding this type of agriculture.

We appreciate the effort to bring a broad range of city agencies to the table to address issues of urban agriculture. We would also like to encourage the council to consider other agencies that could have an interest in and impact on urban agriculture in New York City. The Department of Sanitation has been a key partner for us and many other urban farms, helping to distribute massive quantities of compost as well as support the training of master composters. The Department of Environmental Protection should also be at the table, considering the benefits that urban agriculture could have on our overburdened sewer system by collecting rainwater and allowing rainfall to permeate the soil. We also believe that some of the agencies and institutions holding large amounts of public land should be at the table. Gardening and farming in NYCHA communities, public schools, and colleges would bring a wide range of benefits to New York City residents, and there are many examples of these types of farms in existence today.

Urban agriculture takes on many forms, from the backyard garden or rooftop beehive to the NYCHA farm or the greenhouse in an elementary school. We want to make sure that the skills, views, and needs of low-income communities of color have a voice on this board so that, in addition to increasing local food production, we can seek to achieve food justice in our city.

Thank you for your consideration.

Albert Williams October 26th, 2017

Comprehensive Urban Agriculture Plan: Growth and Integration

Speaker: Albert Williams
Occupation: CUNY School of Public Health Student, Research Coordinator at Mount Sinai Hospital

Council Members, thank you for the opportunity to present testimony on this legislation. Like other New Yorkers, I often experience the difficulty of finding fresh food in many neighborhoods of my hometown Brooklyn and other boroughs of New York City. Difficulty accessing healthy food is even greater for people in states of poverty.[1] Due to these experiences, my support of Introduction 1661 is personal as well as factual.

Urban agriculture has important impacts for cities in community health outcomes, social progress, and economic opportunity. These impacts can be specifically seen in changed diets and exercise, decreases in carbon emissions, and creation of local job opportunities.[2] For example, "Adults with a household member who participates in a community garden consume fruits and vegetables 1.4 more times per day than those who do not participate, and they are 3.5 times more likely to consume fruits and vegetables at least 5 times daily."[3] This surely can impact community health outcomes for generations, which will in turn decrease medical care spending on disease. Urban agriculture supports local economy by providing income opportunities in the farming and selling of food.[4] Additionally, collaboration on agriculture creates a greater sense of community for the peace and welfare of city residents.

In addition to supporting the bill for these reasons, I also propose that this Committee amend the legislation. An important part of designating space for urban agriculture expansion is that the bill can use specific mention of rooftop garden development because rooftop gardens have been particularly effective land use for cities.[5] This legislation also can specify increasing urban agriculture outreach, which can be through marketing, public event campaigns, and integration with existing health initiatives such as fitness programs. With all of this taken into consideration, please vote in favor of this legislation and consider these amendments. Thank you for your time and consideration.

1. Hanna, A & Pikai, O. (2000). "Rethinking urban poverty: a look at community gardens." Bulletin of Science, Technology & Society. 20(3):207-216.
2. Brown, K. H., & Jameton, A. L. (2000). Public health implications of urban agriculture. Journal of Public Health Policy, 21(1), 20-39.
3. Alaimo K, Stickney, and the Flint Urban Gardening and Land Use Corporation Storytelling Subcommittee. (2002). Neighborhood Violence Prevention Collaborative Evaluation Report: Community Gardens. Ann Arbor, Mich: University of Michigan School of Public Health
4. Bonacich, E., & Alimahomed-Wilson, J. (2011). Confronting Racism, Capitalism, and Ecological Degradation: Urban Farming and the Struggle for Social Justice in Black Los Angeles. Souls: A Critical Journal of Black Politics, Culture, and Society, 13(2), 213 - 226.
5. Whittinghill, L. J., & Rowe, D. B. (2012). The role of green roof technology in urban agriculture. *Renewable Agriculture and Food Systems*, *27*(4), 314-322.

Testimony on Int. No. 1661: A local law in relation to developing a comprehensive urban agriculture plan

October 26, 2017

John Rudikoff
CEO + Managing Director
Center for Urban Business Entrepreneurship (CUBE) at Brooklyn Law School

I would like to thank the City Council's Committee on Land Use and Chair Council Member David Greenfield for giving us this opportunity to testify today about Int. No. 1661: A local law to develop a comprehensive urban agriculture plan, and our continuing work to streamline and support the growth of this dynamic and sustainable industry.

My name is John Rudikoff and I am the CEO and Managing Director of the Center for Urban Business Entrepreneurship (CUBE) at Brooklyn Law School which trains its students to serve and work alongside early stage startups, studies and shines a spotlight on the new industries these entities portend, and labor to explore and resolve the novel legal questions and challenges that these new industries and markets face. That is, the intersection of innovation and the law.

I would like to begin by applauding the leadership of our friends the Borough President Eric Adams and Councilmember Rafael Espinal in their efforts to make Brooklyn and New York City the next frontier for the growth of the urban agriculture industry.

Joining me today in testifying is Brooklyn Law School graduate and CUBE Fellow Tatiana Pawlowksi '17, who's tenacious commitment and incisive scholarship deserve much credit for all of us being here today. Her white paper - From Food Deserts to Just Desserts –is an excellent scholarly work that explores precedent and policy in laying out what needs to occur here in New York City if urban agriculture is to thrive. Tanya completed this work as an independent study at Brooklyn Law School, under the direction of Professor Debra Bechtel, and with the intention of creating a road map for legislative action for task forces that Tanya, Professor Bechtel and I had previously served on that were founded by Borough President Eric Adams and Councilmember Rafael Espinal.

When CUBE was first conceived, the ambition was to lasso the extraordinary entrepreneurial activities in Brooklyn so that our students would be equipped for meaningful careers in the 21st century's changing economy. With that mission in mind we leveraged the School's extraordinary business law curriculum, and supplemented it with new programs and faculty with expertise providing diverse legal services to startups. This is a unique perch: again and again our clinics encounter innovators and entrepreneurs whose businesses and industries present questions on which the law and regulation are yet to way in. Urban Agriculture clients have presented just such a challenge: What activities, under existing New York City Code, are allowed?

Put simply, until New York City clearly delineates what urban agriculture practices are permitted such efforts will be relegated to ad hoc and fringe applications and venture capital and other investment dollars will remain on the sideline handicapping efforts to effectively scale. The proposed legislation to develop a comprehensive urban agriculture plan is an essential next step in the process of establishing NYC as a global hub for urban agriculture.

Where do we stand today? Without any official action taken, New York City is already a veritable hot bed of urban agriculture activities. New York City has one of the biggest urban agriculture systems in the country which includes rooftop farms and gardens, vertical, hydroponic and aquaponic farming systems.

And yet currently, most people living in New York City subsist largely on industrial food production. This soulless industry ships in high-calorie, poor-nutrient, and highly-processed foods often coming from far away. This leaves people even further alienated from food production, and disenfranchised in regards to their diet. The results have been nothing short of catastrophic, and has spurred endemic obesity and related illnesses such as heart disease and diabetes, globally. Our food system can be fixed. Our food system will be fixed, but it is going to require action to support sustainable innovation in how we grow and source our food.

I strongly advocate ending the current ambiguity in land use policy, including city zoning laws, building code, fire code, and others, as they present significant barriers to entry for new businesses and limit the growth of the industry in our 5 Boroughs.

Int. No. 1661 is an essential step in that process.

Thank you.

Tatiana Z. Pawlowski | Tatiana.Pawlowski@brooklaw.edu | Testimony in support of Intro. No. 166 / New York City Council Committee on Land Use Hearing, October 26, 2017

Good morning everyone. My name is Tatiana Z. Pawlowski and I am a 2017 graduate of Brooklyn Law School where I was a fellow with the Center of Urban Business Entrepreneurship. I am also the author of a white paper entitled "From Food Deserts to Just Deserts: Expanding Urban Agriculture in New York City Through Sustainable Policy." Thank you for the opportunity to testify before your committee in support of Bill No. 166 sponsored by Councilman Espinal and Brooklyn Borough President Adams.

Having researched the topic extensively in law school by conducting a comparative analysis of numerous urban agriculture programs across U.S. cities, I would like to present a case for why urban agriculture is vital for individuals, particularly in lower income communities—as well as for businesses—and why creating a comprehensive plan to expand existing urban ag policies is key for a healthier, cleaner, and more efficient New York.

Though New York has the biggest urban ag system in the country, two complex and interrelated issues—low access to fresh produce and high land values—require more attention and bolder, broader action through comprehensive planning.

Food deserts, or low-income neighborhoods with low access to fresh produce due to a lack of grocery stores and healthy food providers, are scattered across the city's communities, particularly in the outer boroughs. The USDA defines a community as "low access" if at least 500 people, or a third of its population, lives farther than half a mile from the nearest supermarket. For residents of these communities, which include busy families with young children, as well as the elderly and disabled, walking half a mile to a supermarket to buy fresh produce is impracticable if not outright impossible. Economic disparity and high land values drive a further wedge between vulnerable communities and their access to affordable fresh food. When applied to the current urban ag framework, this dictates how locally grown produce enters the stream of commerce. To turn a profit, large-scale urban farms must build the cost of operations—city rent, taxes, and wages—into their business models, which requires maximizing crop yields in limited space and selling quality goods at a premium. As a result, urban farms cannot afford to sell in lower-income communities, and, in turn, lower-income communities cannot afford to reap the benefits of locally grown food.

The two broad goals of expanding urban ag policy in New York—bringing fresh and affordable produce to all corners of the city and giving urban farmers more options to utilize the city's limited space to meet their profit margins—are not mutually exclusive and can be met with one comprehensive plan that (1) empowers local communities with more urban ag opportunities by ensuring that income and location are not a barrier to food access, and (2) bolsters the innovative options of cutting-edge urban farmers to continue building efficient vertical farms.

To meet these goals, the comprehensive plan should (1) take stock of the city's existing resources, including agencies, policies, and initiatives, to identify how to best incorporate urban ag into an established framework and (2) develop a clear policy which assesses roadblocks to urban ag practices and meets the needs of low-income communities, small-scale businesses, and large-scale urban ag ventures by amending the zoning code.

First, I would like to note that the Mayor's office has readily acknowledged the importance of environmental sustainability and food policy, dedicating city resources and providing tax

incentives for energy conservation, preserving green space and aiding the health and wellness of New Yorkers. These initiatives have already resulted in a greener and more sustainable New York. Thus, given the many urban ag-related goals of the Offices of Sustainability, Resiliency, and Food Policy, the comprehensive plan should streamline existing initiatives by creating one centralized, dedicated program that covers all aspects of urban ag policy under one umbrella, perhaps as an offshoot of the city's office of Food Policy. The plan should aim to align itself with the goals of the sustainability plans already in place, such as the City Council's Foodworks vision plan and the mayor's OneNYC plan. Accountability and benchmarking measures should be inserted into this plan to ensure follow-through.

Second, the plan should address one of the biggest issues encountered by proponents of urban ag: the city's outdated zoning code. Currently, rooftop farming is only allowed in commercial and industrial zones, greenhouses are only allowed on top of non-residential buildings, and growing and selling produce on the same lot is only allowed in industrial zones. The zoning code has not fully addressed the potential of the rooftop farming model, and is altogether silent on the concept of indoor, vertical farming—ambiguities that are particularly significant given the large amount of usable roofs, vacant buildings, and unused indoor space, such as basements. The detrimental reality of the current zoning code's restrictions is that produce cannot be grown inside, or on top of many buildings in residential zones, which impacts the physical health of lower-income New Yorkers and the financial health of smaller scale urban farmers.

To remedy these shortcomings, a zoning code amendment should clearly establish definitions of urban agriculture and its various types, enumerate and expand allowable uses in each district, and lift existing restrictions on sales and greenhouse uses. For example, the amendment should allow for conditional rooftop farming in residential districts and for conditional farming in all districts—or at least in residential districts containing food deserts. The resolution should also expand "as of right" uses for smaller-scale urban ag practices and "accessory" uses. If restrictions cannot be lifted, currently prohibited uses could be expanded into conditional uses, with the permit processes clearly described and streamlined. Finally, the city should consider creating a special zoning district category to account for urban ag practices so as to bypass existing zoning restrictions.

Third, the plan should implement existing resources, such as land use data and NYSERDA feasibility studies, and develop borough-specific policy goals for how urban ag projects could best be developed. For example, while Manhattan's focus should be more on rooftop and indoor farms in commercial zones, Brooklyn, Queens and the Bronx could focus on creating additional indoor farming opportunities given the number of existing industrial districts, and Staten Island could contemplate creating a new zoning district just for urban agriculture in undeveloped parts of the borough.

Fourth, the plan should create a single public resource such as a well-organized website, for providing city residents with clear and easy to understand information about what types of uses are allowable and what processes must be followed for someone who wants to grow their own food in the city. The plan should also aim to maintain centralized and comprehensive databases to track the city's urban ag projects and food production outputs.

For logistics of how the plan should be drafted and carried out, it is helpful to look to what similarly positioned cities have done. For example, Boston's Office of Food Initiatives established several task forces to explore increasing the city's access to healthy and affordable food in schools and in stores, expand the city's food production capabilities, and grow public and private partnerships while advancing the food agenda. The taskforces were comprised of zoning experts, business leaders, lawmakers, community leaders, and scholars. Boston also used a USDA grant to establish an Urban Agriculture Visioning Group and conduct research to establish a 5 year plan for better food production.

New York should follow suit by tapping into available grants and establishing strategic partnerships with business stakeholders to fund feasibility studies and large-scale plans. It should work with local communities and universities with urban planning and food policy programs (like Hunter College) to conduct community surveys and data analysis, and with the city's law schools that run community development clinics (like Brooklyn Law School) to tackle legal issues or help with legal drafting. Finally, New York should engage with local policy experts and advocacy groups to assess creative ways in which the city's urban ag program can best be established.

A well-researched comprehensive plan will mean a well-drafted urban agriculture law, and both will lead to a stronger, healthier, and more resilient New York. Relaxing zoning restrictions and allowing indoor farming will empower communities and individuals to grow their own food. Centralizing information on what is allowable and available will help people know their options for food access. Businesses will have more options to establish their urban ag projects in new zoning districts and bolster the economy.

Our city has the need, the desire, and the resources to making this plan a reality, and approving this bill is the first step in this process. I hope you will join me in my support of this initiative for growth and opportunity. Thank you again for your time.

Bushwick City Farm (BCF)
354 Stockton St., Brooklyn, NY 11206
bcfarmevents@gmail.com

Hello, my name is Mariel Acosta, one of the volunteers at Bushwick City Farm in Bedford-Stuyvesant. Thanks to the City Council Committee on Land Use for taking on this important issue and for allowing me to speak today. While discussing an urban agriculture plan for the city, I hope you will include a plan to acquire vulnerable community land, such as Bushwick City Farm.

As many of you already know, Bushwick City Farm is an urban agriculture space, that also functions as a community space, located across the street from the NYCHA Sumner houses. In 2008, some concerned community members began cleaning up an abandoned lot in the hopes of turning it into a farm, and since then Bushwick City Farm has given away thousands of pounds of free organic produce, clothing, eggs, and local honey to the community. Over the years, we've also helped build gardens in NYCHA housing and local public schools.

Bushwick City Farm has a unique approach to urban agriculture that addresses many of the issues this bill has been called to address. For instance,

- Our neighborhood is in a food desert. We are a food-insecure community with limited access to healthy, locally grown, organic food. Bushwick City Farm invites all neighbors to participate in growing and harvesting healthy food, thus serving as a model for sustainable urban food production.
- There is also a lack of green spaces in our neighborhood that cater to community members of all ages and backgrounds. Our farm is a popular green space that is open to everyone.
- Additionally, one of the main platforms of this bill is to provide youth development and education with regard to local food production. Neighborhood youth spend time at BCF learning firsthand how to care for plants, develop carpentry skills, and apply new technologies like solar energy and aquaponics to urban agriculture.

Bushwick City farm also solves some problems not outlined specifically in this bill that we believe contribute to a healthier and more resilient New York. For instance, gentrification creates tension between "newcomers" and established members of a community. BCF is a unique space where people of diverse backgrounds gather and get to know each other, fostering harmony and cooperation within the neighborhood through shared care of the space. We believe that addressing such a wide collection of issues that New Yorkers all live with makes BCF an important asset to the city.

Since its inception, we have partnered with organizations like Lyons Community School to build a gazebo, hosted interns from YABC Automotive High School, and worked with volunteers of all ages and capacities. We have won multiple grants from the Citizens Committee of New York to help fund projects, but we mostly run on a shoestring budget and rely on thousands of volunteer hours each year.

Currently Bushwick City Farm is facing a possible eviction. This could be avoided if the city intervened to purchase the lot in order to make it a city park or green thumb farm. We are hoping that this bill can help us continue to use this land in the way the neighborhood has been using it for the last nine years. Zoning and creative land use plans could help us continue to working for a better New York.

FOR THE RECORD

The New York City Council
Committee on Land Use
Re: Int 1661-2017

October 26, 2017

Dear Chair Greenfield and other members of the Committee:

Thank you for this opportunity to speak today. My name is Elliott Fisher, and I work at Square Roots. We are an urban agriculture company with a mission to bring real food to everyone. When we talk about real food we talk about food that is better for the planet, for people, and for farmers. Our urban farming platform is designed to cultivate the next generation of food entrepreneurs, engage with communities, and advance today's agricultural technologies for tomorrow's application.

We support a comprehensive urban agriculture plan and want to see Bill 1661 pass.

There is overwhelming evidence to support Square Roots's mission, as well as the goals for many of the other people and organizations represented here today:

1. Urban areas are rapidly increasing in population,
2. Technology for urban agriculture is increasing in both efficiency and cost,
3. The average age of a farmer in America is 58 years old; and
4. The rise of obesity is becoming a worldwide epidemic.

These are just four points that illustrate that now is the right time to start thinking about how we responsibly feed our populated areas with locally-grown and sustainably-produced real food. The facts above also align with the goals of this committee and can be addressed through responsible zoning, land use planning, and public policy. Indeed, we're all presented with a unique call to action.

You can find Square Roots right across the East River in Bedstuy. We've parked ourselves behind the old Pfizer pharmaceutical factory. That's about as close to a farm as New Yorkers can get and the communities supporting urban agriculture are incredible. Every month at Square Roots we host and educate hundreds of people all of whom want to move away from a complex industrial food machine and support a local food system built on trust. Our community includes teachers, activists, investors, developers, students and volunteers, entrepreneurs, architects and engineers, consumers, restaurant and business owners, and retailers. Urban agriculture, therefore, affects all our city's residents. The community's support reinforces and reminds us of our mission.

I hope I've now explained that urban agriculture is more than just food. Square Roots, along with our peers, is forging ahead with a new food system; one that facilitates growing in urban environments and provides direct access to the people and technology behind the food. Our industry will create new jobs, develop new technologies and continue to engage and activate communities.

All of us gathered in this room today have the opportunity to create a meaningful and lasting impact on our city's communities. The time for New York City to act is now and become yet again a leader and a model for the rest of the world. Let's get started.

Our next farm tour is November 28th — Come see the community for yourself.

SQUARE ROOTS

FOR THE RECORD

FOR THE RECORD

My name is Henry Sweets, I am a co-founder of the urban farming business North Brooklyn Farms. Five years ago we worked with two other organizations to transform a vacant lot into a one-acre public park, located on private property owned by Two Trees Development. We now operate our own half-acre green space on the East River at the former Domino Sugar Refinery.

Our farm is full of flowers, vegetables, edible and medicinal herbs and trees, winding pathways and two expansive grassy lawns. We use agriculture as a tool to engage our visitors, and have created a green space at a fraction of the cost of a city park. Since we are located on private property, we can also host events like dinner parties, weddings and concerts. These events fund the entire project, and create hundreds of thousands of dollars in revenue annually. Our farm has created jobs, has exhibited that urban farms can activate temporary spaces and has continued to pave a viable path for the next generation of urban farmers.

In exchange for access to the land, we keep our farm open to the public six days a week, ten hours per day and provide a variety of programming for the community. Hundreds of local families frequent our space and thousands of visitors come to our farm every week.

Some walk in to look at flowers or take a picture. Some to have dinner or a picnic, and others simply relax on one of our lawns. Some community members become active participants at our open volunteer hours, purchase produce from our farmstand or take the u-pick option and teach their children how to harvest vegetables for the first time in their lives.

We serve every community in South Williamsburg as well as bicycle commuters, pedestrians who pass by our space on Kent Avenue, and tourists from around the world.

We are a cultural space, and provide a place for artists, teachers, and small businesses to do their work and give their dream a shot.

We could build these farms all over New York, unlocking the potential of the thousands of acres of unoccupied land in the city, but we are up against regulatory hurdles and the constant threat of losing our year-to-year lease.

As you consider the value of urban agriculture, please consider this: Urban farming has an impact beyond the produce that it grows, the rainwater it absorbs or the natural elements it brings to the city - it can also be a tool to create a unique and inclusive community space. A place where people say hi to each other, and strangers connect in the midst of the natural forces that have guided human progress for tens of thousands of years.

With a fraction of the funding required to build a city park it is possible for publicly held land to become an agricultural green space where activities and ideas flourish, creating lasting positive impacts on the physical and mental health of those who visit the space. Our project has proven that. As our neighborhoods change at increasingly vertiginous rates, people need places like this in which they can ground themselves and gain a sense of place.

Testimony for Int. 1661: A Local Law in relation to developing a comprehensive urban agriculture plan

Presented by: Elyssa Rothe
95 Beekman Avenue #515G
Sleepy Hollow, NY 10591
rothe.elyssa@gmail.com
914-572-4236

October 26, 2017

I am one of the hundreds of New Yorkers aiming to establish a career in the Urban AgTech sector. Like everyone else looking for work in this nascent industry, I have a niche, and my focus is legislation and finance. My background is in clean energy finance and policy, and I aim to transition these skills to the sector that I believe addresses one of the most important issues facing NYC: Urban Agriculture.

I am currently a resident of Westchester County, and my relocation to NYC is reliant upon finding a job in Urban Ag and AgTech. The industry is still in a nascent phase, so well-paying jobs are still few and far between. I would love to see New York City support Urban Ag, and help bolster this industry and the jobs that will become available to a ready and waiting workforce.

The support for workforce development that I have found, is in the city's only Urban Ag co-working space, AgTech-X. AgTech-X has provided physical space to convene, networking opportunities with industry experts, educational workshops, and has boosted my probability of finding work in NYC for this industry.

I support 1661, and urge you to complete the comprehensive urban agriculture plan, as the first step in building strong roots for Urban AG in NYC, and an eventual job creation mechanism for our city. There are hundreds of other young professionals just like me, hoping to work in the Urban Ag field. My hope is that we can find a home for these job seekers, and myself, in NYC, and we don't lose a promising workforce to other cities that choose to nurture Urban Ag.

Jacob Roday 10/26/17

jroday1@pride.hofstra.edu (631)-946-9619

Personal Testimony to the New York City Council Land Use Committee on Int. 1661-2017

To Whom It May Concern:

Hello fellow New Yorkers and members of the City Council.

My name is Jacob Roday and I am a graduate student.

My master's thesis is being written on studying the effects of sustainable urban agriculture in New York City.

From my research, I have concluded that establishing an environment in which urban farming can thrive is necessary for the sustainability of New York.

The first step toward meeting this goal is creating a simpler regulatory framework in which urban farmers can succeed.

My research indicates that Urban agriculture has the potential to positively impact the lives of everyday people living in New York City.

Urban farming lowers the cost of fresh produce, increases access to healthy and nutritious food, establishes a new local economy for communities, and stimulates job creation and education.

These benefits will not be possible in the current patchwork of regulation and oversight.

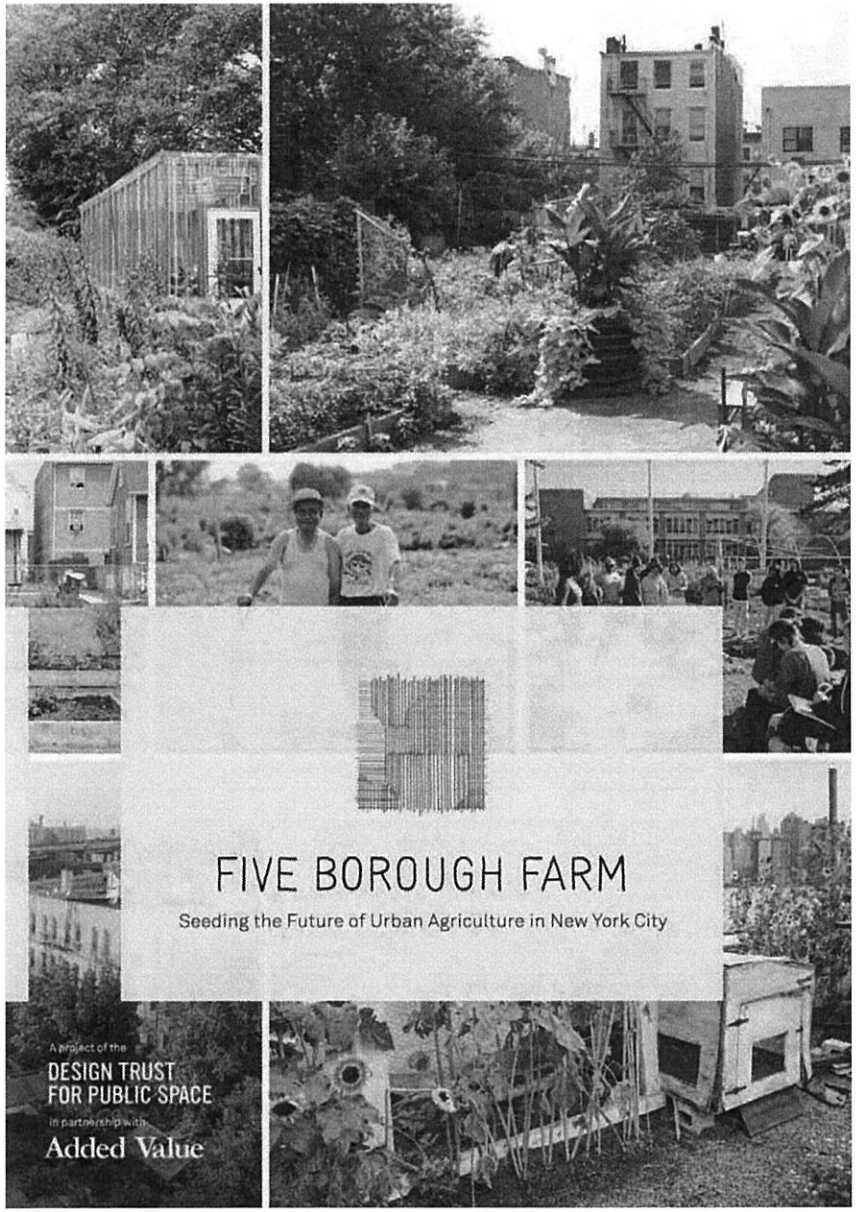
The evidence suggests that legislation should strive to allow any urban farmer of every size and scale to obtain the right to grow and sell their produce in New York.

Legislation is obligated to include regulations on zoning, land use, health inspections, licensing, access to open markets, and tax incentives for developing empty plots into farms.

New York City's sustainability hinges on the success of creating a comprehensive urban agriculture plan.

I implore you to consider the research and the evidence on the benefits that urban farming brings to the table and I sincerely hope that you take my testimony into consideration in regards to this legislation.

Thank you for your time and have a great day.



Five Borough Farm is a Design Trust for Public Space project, conducted in partnership with Added Value.

Design Trust for Public Space
www.designtrust.org

Added Value
www.added-value.org

Design Trust Project Team
Nevin Cohen, *Policy Fellow*
Agnieszka Gasparska, *Graphic Design Fellow*
Elliott Maltby, *Design Fellow*
Ian Marvy, *Added Value*
Gita Nandan, *Design Fellow*
Kristin Reynolds, *Research Collaborator*
Rupal Sanghvi, *Metrics Fellow*
Rob Stephenson, *Photo Urbanism Fellow*

Design Trust Staff
Megan Canning, *Deputy Director*
Susan Chin, *Executive Director*
Jerome Chou, *Director of Programs*
Chris Kannen, *Production Associate*
Kristin LaBuz, *Development and Communications Associate*

Authors
Nevin Cohen
Kristin Reynolds
Rupal Sanghvi

Editor
Jerome Chou

Information Graphics and Book Design
Agnieszka Gasparska, Kiss Me I'm Polish LLC

Photography
Rob Stephenson

Printed and bound in the USA by Print Craft, Inc.
©2012 by the Design Trust for Public Space. All rights reserved.

ISBN 978-0-9777175-6-9

FSC
Mixed Sources
Cert no. XX-COC-XXXX
©1996 FSC

This publication was printed on recycled paper containing 10% post consumer recycled fiber, reflecting the Design Trust's commitment to protecting our environment.

INTRODUCTION

"Right now urban agriculture's on everyone's lips and it sounds good. But yet, are people in power then making policy? Are they thinking of it as, 'Oh, it's a new wave and it will go away'? Or do they really believe in what they're saying: as the city goes into the next decade or so and even further, that community gardens and urban farms must be part of the landscape when it comes to urban planning?"

– Community Gardener

Policy decisions affect every aspect of urban agriculture, from the availability of soil and growing space to the cost of running a farmers market and the extent to which children learn about food and agriculture in their schools. Fortunately, there is no shortage of good policy ideas to support and expand urban agriculture in New York City. Recent legislation and agency actions have sought to make it easier to build rooftop greenhouses and have funded urban farms and gardens. Several policy documents, including the Mayor's citywide sustainability plan, PlaNYC, and the City Council Speaker's comprehensive food policy platform, FoodWorks, have asserted the importance of urban agriculture to community development, food access and open space, recommending dozens of initiatives to support the city's farmers and gardeners.

Despite this flurry of policy activity, numerous stakeholders interviewed for this project—including government officials themselves—lacked confidence that City government is committed to perpetuating urban agriculture as a wide-scale use of public space, particularly over the long term. These doubts stem from several factors. First, there is currently no Mayoral directive or Local Law to promote urban agriculture. Lacking this legally binding mandate, government agencies have limited resources and authority to address urban agriculture, incorporate it into potentially complementary plans and operations, or coordinate activity with other agencies. Farmers and gardeners interviewed described in very positive terms the help they receive from municipal programs such as GreenThumb, but noted that their ability to obtain services or information from government agencies has been uneven, and that many government regulations and processes are unclear. For instance, government officials have no official policy for evaluating proposals for new farms and gardens on City-owned land or for making compost produced in New York City available to farmers and gardeners.

This chapter recommends government policies and practices that would integrate urban agriculture more fully into New York City's physical landscape and agency procedures, making farms and gardens as much a part of the city's sustainability fabric as waste recycling, transportation infrastructure, water and sewer service, parks and open space, and community development programs. The proposed recommendations would make the city's urban agriculture system—from the allocation of growing space and the delivery of services to the coordination of numerous stakeholders' actions—more efficient, transparent, and participatory, and as a result, better able to achieve key municipal goals. These recommendations include the following:

- Develop an urban agriculture plan that establishes goals, objectives, a citywide land use scheme for garden and farm development, and adequate agency budgets to support existing and future urban agriculture activity.
- Integrate urban agriculture into existing plans, programs, and policy-making processes in city government, including the Department of Environmental Protection's Green Infrastructure Program and the Department of Sanitation's plans for compost production, and identify opportunities for existing initiatives to achieve multiple goals while supporting farmers and gardeners.
- Foster innovative opportunities to build urban agriculture into the cityscape, from new housing complexes and existing rooftops, to sidewalks and stalled development sites.
- Address disparities in access to funding, information, and other resources by creating more transparent and participatory processes—such as a citywide Urban Agriculture Task Force—to enable gardeners and farmers to influence policy and decision-making.
- Address race- and class-based inequities by supporting capacity building among underserved groups and within city agencies.
- Make existing administrative processes more responsive to urban agriculture constituents, making it easier for enterprising farmers and gardeners to thrive.

The recommendations consider policy at different scales, from citywide plans and agency-specific regulations to decision-making that affects individual sites. They address not only food production, but also services and infrastructure—from compost production to retail distribution channels—that support urban agriculture. They propose changes to specific laws and regulations, as well as to the processes and organizational structures that determine how agency priorities are established and decisions are made. Finally, although the recommendations focus on the roles of government agencies and elected officials, these stakeholders should partner whenever possible with philanthropies, support organizations, private businesses, universities, farmers and gardeners, and the many other advocates for urban agriculture in New York City.

Among the many actions recommended in this chapter, two in particular would better equip city government to address urban agriculture citywide. The first is to clearly define and fully fund leadership positions and staff to develop urban agriculture policy and provide services to farmers and gardeners. Bolstering the budget and staff of GreenThumb, a division within the Department of Parks & Recreation that provides technical and material assistance to hundreds of farms and gardens in all five boroughs, would help ensure that these sites receive critical support, and would facilitate the creation of new urban agriculture projects. In addition, the Food Policy Coordinator, who currently convenes multiple agencies to address the city's food system, is well-positioned to work with the many agencies currently involved with urban agriculture to develop policies to address the availability of City-owned land, soil, and other resources needed by urban farmers and gardeners, and to develop a citywide urban agriculture plan.

An urban agriculture plan would identify locations for farms, gardens, and urban agricultural infrastructure, such as commercial kitchens, farmers markets, and composting sites. It would engage the public, allowing farmers, gardeners and other urban agriculture stakeholders to lend their expertise in shaping policy, and enabling them to document the current and potential impacts of urban agriculture. An adopted plan also would have the legal status that existing policy reports and even PlaNYC lack. With a plan in place, the City would have an opportunity to capture the full economic, ecological, health, and social benefits of a larger and more robust network of gardens and farms, and the myriad entrepreneurial ventures that New Yorkers will create.

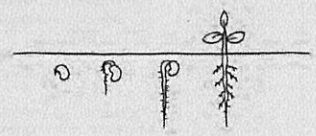
EVOLUTION OF URBAN AGRICULTURE POLICY

The goal of providing space for a crowded, expanding population to grow food in New York City dates back to the early 20th century. Dozens of school gardens and farm plots in public parks flourished through the 1930s. In 1937, Parks officials reported that over 1.2 million pounds of vegetables were harvested on parkland. Through initiatives such as the U.S. School Garden Army, Women's Land Army of America, and Victory Gardens, government agencies promoted agriculture in cities to alleviate the effects of urban poverty and contribute to national food security, particularly during times of war.[47] Less emphasis was placed on maintaining gardens in public space during the 1950s, as the national food supply stabilized, suburban development surged, and backyard landscaping became a focus of new homeowners and the horticultural industry.[48]

During the late 1960s and early 1970s, a time of fiscal crisis and social unrest in New York and other major U.S. cities, urban agriculture activity increased nationwide. In New York, where housing abandonment and reduced municipal services devastated many neighborhoods, residents began transforming vacant lots into vibrant community gardens, including spaces to grow food.[49] Community members, rather than government agencies, typically led these projects, many of which focused explicitly on social justice and "self-help."[50] New support organizations were formed; for example, New York City's Green Guerillas was founded in 1973 to help residents organize the cleaning and planting of vacant lots for food production, neighborhood revitalization, and grassroots development in terms of both the physical landscape and community empowerment. New York City's government soon followed the lead of community efforts. In 1978, the Koch administration created "Operation Green Thumb" (now called GreenThumb) to provide technical support to community gardeners and to assist in the management of city-owned garden sites. The Garden and Greening Program of the New York City Housing Authority (NYCHA) and an urban agriculture technical assistance program within Cornell Cooperative Extension also provided municipal support for urban agriculture.

The urban agriculture community was galvanized in 1999, when the Giuliani administration attempted to auction off the land occupied by 115 community gardens to housing developers, setting off legal challenges and protests, and drawing the intervention of the state Attorney General. For many farmers and gardeners, Giuliani's efforts highlighted the vulnerability of farm and garden space in a city that was rebounding economically, as well as the importance of engaging in the process of shaping public policy.

Over the last decade, urban agriculture has expanded across the country, as city residents—particularly in low-income neighborhoods—increasingly recognize the many functions that community gardens and farms serve, including providing access to affordable fresh, healthy, locally produced food.[51] Planners and policy makers have responded to these trends by attempting to weave agriculture back into the urban landscape, revising their local zoning codes, ordinances, and development policies to accommodate, regulate, and support urban agriculture activities.[52]



47 Lawson, Laura J. 2005. op cit.; Hayden-Smith, Rose. 2006. Soldiers of the soil: A historical review of the United States

48 Hynes, P.H. 1996. op. cit., p. xiii-xiv; Lawson, Laura J. 2005 op cit. p 205-207.

49 Lawson, Laura J. 2005. op cit., p. 213.

50 Lawson, Laura J. 2005. op cit., p 206-208; Hynes, P.H., and G. Howe. 2002. Urban horticulture in the contemporary United States.

51 Martinez, S., et al. (2010). Local Food Systems: Concepts, Impacts, and Issues. Economic Research Service 97. Washington, DC: US Department of Agriculture; Marketing of local foods grossed $4.8 billion in 2009. See Low, Sarah A., and Stephen Vogel. Direct and Intermediated Marketing of Local Foods in the United States. ERR-128. U.S. Department of Agriculture, Economic Research Service, November 2011.

52 Hodgson, K., et al., op cit.; Viljoen, A., Bohn, K., & Howe, J. (2005). Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities. Oxford: Architectural Press; Nordahl, D. (2009). Public Produce. Washington, DC: Island Press.

Recent New York City Initiatives

Five Borough Farm builds on the momentum to adopt policies supporting urban agriculture citywide, particularly on the analysis and proposals outlined in four recent documents: the update to PlaNYC, the City's sustainability plan; FoodWorks, a report issued by the Speaker of the City Council; FoodNYC, a white paper published by the Manhattan Borough President; and "The Potential of Urban Agriculture in New York City," a report published by Columbia University's Urban Design Lab.

PlaNYC

On April 22, 2007, the Bloomberg administration launched a citywide sustainability plan, PlaNYC.[53] That document did not mention urban food production. However, an update to PlaNYC released in April 2011 states that sustainable food systems are critical to the city's well-being and included food as an issue that requires actions from multiple agencies. In particular, the updated PlaNYC states:

> We are committed to promoting community gardens and other forms of urban agriculture. We recognize the important role they serve in building communities, supporting local cultural heritage, and bringing individuals together around the vital issue of access to healthy food.[54]

PlaNYC also acknowledges that urban agriculture provides open space in communities with few or no formal parks. For example, in the Parks and Open Space section, PlaNYC states:

> We will target high-impact projects in the neighborhoods with the greatest open space needs. These projects will include community gardens and urban agriculture opportunities, which enrich many of the city's neighborhoods least served by parks.[55]

Finally, PlaNYC outlines several specific objectives to increase urban agriculture:

- The New York City Housing Authority will expand its community gardening program to include the creation of "at least one urban farm" as well as 129 new community gardens on Housing Authority land.
- The Department of Parks & Recreation will launch a study to "identify potential urban agriculture or community garden sites on City-owned properties unsuitable for other development." In addition, the Department will increase the number of community volunteers registered with GreenThumb by 25 percent, expand support for community gardens into new underserved neighborhoods, and establish five new farmers markets at community garden sites.
- The Mayor's Fund and the Department of Education will register 25 new school gardens per year, retaining 75 percent of new registered school gardens year to year.
- The Departments of City Planning, Buildings, and Parks & Recreation will review laws and regulations and take steps to reduce existing regulatory barriers to urban agriculture.
- The Department of Sanitation will reinstate leaf and yard waste composting, expand composting of park leaf and grass clippings, and evaluate the feasibility of a curbside organic waste composting program.

PlaNYC is a strategy document that reflects the vision and objectives of the administration and the Office of Long-Term Planning and Sustainability, which prepares the document. However, at this time there is no requirement in the City Charter or Administrative Code for agencies to ensure that their policies, plans, or actions conform to the goals and targets outlined in PlaNYC, nor does PlaNYC commit the city to a particular course of action.

Other Policy Documents

Two policy documents prepared by elected officials with input from key stakeholders, experts, and the general public indicate that urban agriculture is important to the city's future and offer recommendations to support and grow the city's gardens and farms: FoodWorks, a comprehensive, citywide food policy platform issued by City Council Speaker Christine C. Quinn in November 2010, and "FoodNYC: A Blueprint for a Sustainable Food System," a white paper issued by Manhattan Borough President Scott Stringer in February 2010. In addition, a recent report from Columbia University's Urban Design Lab highlights opportunities to expand urban agriculture citywide, and also includes a set of recommendations.

Collectively these documents have helped build public support for policies to strengthen urban agriculture citywide, and have advanced specific proposals that stakeholders can explore or promote. Most notably, FoodWorks has guided the City Council to enact new local laws that mandate specific agency actions to address urban agriculture.[56]

53 <http://www.nyc.gov/portal/site/nycgov/menuitem.c0935b9a57bb4ef3daf2f1c701c7a9a9/index.jsp?pageID=mayor_press_release&catID=1194&doc_name=http%3A%2F%2Fwww.nyc.gov%2Fhtml%2Fom%2Fhtml%2F2007a%2Fpr115-07.html&cc=unused1978&rc=1194&ndi=1>

54 Ibid, pg. 37.

55 PlaNYC (2011) pg. 35.

56 Ackerman, K. (2011) The Potential for Urban Agriculture in New York City. Growing Capacity, Food Security, and Green Infrastructure. NY: Urban Design Lab at the Earth Institute.

Implementation of FoodWorks Strategies

Shortly after releasing FoodWorks, the City Council passed several new local laws and adopted a resolution to implement a number of urban agriculture-related policies. They include:

- Local Law 48 of 2011, which requires the Department of Citywide Administrative Services (DCAS) to maintain an online database of all property owned and leased by the City, including detailed data about the sites as well as whether land is potentially suitable for urban agriculture. The database has been made public, but information on which sites are suitable for urban agriculture has not yet been included.

- Local Law 49 of 2011, which adds greenhouses to the list of rooftop structures that can be excluded from building height limitations, making it easier to install the structures atop existing buildings.

- Local Law 52 of 2011, which requires the Mayor's Office of Long-Term Planning and Sustainability to gather and report on key data about New York City's food system, including sources of food purchased by the city (including, potentially, community gardens), and how food is distributed and consumed. An annual food system metrics report is due September 1, 2012, and annually thereafter.

- Resolution 527, which calls on the State Legislature to extend the Green Roof Tax Abatement to live food-producing plants as well as low-maintenance sedums, thus encouraging more property owners to install rooftop farms.

- The zoning text amendment approved by the City Council that allows greenhouses to be exempt from floor area and height limits on commercial buildings.

RECOMMENDATIONS

1. Formalize City Government's Support for Urban Agriculture

City government has responded to the tremendous surge in urban agricultural activity in many ways. Agencies have adopted ad hoc agreements with individual farms and gardens, for instance, and enterprising staff have stretched their resources and official mandates to support urban agriculture. Policy makers have developed many recommendations that would facilitate the expansion of urban agriculture in New York. Government officials now have an opportunity to coordinate these efforts on a citywide scale, to codify in law the goals and strategies that have been outlined in documents such as PlaNYC and FoodWorks, and to demonstrate the city's long-term commitment to urban agriculture.

1.1 Establish a clear urban agriculture policy

A first step to integrate urban agriculture formally in the city's governance is to establish an urban agriculture policy in the Administrative Code or City Charter. Changing the Administrative Code or Charter requires enactment of a local law, enabling a wide range of stakeholders to provide input, and requiring affirmation by a majority of the City Council and the Mayor.[57]

Such a policy would indicate that urban agriculture is an important element in the city's sustainable food system that contributes to social, health, economic, and ecological benefits. As in PlaNYC, a policy statement would outline goals, such as supporting urban agriculture as an open space amenity in underserved neighborhoods, making school gardens a year-round community resource, or promoting economic development opportunities for low-income residents at urban farms and gardens. It would also set measurable objectives, such as creating a certain number of new farms and gardens, or creating a certain number of new urban agriculture jobs. Finally, it would specify the roles and responsibilities of City agencies in achieving these goals and objectives.

A policy commitment would have several effects. It would:

- Empower agency commissioners to initiate new programs, institute supportive agency practices, push for expanded budgets to run programs, and introduce regulations to advance urban agriculture.

- Legitimize agency staff support for urban agriculture, especially in those agencies not directly responsible for gardens and farms.

57 The city has established public policy goals, such as its commitment to waste recycling, in the Administrative Code. See NYC Administrative Code § 16-302, Declaration of policy. It is hereby declared to be the public policy of the city to reduce environmental pollution and dangers to health, to decrease the demand for scarce landfill space, to minimize the size and cost of the proposed resource recovery program, and to encourage the conservation of valuable natural resources and energy. It is the policy of the city to promote the recovery of materials from the New York City solid waste stream for the purpose of recycling such materials and returning them to the economy.

LESSONS FROM SEATTLE

In Seattle, a City Council resolution and clear commitments from the Mayor in support of urban agriculture have fostered greater collaboration across departments and enabled urban agriculture to be treated as a priority within specific agencies.

Seattle's active network of community gardeners, environmentalists, and academics has worked to develop and support the implementation of urban agriculture policy. In 2008, their support helped lead the Seattle City Council to adopt Resolution Number 31019, which established food system goals, including proposed policies to support the expansion of urban agriculture.[58] The Council's food system resolution identified the roles of multiple city agencies in supporting a sustainable food system: for instance, it directs the Department of Neighborhoods to identify community kitchens and other facilities to support community gardens, and the Transportation Department to consider pedestrian, bicycle, and transit connections between residential neighborhoods and community gardens, food banks, food markets, and farmers markets in evaluating new transportation projects. The resolution was accompanied by a ballot initiative in November 2008, in which 59 percent of Seattle voters approved a Parks and Green Spaces Levy that provided $2 million in funding for the development of new community gardens.[59]

Integrating urban agriculture in the missions of different Seattle agencies has led to innovative policy development. For example, the Seattle Public Utilities department created a backyard composting project, has extensive public information on resource-conserving gardening in the city, and also supports food recovery from businesses for both waste reduction and food access. In all major land use decisions, the Department of Planning and Development is considering the potential benefits and impacts of its actions on the city's food system.

In February 2010, Mayor Mike McGinn and the City Council declared 2010 "the year of urban agriculture," launching a campaign to promote urban food production and access to locally grown food. **The Mayor has directed multiple agencies to work together to support urban agriculture, establishing an interagency food systems team comprising eight city agencies** (including Public Works, Seattle City Power and Light, Parks and Recreation, and the Office of Economic Development). Parks and Recreation is working with the Department of Neighborhoods to integrate community centers into the city's community garden program and provide community kitchen facilities to neighborhood groups. The City's sustainable building initiative, a joint Seattle Public Utilities and Department of Planning and Development project, has been exploring how its green roof program can promote rooftop urban agriculture. In August 2010, the Seattle City Council adopted land use code changes to recognize and allow five different types of urban agricultural land uses.[60]

The key political factor behind the development of urban agriculture policy in Seattle was the support of the McGinn administration, together with interested council members, and the work of advocates and gardeners to build support among Seattle voters, bolstered by city policies.

58 http://clerk.seattle.gov/~scripts/nph-brs.exe?s1=&s2=&s3=31019&s4=&Sect4=AND&l=20&Sect2=THESON&Sect3=PLURON&Sect5=RESN1&Sect6=HITOFF&d=RESF&p=1&u=%2F~public%2Fresn1.htm&r=1&f=G

59 http://www.cityofseattle.net/parks/levy/

60 http://tinyurl.com/[illegible], accessed on December 10, 2010

- Signal to entrepreneurs, the philanthropic community, educational institutions, and businesses that urban agriculture has a future in New York, thus encouraging private investment in new and expanding food production and social enterprise ventures.

- Help advocates within and outside of government maintain City budgets for urban agriculture, even if priorities change from one Mayoral administration to the next.

But a policy commitment is only the first step toward institutionalizing urban agriculture. It should be followed by the development of an urban agriculture plan.

1.2 Develop an urban agriculture plan

A citywide urban agriculture plan would build on the goals, objectives, and agency roles established in an urban agriculture policy statement, and would include many dimensions not addressed in a policy statement.

First, an urban agriculture plan would gather and analyze data on land uses, economic, social, and environmental conditions, and expected trends, to specify where new urban farms and gardens should be located. Second, it would be developed with public participation, engaging a wide range of stakeholders to shape the plan. Third, unlike strategy documents or policy papers, an urban agriculture plan would be approved through procedures in the City Charter.[61] Fourth, adopted plans are meant to be considered alongside changes to zoning and other agency plans[62] and programs, such as community-based plans and citywide plans for comprehensive solid waste management,[63] composting,[64] and sustainable stormwater management.[65] Finally, an urban agriculture plan would transcend individual administrations, and, with regular updates, would evolve as the city's food system, economy, priorities, and technologies change.

Specifically, an urban agriculture plan should:

- Determine the extent to which urban agriculture should be expanded, based on an assessment of the social, economic, and ecological benefits associated with farming and gardening, and factors such as the potential capacity for food production, the costs of expanding production, opportunity costs for using land for agriculture, and the potential for urban agriculture to meet the needs of different communities.

61 For instance, Section 197-a of the New York City Charter provides for approval of long-term plans, including citywide plans.

62 See New York City Department of City Planning, Community Based Planning: The 197-a Plan. Accessed at http://www.nyc.gov/html/dcp/html/community_planning/197a.shtml on January 19, 2012.

63 http://www.nyc.gov/html/[illegible].shtml

64 Laws of New York City § 16-316.2 requires a food waste composting plan. The Sanitation Department, in conjunction with the mayor's office of long-term planning and sustainability, is required to issue a report by 7/1/2012, recommending methods to expand the diversion of compostable waste from the city's waste stream.

65 See http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml

- Identify, with extensive citizen input, the neighborhoods that would benefit the most from urban agriculture-related activities and benefits, including youth leadership programs, garden-based educational opportunities, and access to healthy food.

- Assess the land and rooftop space needs for a variety of urban agriculture scenarios over the next decade, including identifying specific parcels of land and rooftops that should be used for urban agriculture in the future.

- Determine annual operating budgets, infrastructure, and long-term capital budget needs to adequately support the city's urban agriculture program.

- Create processes that ensure coordination across City agencies (and between city and state/federal agencies) to support urban agriculture.

- Require City agencies to consider urban agriculture in their development of plans. For example:
    - Updates to the Comprehensive Waterfront Plan could identify waterfront sites that are appropriate for food production and distribution.
    - School Wellness Plans could give parents a process to include gardening as a part of their school's wellness programs.
    - The Citywide Solid Waste Management Plan could include strategies to meet the compost needs of the city's gardens and farms.

Making Commitments to Urban Agriculture in City Plans: Seattle and Vancouver

In Seattle, the broad goals of the city's P-Patch community gardening program are tied to specific standards for the appropriate amount of space devoted to urban agriculture per capita. **Seattle's 2005 comprehensive plan calls for at least one community garden for every 2,500 households in an urban village or neighborhood** (Seattle Comprehensive Plan, Urban Village Appendix B).[65] Vancouver's Greenest City 2020 Action Plan not only sets forth the broad aspiration to make the Canadian city a global leader in urban food systems, but also establishes a specific target of increasing city and neighborhood food assets (including garden space) by at least 50 percent from 2010 levels. Among the highest-priority actions for the next three years are creating five to six community gardens per year, enabling three new urban farms, adding public fruit trees, and developing other food processing and distribution infrastructure. And the plan designates a lead agency—Social Policy—responsible for implementation, with support from two other key agencies, Engineering and Parks.[66]

65 Available at [illegible]

66 City of Vancouver. Administrative Report RR-1. July 5, 2011. Accessed at [illegible] on January 27, 2012

Minneapolis' Urban Argriculture Plan

In February 2011, Minneapolis adopted an Urban Agriculture Policy Plan, which makes a number of recommendations to support urban agriculture. The plan calls on the city to "prioritize local food production and distribution" when deciding on the use of city-owned and private property, including new development projects "that could potentially affect existing local food resources." It also requires the city to integrate farmers markets into development plans, identify policies to encourage green roofs for food production, and create incentives for developers to include space for food production, distribution, and composting in new projects. Such policies include allowing urban agriculture to count toward green space set-aside requirements and green building requirements.[67]

The Minneapolis plan also calls for the creation of an "overarching policy framework" to support urban agriculture, including an inventory of land for agriculture and food distribution, policies to support ownership or long-term tenure for growers and farmers markets, policies to reduce liability and property taxes for urban farms and distribution facilities, and policies that make vacant and foreclosed properties more accessible for food growing and distribution. Following the adoption of the plan, the Minneapolis City Council approved a zoning code text amendment on January 23, 2012, to allow urban agriculture uses within the city.[68]

- PlaNYC could address the role of urban agriculture on issues such as neighborhood sustainability, management of waste and stormwater, and public health.

- Track and evaluate the effectiveness of City agency activities to support urban agriculture, and ensure that such information is used to make continuous improvements. This could include developing agency urban agriculture indicators to be included in the Mayor's Management Report so that agencies, policy makers, and citizens can gauge agency performance with respect to urban agriculture.

- Improve governance structures, practices, and programs to broaden participation in urban agriculture policy-making and planning, and provide more equitable access to material and financial resources.

The Food Policy Coordinator, working with the Department of City Planning and other City agencies, could lead the production of a plan including the compilation and analysis of existing data, and public participation processes. While some City officials have expressed concern about the potential cost and time of preparing such a plan, which is not currently funded in the City's budget, a number of tasks required to complete a plan are already mandated, under way, or completed. For instance, as noted above, Local Law 48 of 2011 requires the DCAS to identify city-owned parcels that are potentially suitable for urban agriculture, and data on more than 1,000 GreenThumb and public housing gardens are already collected by the Department of Parks & Recreation and the New York City Housing Authority.

67 Minneapolis was able to prepare an urban agriculture plan in-house for $150,000, including a $50,000 consultant contract and approximately $100,000 for city agency staff. (Personal e-mail exchange with Amanda Arnold, AICP, Principal City Planner, City of Minneapolis, on January 18, 2012.)

68 [illegible]

The following are examples of key milestones in creating an urban agriculture plan:

1.2.1 – Create an agriculture land use map
An urban agriculture land use map, prepared with community input, would document the size, location, citywide distribution, and status of sites that might be appropriate for urban agriculture. This document would help determine how many parcels overall could feasibly be dedicated to urban agriculture, how agricultural land should be distributed throughout the five boroughs, and how long land should be dedicated to urban agriculture. It would also help evaluate where urban agriculture-related infrastructure such as food processing facilities (e.g., to wash, cut, and bag produce) and food distribution hubs could be strategically located to take advantage of the food produced on urban farms and gardens.

1.2.2 – Document all existing urban agriculture sites
There is no single list within City government that records the more than 700 farms and gardens growing food citywide. City agencies increasingly want to obtain information on urban agriculture, but slim agency budgets, a lack of staff assigned to address urban agriculture, and limited capacity to manage large amounts of data housed within multiple agencies overseeing farms and gardens make it difficult to document urban agricultural activity citywide.

Local Law 52 of 2011 requires the Mayor's Office of Long-Term Planning and Sustainability to publish a report on the city's food system by September 2012 that includes the location (sorted by community board and size in square feet) of each community garden on city-owned property that is registered with and licensed by the Department of Parks & Recreation, and whether each garden engages in food production. While this is a step in the right direction, **the Mayor's Office of Long-Term Planning and Sustainability should compile and publish an online registry of all urban agriculture sites in New York City, including community farms, school gardens, public housing gardens, institutional farms, and commercial farms.**

In addition to the information required by Local Law 52, this database should also include the following:

- Square feet being gardened or farmed (not merely the total square feet of the garden or farm lot)
- The type and quantity of food being produced
- Related activities that take place on the site
- The expected or desired duration of farming and gardening on each site

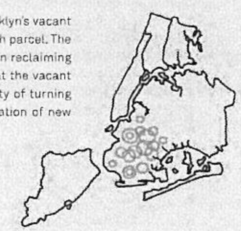
The Mayor's Office of Long-Term Planning and Sustainability could outline steps and provide resources to assist farmers and gardeners in collecting this data, which would help City officials anticipate future needs for urban agriculture infrastructure and determine where farming activities are likely to increase or decrease across the city. As part of the land use planning process for urban agriculture, City officials would also be in the position to determine appropriate lease or license arrangements for farms and gardens that should have extended protection from development, and sites that should be farmed or gardened on an interim basis.

In a city as large as New York, with new urban agriculture projects coming on-line regularly, even a well-funded and -staffed effort to compile growing sites will quickly become outdated without frequent updates. **City officials, working with funders and support organizations, should develop an interactive database that could be updated by urban farmers and gardeners, and the organizations that support them.** GreenThumb, which already conducts regular visits to gardens citywide, could spot-check sites added by the public. Creating this interactive database would maximize limited city resources and tap the on-the-ground knowledge of community members. It also would signal to the urban agriculture community that they are partners in developing city policy.

1.2.3 – Document available city-owned property
NYC OpenData, a City government online database, provides information on the approximately 18,500 city-owned parcels that are currently used by City agencies for public buildings (such as schools, police stations, libraries, and warehouses); open spaces (such as piers, parks, and natural areas); highway maintenance yards and parking lots; or are unused and vacant. In the Local Law 48 of 2011 Report, users searching for vacant land can find the block and lot information, dimensions, inclusion in government clean up programs, existing structures, and other details of sites, including which agencies have jurisdiction over each site and contact information for further information.[69] DCAS has yet to meet the requirement in the law to assess any given site's suitability for urban agriculture. In fact, a provision in the law specifies that data must be provided to "the extent such information is available" to DCAS, which may relieve the agency of the obligation to gather new information. **The Council and advocates should work to ensure that this information is gathered by making available the funding and staff resources to complete an urban agriculture assessment and by tightening the requirements in the coming years.**

Identifying and Activating Vacant Land: 596 Acres

The nonprofit 596 Acres has created a website featuring a map of Brooklyn's vacant parcels and contact information for the City agency responsible for each parcel. The website also serves as a message board to help residents interested in reclaiming these lots for community use find each other. 596 Acres posts signs at the vacant lots to draw attention to, and educate passersby about, the possibility of turning those sites into gardens. The project has already resulted in the creation of new GreenThumb gardens and has enabled community members to organize to create others. While 596 Acres is no substitute for DCAS meeting the requirements of Local Law 48 of 2011, the project illustrates that gathering and conveying this information to the public can be done quickly, at a relatively low cost.



69. See the LL48 database: [illegible]

1.2.4 – Identify available private property

The NYC OpenData database covers City-owned property, but the City's agriculture land use map should also encompass only privately-owned open space and potential growing spaces atop flat-roofed buildings throughout the city.[70] A comprehensive citywide database that includes these private properties would help owners of vacant land or rooftop space connect with individuals and groups that are interested in using those spaces to grow food—either on a rental or sharecropping basis, or for free, depending on the owner's needs. Such a database could also be used to help agencies such as the Department of Environmental Protection identify participants for its Green Infrastructure Program, and enable entrepreneurs to identify parcels of land for commercial farming ventures.

1.2.5 – Develop criteria to evaluate the suitability of vacant land for urban agriculture

These criteria could include the following:

- Growing conditions, including exposure to sun, wind, etc.
- Quality of soils, including both soil fertility and toxicity
- Access to water and electricity
- Ease of accessing the site
- Compatibility with neighboring land uses and community goals for the site
- Need for open space in the community
- Nearby health or safety hazards
- Access to healthy food in the surrounding neighborhood
- Title or other legal obstacles to using the site
- Costs to convert the site to an agricultural use
- Value of alternative uses and development potential
  - Is the site intended to be developed?
    If so, how many years before construction will begin?
  - If not, is there market demand for development in the near future?
  - Is the parcel large enough to make it attractive to developers?[71]

[70] Columbia University's Urban Design Lab has already conducted a preliminary assessment of private-owned spaces that potentially could be used for urban agriculture.

[71] Developers may require lots to be a minimum size before they can build new apartments or commercial establishments, but urban farmers and gardeners can operate on very small sites—container gardens can fit into sites with as little as a few hundred square feet.

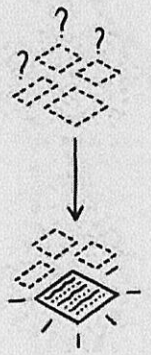
1.2.6 – Evaluate the availability and suitability of city-owned sites for agriculture

Once criteria to evaluate the suitability of city-owned land for urban agriculture have been developed, DCAS should review and apply these criteria to existing sites. DCAS could start with a manageable subset of its database of properties. Assessing even a few dozen sites would be a valuable way to estimate the time and costs of completing the evaluation of all vacant parcels. DCAS also could partner with community-based non-profit organizations that have identified suitable city-owned land and local residents interested in starting urban farms and gardens on those sites.

San Francisco Urban Agriculture Land Use Criteria

In San Francisco, a Mayoral Directive required all city agencies with jurisdiction over property to audit their land to identify parcels suitable for or actively used for food-producing gardens.[72] To do so, a group of agency representatives from the Mayor's Director of Greening, City Planning, Department of Public Health, and Department of the Environment developed the following evaluative criteria:

- Vacant or underused sites no less than 500 square feet with no portion less than 10 feet wide
- Availability for at least the next three years
- 30% of the site with a slope of 10% or less, with the remaining portions of the site with slopes less than 40%
- Permeable surface, including unused existing lawns, and under/unused sites with impervious surfaces
- Direct, bright indirect, or moderate indirect light for at least 6 hours a day
- Water access, feasibility for the installation of new water access, or potential for rainwater capture
- Within reasonable walking distance from public transit
- Within reasonable distance from a vehicle drop-off area and reasonably accessible by a construction vehicle
- No streams or wetlands, including underground streams or gardens planned to be uncovered
- Rooftops and areas for vertical farms and gardens



Individual agencies reviewed 120 sites and uncovered a total of 13 new parcels that were deemed available for gardening.

[72] City of San Francisco, Executive Directive on Healthy and Sustainable Food 09-03, Summary Report, December 2010, pg. 7 and appendix F. Other cities that have gone through the process of searching for new land suitable for urban agriculture include Portland, Vancouver, and Oakland. See Mendez, W., Balmer, K., Kaethler, T., & Rhoads, A. (2008). Using Land Inventories to Plan for Urban Agriculture: Experiences from Portland and Vancouver. Journal of the American Planning Association, 74(4), 435–449.

1.3 Explore appropriate land tenure and garden preservation

Land tenure remains an issue for community gardeners on City-owned property. Several interviewees expressed concerns about the possibility of losing garden or farm space, which may influence the willingness and ability of practitioners to improve sites, their ability to obtain funding for projects, and the types of agricultural practices they are able to use on a particular site. Whether those fears are unwarranted, as some officials claimed, they persist among gardeners.

As described in the Urban Agriculture in NYC chapter, the community gardens that occupy City property have one-year licenses that can be renewed indefinitely, provided that the gardeners continue to use their space for gardening in compliance with all rules and regulations and the City does not wish to convert it to another use. To convert a garden site into another use, the City must go through a formal land use review process involving input from the local community board, the City Council, and Borough President, making the task time consuming and politically difficult. However complicated the process may be, the possibility remains for the City to develop the space.

The City should consider a range of license and lease terms for some community gardens and farms. For example, the Department of Parks & Recreation has entered into a long-term license with Added Value to enable the group to continue farming the Red Hook ball field it has occupied since 2003. Other cities have adopted different land tenure terms for gardens and farms. For instance, Baltimore[73] and Boston[74] recently issued requests for qualifications and proposals for urban farms that would be given five-year renewable leases, while the City of Oakland leases land to City Slicker Farms for 10 years. Longer-term leases enable farmers and gardeners to justify more substantial investments in their site's infrastructure, and may make it easier for them to obtain funding for their projects.

Another mechanism to provide long-term protection for urban agriculture sites is New York's nonprofit land trusts, which own and manage community gardens citywide. However, land trusts require funds to ensure that garden sites are properly maintained, and the city's existing land trusts would need to have additional revenue to add more gardens to their inventories. The Mayor's Office, Borough Presidents, or City Council, working with private funders, could help fund one or more land trusts to enable them to take on the ownership of additional sites.

1.4 Strengthen the role of the Food Policy Coordinator

To fully integrate urban agriculture into city government will require coordinating actions and policy-making across multiple agencies. One way to do this is to make the city's Food Policy

73 Request For Qualifications: Urban Agriculture in the City of Baltimore. RFQ Issued: March 25, 2011. Issued by: Baltimore City Department of Planning and Department of Housing and Community Development. Accessed at [illegible] on January 30, 2012

74 http://www.cityofboston.gov/news/default.aspx?id=5169

Coordinator responsible for leading all efforts related to citywide urban agriculture policy. In 2008, a Mayoral Executive Order established the position of Food Policy Coordinator to improve New Yorkers' access to healthy food.[75] This position, which reports to the Deputy Mayor of Health and Human Services, includes the following responsibilities:

- Develop and coordinate initiatives to promote access to healthy food for all New Yorkers.
- Increase access to, and the use of, food support programs (such as the USDA's Supplemental Nutrition Assistance Program) for those who qualify for financial assistance to purchase food.
- Develop healthier City agency food standards for all meals or food supplies that are purchased, prepared, or served in agency programs.
- Ensure that meals and snacks served by city contractors and agencies meet those standards.
- Convene a Food Policy Task Force made up of representatives of various entities involved in the city's food system.[76]

One of the Food Policy Coordinator's critical functions is to foster collaboration across municipal agencies that typically are not considered responsible for food policy, but which control or manage elements of the food system such as land for urban farms and farmers markets. This mandate to coordinate the actions of multiple agencies makes the Food Policy Coordinator a logical choice to help agencies incorporate urban agriculture into their planning and operations. However, the executive order that established the Food Policy Coordinator position does not specifically mention urban agriculture. The City Council also could take the following steps to strengthen the position:

- Add urban agriculture to the list of food systems for which the Food Policy Coordinator is responsible.
- Establish the position through an amendment to the City Charter, making it a more permanent part of city government.
- Move the position to an agency with greater jurisdiction across multiple agencies, such as the Office of Operations.
- Provide the position with the adequate staff and funding to carry out the tasks of developing urban agriculture-related policy.

75 Executive Order 122 of 2008.

76 Executive Order 122 of 2008 states: "The Food Policy Coordinator shall convene a Food Policy Taskforce, which shall have representation including, but not limited to, the Department of Health and Mental Hygiene (the "Health Department"), Department of Education, the Human Resources Administration, the Office of the City Council Speaker, and the Council on the Environment of New York City." (emphasis added)

One of the first tasks of a newly strengthened Food Policy Coordinator could include working with other agencies to develop suitability criteria for urban agriculture on city-owned land. Additionally, the Food Policy Task Force should identify ways to streamline interactions among the agencies that provide services to or regulate urban farms and gardens. A top priority could be to develop a process—and information—to give gardeners and farmers a clearer sense of how to navigate various administrative requirements and access the services of diverse City agencies.

1.5 Increase the capacity of GreenThumb staff

One of the most significant obstacles to expanding urban agriculture in New York City is that much of the financial and logistical burden for supporting individual farms and gardens citywide falls on a single government entity—GreenThumb, a division within the Department of Parks & Recreation—that lacks adequate staff and funding. In order to allow a community group to start a new community garden, GreenThumb must interview the group to ensure that it has the capacity to manage the space, license the group, and oversee the use of the site to ensure that it remains well-tended and publicly accessible. In addition, GreenThumb provides services and materials, such as removing debris and weeds, soil remediation, new topsoil and compost, fencing, and a water supply. GreenThumb offers these services not only to the hundreds of gardens under its jurisdiction, but also to numerous nonprofit, commercial, and institutional farms citywide.

GreenThumb's current funding stream comes exclusively from Federal Community Development Block Grant funds.[77] These funds cover its staff costs for a director, several staff members, two to three outreach coordinators, and five employees who are involved in garden development, landscape restoration, and maintenance. These funds also pay for the program's budget, which includes everything from soil and lumber to gardening supplies, seeds and bulbs, vehicle use, information dissemination, training, and—budget permitting—sheds, hoop houses, and other garden enhancements. In fiscal year 2012, Green Thumb's OTPS (Other Than Personnel Services) budget was approximately $277,000.

GreenThumb is funded at a significantly lower level per garden than other leading municipal community garden programs, such as Seattle's P-Patch program. Moreover, the GreenThumb budget is scheduled to be reduced in the fiscal year 2013 financial plan. As the table at right illustrates, if the proposed fiscal year 2013 budget is adopted, GreenThumb will have a smaller budget than Seattle's community gardening program, despite having more than six times the number of gardens. It is unlikely that GreenThumb will be able to support additional gardens without an increase in funding.

77 Federal funding for GreenThumb comes from Community Development Block Grants, a federal program run by the U.S. Department of Housing and Urban Development to help cities stabilize and improve neighborhoods.

	Seattle P-Patch FY 2012 Expense Budget*	New York City Greenthumb FY 2012 Expense Budget**	**New York City Greenthumb FY 2013 Financial Plan***
FY 2012 Expense Budget*	$669,071	$728,046	$655,454
Number of gardens	~ 75	~ 490	~ 490
Expenditure per garden	$8,921	$1,456	$1,338

* http://www.seattle.gov/financedepartment/12adoptedbudget/default.htm

** http://www.nyc.gov/html/omb/downloads/pdf/as6_11.pdf

*** http://www.nyc.gov/html/omb/html/publications/finplan07_12.shtml

The City should ensure that GreenThumb's budget is adequate for its responsibilities for both management (tracking the gardens, renewing licenses, managing the delivery of supplies and services) and providing services and supplies. Allocating City funds to underwrite some or all of these costs, rather than relying on federal funds to do so, would enable existing farmers and gardeners to be more productive and facilitate the development of new urban agriculture projects.

In large organizations, including City government, what gets measured gets managed. One way to improve the management of GreenThumb gardens within City government is for the Department of Parks & Recreation to include these gardens in its evaluations of Parks facilities. For example, the Mayor's Management Report (MMR) tracks how well agencies perform their missions by outlining each agency's responsibilities and by reporting measurable indicators of success.[78] In addition, the report provides the public with information about how well particular agency tasks are being performed and how well the City is operating overall.

However, gardening or farming activities are not included in the MMR. As a result, the MMR does not include related indicators such as security issues at gardens, missing or broken fences, and compost provided by the Department of Sanitation, making it less likely for officials to commit funds to address these issues.[79] Including indicators for urban agriculture in a management tool like the MMR would make the needs of community gardens more visible, and therefore more likely to be considered as important as other agency functions—such as park maintenance—which are already tracked in the document. However, if community gardens are included in the MMR, the Department of Parks & Recreation should ensure that they are not penalized because they do not necessarily look or perform like other open spaces, such as manicured lawns or ball fields.

78 See http://www.nyc.gov/html/ops/html/data/mmr.shtml

79 The 2011 Mayor's Management Report does include the rest of the infrastructure managed by the Department of Parks & Recreation in the description of the scope of the agency's operations, from 1,800 parks to 600 comfort stations to 650,000 street trees. Community gardens, however, are omitted.

1.6 Establish an urban agriculture ombudsman

Because City agencies in New York do not view urban agriculture as part of their mission, staff at these agencies typically do not have the knowledge or expertise, or the administrative imperative, to address the needs of the urban agriculture community—access to compost or soil, learning how to set up a farm stand, or information about putting a greenhouse on a roof. As a recent study illustrated, community groups have to navigate substantial red tape to get permits for farmers markets.[80]

The City should designate one individual (or office) to receive public questions and concerns about urban agriculture, help farmers and gardeners navigate the bureaucracy, and serve as an urban agriculture liaison to other City agencies. This role could be assigned to the Food Policy Coordinator, the Office of the Public Advocate, an additional staff member assigned to GreenThumb, or designated staff within another City agency. This could initially be established as a pilot program to identify the issues that gardeners and farmers have, and to identify where there are real needs for agency coordination and collaboration.

80 Office of the Manhattan Borough President (2011) Red Tape, Green Vegetables: A Plan to Improve New York City's Regulations for Community-Based Farmers Markets. NYC: Manhattan Borough President's Office.

2. Integrate Urban Agriculture into Existing City Policies and Plans

Government agencies prepare plans for various aspects of the city's operations or physical development that address diverse issues, from affordable housing production to waste management.[81] Plans operate at different scales: rezoning plans, for instance, are often focused on neighborhoods, while transportation plans consider New York City within the broader region. Plans address the City's capital budget[82] and outline new and expanded public facilities required by City agencies.[83] In a well-planned city, each individual plan also addresses broader city goals and objectives, as well as topics addressed by multiple agencies such as health, equity, the environment, and economic development.

As it is in PlaNYC, urban agriculture should be treated as an issue that requires actions from multiple City agencies, which should integrate thinking about urban agriculture into their programs, plans, and long-range strategies. At a minimum, agency staff could assess how their plans and programs affect or could capture the multidimensional benefits of urban agriculture. This section outlines a number of opportunities for agencies to incorporate urban agriculture in their planning and operations, and potentially find cost-effective initiatives that can simultaneously achieve their goals, address other pressing citywide issues, and support farmers and gardeners.

2.1 Expand support for urban agriculture in the city's green infrastructure program

In 2010, the Department of Environmental Protection (DEP) released a stormwater management plan outlining the low-tech, landscape design techniques (collectively called "green infrastructure") that the City will use to slow and absorb stormwater runoff to reduce combined sewage overflows into our waterways.[84] DEP has committed to investing $187 million in green infrastructure over the next four years, and over $2.4 billion by 2030, to implement this plan.[85]

Although DEP's plan does not mention urban farms and gardens, the agency has funded several urban agriculture projects on private property as part of the green infrastructure program. Because urban agriculture provides multiple benefits, if DEP prioritized support

81 http://www.nyc.gov/html/[illegible]

82 New York City Charter, Chapter 10, section 228.

83 New York City Charter, Chapter 8, section 204.

84 http://www.nyc.gov/html/dep/html/stormwater/[illegible]

85 This consists of $1.5 billion in public dollars (paid by water fees and state and federal funds) and $900 million in private investments, in addition to $2.9 billion in cost-effective conventional improvements.

for urban agriculture as a green infrastructure strategy, it could simultaneously tackle the combined sewer overflow problem and many other pressing citywide issues. For instance, in areas of the city such as the Bronx River watershed, new urban agriculture sites funded through the green infrastructure program would help reduce combined sewer overflows, while also providing fresh produce and new open space amenities in underserved neighborhoods, in addition to the other benefits associated with urban agriculture.

2.2 Establish a municipal soil conservation and distribution program

Soil is a critical resource for the city's gardens and farms, particularly those that use raised beds. The GreenThumb program purchases and delivers soil to registered school and GreenThumb gardens, but funds for soil purchases and deliveries are limited. In order to develop efficient, cost-effective strategies to address farmers' and gardeners' need for soil, the City could convene public and private partners to develop a citywide agricultural soils program. Participants could include City and State agencies such as Parks & Recreation, Sanitation, Environmental Protection and the New York State Department of Agriculture and Markets, the New York State Soil and Water Conservation District,[86] Cornell University's Cooperative Extension, and private contractors that currently deliver soil for the City.

The Need for Soil

One way to estimate the total amount of soil needed annually to support urban agriculture sites in New York City is to calculate how many sites exist citywide, how much land is used at those sites for growing food (as opposed to areas for community events, storage of tools, or other uses that do not require soil), and how much soil is needed for growing food.

No one has yet established an accurate count of the total area of gardened and farmed land in New York City. Farming Concrete, in its 2010 report, noted that of 67 gardens surveyed there were 71,950 square feet of garden beds, averaging 1,074 square feet of bed space per community garden.[87] However, this survey captures only a fraction of the urban agriculture sites citywide. A more accurate citywide estimate would require an extensive survey of urban agriculture sites, which must include private backyard sites, school and public housing gardens, and commercial and community farms.

86 [illegible]

87 Farming Concrete 2010 Report, p. 7. [illegible]

This program could conduct an initial analysis to determine the following:

- The total amount of land currently under production and the amount of soil needed to serve these sites
- The amount of soil needed over a ten-year period assuming the continued growth of urban agriculture. This could be roughly estimated in a number of ways, including assuming a certain number of additional acres of land are used for production each year for the next ten years
- The amount of soil currently provided by agency programs such as GreenThumb and other entities such as the city's botanic gardens and New York Restoration Project
- Options for storing soil in central locations and an efficient distribution infrastructure

2.3 Design a program to collect and compost organic matter, and distribute compost to gardens and farms

As part of its Compost Giveback program, the Department of Sanitation (Sanitation) began collecting residential leaves and yard waste in 1990 for composting at the former Freshkills landfill in Staten Island and Soundview Park in the Bronx, providing free compost for urban gardeners and farmers. In 2008, Sanitation suspended this program due to budget cuts, though it continues to compost leaf waste collected by private landscaping companies and the Parks Department, and helps to fund composting education and community-based composting projects.

The New York City Council recently passed two laws that pertain to citywide composting. Local Law 37 of 2010 requires Sanitation to resume the residential leaf and yard waste collection program by December 2012. The new collection program will run between March 1 and July 31, and from September 1 through November 30 of each year, a much longer period than the previous program, which collected leaves for only four weeks during the fall. In addition, the law requires Sanitation to collect leaf and yard waste from NYCHA properties, and to collect Christmas trees for two weeks instead of one week every January.

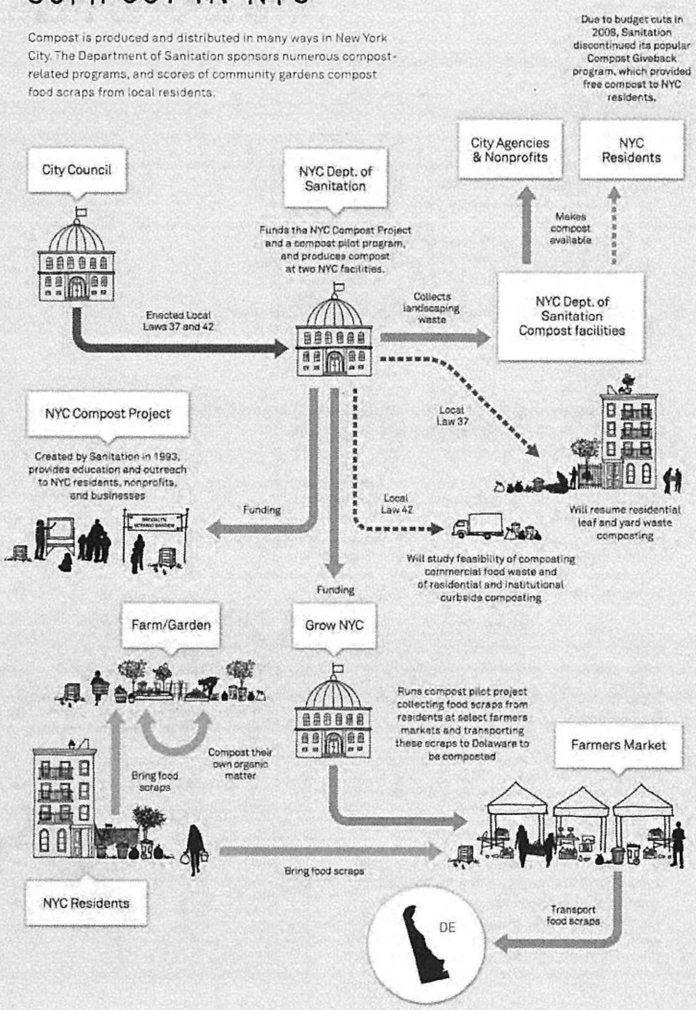
Local Law 42 of 2010 requires Sanitation, in conjunction with the Mayor's Office of Long-Term Planning and Sustainability, to issue a report by July 1, 2012, "recommending methods to expand the diversion of compostable waste from the city's waste stream." This report will also assess the feasibility of a curbside collection program

What is Compost?

Compost is the product of the decomposition of organic matter. When mixed with soil it provides nutrients and improves the soil structure. Finished compost can be produced in less than one year through properly managed decomposition of green plant materials and kitchen scraps, combined with dry organic material such as wood chips and paper.

COMPOST IN NYC

Compost is produced and distributed in many ways in New York City. The Department of Sanitation sponsors numerous compost-related programs, and scores of community gardens compost food scraps from local residents.



for household and institutional compostable waste, which includes food waste, paper products, and other organic matter. Local Law 42 also requires Sanitation and Long Term Planning and Sustainability to provide a separate plan by 2014 to "study the viability of instituting a food waste composting program for the residential or commercial waste stream."

None of these regulations address the distribution of finished compost to gardens and farms. Although in the past, leaf and yard waste provided the primary material for Sanitation's now-discontinued Compost Giveback program, Local Law 37 does not require the agency to reinstate those giveaways. Furthermore, Local Law 42 does not require Sanitation's report on curbside compost collection and food-waste composting plans to address the needs of urban farmers and gardeners for compost.

In addition to conducting the analysis required by these laws, Sanitation should examine scenarios to make compost available for free or at low cost to the city's farms and gardens. Sanitation could consider how much compost the city's existing farms and gardens currently use and need, and how much would be required in future scenarios in which the city adds more farms and gardens. Sanitation also could evaluate the extent to which its compost production could meet current and future demand, and whether municipally-produced compost is a cost-effective way to supply farms and gardens citywide, and potentially throughout the metropolitan region.

2.4 Include urban agriculture in the City's review processes

Government agencies regularly assess the potential environmental and community impacts of their actions, such as the rezoning of a neighborhood, and the actions of private entities, such as constructing a new building, when their proposed projects require a City action. These review processes include the City Environmental Quality Review (CEQR) and the Uniform Land Use Review Procedure (ULURP).

These review processes currently do not require agencies to consider the effects of an action such as a new development or neighborhood rezoning on gardens or farms, or on access to healthy food.[88] **This analysis should be required by the Mayor's Office of Environmental Coordination, which assists agencies in carrying out environmental reviews and establishes parameters for the process, and the Department of City Planning, which oversees the ULURP process.**[89] For example, the review of a proposed building could consider if it would block sunlight from an adjacent community farm; potential mitigation measures could include reconfiguring the building, incorporating a new farm into the design of the proposed project, or creating a new farm somewhere in the project vicinity. Including this analysis of impacts on urban agricultural assets in these review processes would enable City agencies, developers, and the affected communities to determine what alternatives and mitigation measures, if any, are needed and feasible.

88 The GreenThumb licenses require that the City go through the ULURP process for garden sites they wish to develop.

89 The Manhattan Borough President proposed including food infrastructure in the City's environmental review process in 2009. See Planning for Healthy Neighborhoods: Include Food Infrastructure in the City's Environmental Review. A proposal by Manhattan Borough President Scott M. Stringer, June 2009. Accessed at [illegible]

2.5 Incorporate agriculture into neighborhood planning

Urban agriculture requires the allocation of space, engagement of community members, and support from City agencies (from the police to sanitation workers) at a neighborhood scale. Citywide planning and policy-making for urban agriculture, which take a broad perspective and can address citywide issues such as the location of large-scale sites for composting, should be done in tandem with community-based planning, which addresses the local details of urban agriculture and taps the unique understanding that local residents bring to the table.

Examples of neighborhood-level planning issues related to urban agriculture include:

- Identifying sites for farmers markets and community gardens
- Addressing the compatibility of rooftop farms with neighborhood characteristics
- Determining the desirability of integrating farms into new residential buildings
- Locating greenhouses and identifying land for food processing facilities
- Allocating capital dollars for municipal food processing facilities
- Considering the use of parkland for growing and selling food

Two entities—the Department of City Planning (DCP) and Community Boards—routinely handle issues that affect urban agriculture. For instance, Community Boards help shape the City's capital and operating budgets, which can be directed to support urban farms and gardens.[44] DCP reviews neighborhood plans and changes to the City's zoning resolution, which, among other things, regulates where different uses (such as businesses, apartment buildings, factories, and parks) can be located.

What is the City Environmental Quality Review process?

The City Environmental Quality Review (CEQR) is the process by which City agencies review proposed actions for their environmental impacts. For instance, for a proposed new building that requires a zoning variance, the CEQR process would consider how the building might impact the existing historic character of the neighborhood, its open spaces, and natural resources; whether the existing transportation network is adequate to handle any additional traffic that might result when the building opens; and the shadows the building might cast on adjacent properties.

Where substantial negative impacts are likely, CEQR generally requires an Environmental Impact Statement (EIS) to examine those impacts in detail and propose potential mitigation strategies and alternatives. The environmental review process is no guarantee that projects will be improved as a result of the analysis. Nevertheless, an EIS is often the only publicly available source of detailed data and analysis to enable communities and decision makers to understand, comment on, and avoid the anticipated negative consequences of new projects and programs.

What is ULURP?

The Uniform Land Use Review Procedure (ULURP) ensures that New Yorkers can review proposed land use changes, from the sale of City-owned property to the designation of urban renewal areas, before land is conveyed or designated. ULURP mandates that the affected community board and the Borough President consider and vote on land use changes before they can be approved by the City Planning Commission and—for some actions — by the City Council. This process governs decisions by the City to sell property on which community gardens exist, or to purchase land for new gardens. (No such process exists for gardens located on private, state, or federal land in New York City.)

Community Boards and DCP should use their authority proactively to assess the physical and resource needs for urban agriculture within their community and incorporate urban agriculture into neighborhood-level planning processes. These include: rezonings, 197-a plans, the Uniform Land Use Review Process (ULURP), the Fair Share Process, and the budget-setting process.

Rezoning
Since 2002, DCP has completed 115 neighborhood rezonings (changes to the City's zoning resolution), none of which explicitly consider the impacts on the city's farms and gardens. DCP could revise the rezoning process to include assessing the impacts that land use changes and the new development might have on existing farms and gardens. It also could explore ways to provide space for new urban farms and gardens within rezoned neighborhoods.

197-a plans
Section 197-a of the City Charter authorizes the production of plans for specific areas within the city. Thirteen 197-a plans have been adopted citywide to date. DCP could encourage 197-a plans to incorporate urban agriculture. For instance, a 2007 197-a plan approved by DCP for Manhattanville and Morningside Heights states that one of the primary goals is to "build on the strong social, economic, and cultural base of the district

Community Boards

Community Boards are a system of local representative bodies in New York City. Each of the city's 59 Community Districts is represented by a Community Board, and each Board is made up of 50 unsalaried members. Community Boards are responsible for shaping municipal priorities in land use, advising on the services provided by municipal agencies, recommending agency budget expenditures, and evaluating the environmental impacts of proposed projects.

The composition of community boards may not be representative of the neighborhoods they comprise, resulting in policy positions that do not reflect all the constituents of that community. Because they are composed of citizens who are unfamiliar with urban agriculture, community boards generally require technical assistance to engage effectively in food systems and urban agriculture planning. However, despite these limitations, Community Boards remain an important vehicle for community participation in neighborhood planning.

through a sustainable agenda that would reinforce and reinvigorate the ethnically and culturally diverse neighborhood." The plan recommends facilitating new green areas, including locations for new "landscaping and plazas on city-owned properties," and studying the feasibility of establishing an additional farmers market within the district. These kinds of proposals could easily incorporate an assessment of existing and potential urban agriculture sites.

In those communities developing or revising a 197-a plan, Community Boards with vacant land could identify city-owned parcels that the board deems appropriate for small-scale urban agriculture for food production through the 197-a process.

ULURP

A Community Board could work to ensure that neighborhood-rezoning projects include adequate space for urban agriculture. Through the ULURP process, boards could provide extra scrutiny over proposals for developing community gardens and farms, or for development projects that jeopardize garden or farm sites.

Tools to Assist in Neighborhood-Level Planning

In 2011, members of the nonprofit organization Food Systems Network NYC launched a project called FoodAction NYC to help members of the public to work with community boards on food planning projects.[90] FoodAction will produce an online toolkit, along with information on the city's food system that can be mapped to help community boards to engage in food systems planning.[91]

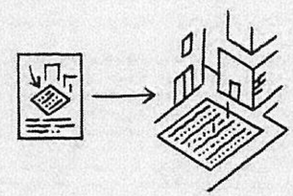
Fair Share Process

The Fair Share Process is used to equitably allocate sites for municipal facilities.[92] Each year, the Mayor's Office publishes a document called the Citywide Statement of Needs, a compendium of proposed additions, closures, expansions, or other plans for changes at city facilities for the coming two years. The Statement of Needs is based in part on the needs assessed by each individual community board through a budget-setting process (described below). While much of the original impetus for this process was to prevent the unfair clustering of potentially harmful facilities such as waste treatment plants, it also could be used to ensure that urban agriculture–related facilities such as compost distribution sites or new farms and gardens are being distributed fairly throughout the city.

Budget Priorities

Community Boards also submit budget proposals based on their district's needs to the Office of Management and Budget (OMB) as part of the process to determine citywide budgets. This process allows Community Boards to make both capital and operating budget requests, such as capital funds to construct lighting and other infrastructure to support outdoor farmers markets, or operating funds for a specific community farm. Community Boards should work with farmers and gardeners, support organizations, and GreenThumb to make budget requests that address the needs of farms and gardens in their district. It should also be noted, however, that the Community Board process is not sufficient to gauge the need for capital funds for urban agriculture, especially in low-income communities that may have more pressing needs besides urban agriculture.

Neighborhood Urban Agriculture Planning in Chicago and Vancouver



Chicago's city planning department has incorporated urban agriculture into several neighborhood plans. In the Englewood community, on the city's south side, city officials established the Greater Englewood Urban Agriculture Task Force, which includes Growing Home (a community-based urban agriculture organization), other community groups, local financial institutions, the local community college, and Englewood residents. The Task Force's goal is to turn Greater Englewood into a "food destination" by creating a large number of urban farms, developing and promoting farmer training, planning for business and infrastructure development that supports new and existing food entrepreneurs and urban farmers, and offering food education through the local community college.[93]

Vancouver's Greenest City Action Plan (GCAP) addresses the regional, national, and global dimensions of the food system, yet focuses on neighborhood-level initiatives.[94] The Plan calls for the development of neighborhood food infrastructure, including food hubs (food processing and distribution facilities to connect rural farmers to urban consumers), community kitchens, markets, gardens, and even community root cellars for food storage and community bread ovens. The city has provided small grants to a neighborhood-based network, called Village Vancouver, to develop more localized food systems and reduce energy consumption, food waste and packaging, and to achieve other environmental goals.[95] Specific projects include asset mapping in neighborhoods to identify community resources for urban farming, including land and skills, and training programs to enable members to start seed-saving collectives, food co-ops, beekeeping organizations, and other projects.

90 http://www.foodsystemsnyc.org/articles/[illegible]

91 http://www.[illegible]

92 http://www.nyc.gov/html/dcp/html/[illegible]

93 Greater Englewood Urban Agriculture Task Force (GEUA): Progress, Accomplishments and Priorities for the Coming Year, no date.

94 City of Vancouver Administrative Report No. A-8. June 8, 2010. Accessed at [illegible]

95 http://www.[illegible]

3. Identify Innovative Opportunities to Build Urban Agriculture into the Cityscape

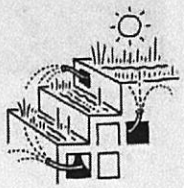
At a smaller scale than neighborhood-level plans, government agencies routinely plan for individual buildings or parcels of land. Because urban agriculture can thrive in very small areas in many different forms, New Yorkers have already reclaimed many different kinds of spaces citywide, from rooftops to stalled development sites, using everything from milk crates to kiddie pools to grow food. Government agencies have many opportunities to facilitate this activity and encourage the creation of new farms and gardens by modifying existing regulations and procedures for developing City-owned land.

3.1 Support project-level urban agriculture planning and design

The NYC Department of Housing Preservation and Development (HPD) supported the development of a 202-apartment affordable housing project in the Bronx called Via Verde that includes rooftop gardens designed to encourage multiple uses, such as fruit and vegetable cultivation, passive recreation, and social gathering, while also providing the benefits of stormwater control and building insulation. The developer of Via Verde, Jonathan Rose Companies, was selected from a competitive Request for Proposals (RFP) process. Although the RFP did not specify an urban agriculture feature, it did require respondents to consider incorporating access to nutritious food, a fitness theme, and places for social gathering into the development.[96]

Urban Agriculture at Via Verde

Spinach, kale, collards, broccoli, cabbage, onions, and peas are growing at Via Verde in 11 raised garden beds, totaling approximately 1,541 square feet, while the building's fourth-floor terraced roof features apple trees in a dozen large rooftop planter boxes. In the 20th-floor community room of the Via Verde tower, GrowNYC staff will provide monthly workshops on gardening, composting, and healthy eating for Via Verde residents, using the facility's kitchen to prepare meals using produce from the gardens. Residents will be encouraged to participate in the weekly rooftop garden and harvest work days.

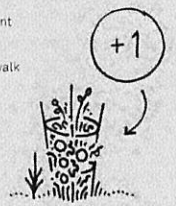


96 City of New York, Department of Housing Preservation and Development. (2006) New Housing New York Legacy Project Product for Proposals. Issue Date: June 12, 2006. Accessed at http://www.nyc.gov/html/hpd/pdf/rfp_prod_pfp.pdf on January 30, 2012.

Encouraging Urban Agriculture in Affordable Housing Development

The Enterprise Foundation's Green Communities[97] Certification program uses a point-based evaluation tool for affordable housing projects that is similar in approach to the Leadership in Energy and Environmental Design (LEED) standards for buildings. Developers get points for including various features to improve public health and food access – urban agriculture is one of those features. One point can be earned by incorporating one of the following strategies for increasing access to healthy foods:[98]

- Building neighborhood farms and gardens into the project (including permanent growing space and related infrastructure)
- Connecting the project to established community gardens within a half-mile walk
- Offering the delivery of community-supported agriculture (CSA) program shares for residents, project staff, and surrounding community
- Locating the project within a half-mile of an existing or planned farmers market



HPD and other agencies should encourage new development projects to include growing spaces by specifying the incorporation of urban agriculture and food access, more broadly as part of the project program and design guidelines. There are precedents for doing so. State policies, for instance, encourage developers of affordable housing to use green building techniques. And at the city level, HPD has incorporated the Enterprise Green Communities Certification as a threshold requirement for obtaining Low-Income Housing Tax Credits.[99]

3.2 Encourage rooftop urban agriculture

Urban farmers and gardeners in dense cities increasingly are interested in using rooftops as growing spaces. New York has become a leader in developing this form of urban farming, with a wide array of rooftop agricultural projects. Nonprofits have used roof spaces for therapeutic gardens, housing developers have built rooftop gardens and greenhouses as amenities for new residential buildings, and grocers and restaurants are sourcing fresh produce from their roofs. On an administrative building on Randall's Island, the Department of Parks & Recreation is testing different kinds of green roof strategies, including vegetable plots, that in the future may be installed on recreation centers citywide. In addition to providing food and open space, these projects collect stormwater and can reduce the buildings' heating and cooling costs.

97 http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/policy-initiatives-overview

98 www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/criteria

99 Criterion number 2.12.

Rooftop Greenhouses

To qualify for the new exemptions approved by DCP, rooftop greenhouses must:

- Not be on buildings that contain residences or other uses with sleeping accommodations.[100] DCP believes that residential building owners will turn rooftop greenhouses into additional living space instead of growing space.
- Only be used to grow plants (or if they are accessory to a community facility, are used primarily for plant cultivation)
- Not exceed the building height limit by more than 25 feet
- Have roofs and walls that have at least 70 percent transparent material (not counting for accessory office or storage space, which may take up no more than 20% of the floor space and have solid walls and roofs)
- Be set back from the perimeter wall by at least 6 feet all around if the greenhouse exceeds height limits
- Incorporate a rainwater collection and reuse system to reduce the demand on the potable water supply and minimize stormwater runoff

New York has up to 2,700 acres of flat rooftops with the potential to serve as growing spaces—that's an area more than three times the size of Central Park.[101] New York City planners and policy makers have been trying to make it easier to install rooftop greenhouses by changing regulations on the height and size of structures on top of existing buildings. Local Law 49 of 2011 amends the building code by adding greenhouses to a list of other rooftop structures, such as water tanks and air conditioning equipment, that do not count toward height restrictions. The Department of City Planning approved a zoning text amendment that excludes rooftop greenhouses atop commercial buildings from regulations that limit the bulk of the building.[102]

City agencies should continue to look for ways to encourage rooftop agriculture. The Department of Environmental Protection could expand its support for rooftop farms as part of its program to manage stormwater. Through its RFPs, HPD could incentivize housing developers to include greenhouses in new buildings. City Council members and Borough Presidents could use their discretionary budgets to help fund rooftop greenhouses.

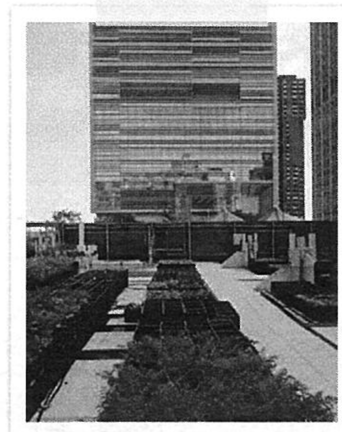
100 Greenhouses are allowed atop residential buildings if they stay within the FAR and height limits for the site.

101 Ackerman, K., op cit.

102 The text amendments exclude greenhouses from the calculation of the floor area ratio (FAR) of the building. See http://www.nyc.gov/html/dcp/html/greenbuildings/index.shtml

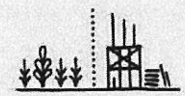
3.3 Support "interim use" urban farm projects

Numerous urban agriculture projects are designed to occupy spaces temporarily. On East 29th Street in Manhattan, for instance, GrowNYC is managing the 15,000 square foot Riverpark Farm on the site of a stalled real estate development. Vegetables have been planted in 3,400 milk crates, which can be moved when construction resumes.[103] Other municipalities have incentivized developers to use stalled sites for urban agriculture and other "green" uses. **The Department of Buildings and the Department of City Planning could follow this lead to encourage temporary urban agriculture projects on the more than 600 stalled development sites citywide.**



Riverpark Farm, Manhattan

Urban Agriculture on Stalled Development Sites



In San Francisco, city officials created an innovative strategy, called a Green Developer Agreement (GDA), to encourage temporary green uses of sites where development is stalled.[104] This binding agreement allows developers to preserve their development approvals for a five- to eight-year period as long as the site is used for a "green" purpose, including urban agriculture. The agreement ensures that the interim "green" use remains until construction begins, while protecting developers from losing control over the site in case the interim use proves so popular that residents attempt to scuttle the original approved development. In 2010 a nonprofit organization opened an interim-use community farm project on a vacant parcel near the city's downtown.

103 Collins, G. August 2, 2011. Tom Colicchio's Secret Farm, Right Next to the F.D.R. Drive. The New York Times

104 San Francisco Planning Department. (2010) Executive Summary: Draft Green Development Agreement Legislation. Accessed at [illegible]

Forest Houses

In December 2010, the New York City Housing Authority sold a parcel of land at the Bronx public housing project Forest Houses to Blue Sea Development to facilitate the construction of 124 units of affordable housing. When it opens, the development will feature a 10,000-square-foot hydroponic rooftop greenhouse operated by a private firm, Sky Vegetables, that will grow produce on a commercial basis for the surrounding community.[104] The initiative to put a greenhouse atop the development was entirely Blue Sea's, though the support of local elected officials was critical.

The project overcame three obstacles that developers of other building-integrated greenhouse projects may face. First, City agencies and tax credit investors unfamiliar with building-integrated agriculture were unwilling to allow the anticipated revenues from the urban agriculture operation to be incorporated into the building's pro-forma, making it effectively impossible to finance the costs of the greenhouse through anticipated rental revenue from its operations. In the end, Blue Sea was able to secure funds from the Bronx Borough President's Office and the City Council to cover the greenhouse purchase and installation, but was precluded from charging rent for the space.

Second, the developer had to address a zoning issue. Blue Sea had to get a determination from the Department of City Planning that a greenhouse is an agricultural use that counts as a community facility, which is permitted atop residential uses. The greenhouse will sell produce within the neighborhood, reaching people within the community most in need of greater access to fresh food, and distribution of the produce will be done off-site through a CSA and other distribution channels.

Finally, the Department of Buildings initially required the greenhouse to meet the same energy code standards that apply to the whole building, a standard that freestanding greenhouses are not required to meet. Negotiating with the Department of Buildings over the energy code issue delayed the project by several months.

3.4 Encourage gardening in small spaces

Given that New Yorkers grow herbs and vegetables on windowsills and balconies, and in containers in a variety of small spaces, even tiny vacant parcels can be used for food production. Some farmers and gardeners have even found ways to aggregate small, dispersed garden plots, like backyards, to grow enough produce to run a CSA.[105]

Other small public spaces can be used to grow food as well. In Seattle, for example, residents are allowed to grow edible plants in what are known as "parking strips," the space between the curb and sidewalk found in residential neighborhoods.[107] The Vancouver environmental education organization City Farmer has a demonstration curbside vegetable garden to illustrate the possibilities of growing food in such a space. Portland's Bureau of Transportation also allows edible landscaping in parking strips. New York City amend-

105 U.S. Department of Housing and Urban Development Office of Public and Indian Housing. (2011). Final PHA Plan Annual Plan for Fiscal Year 2012. New York City Housing Authority. October 18, 2011. pg. 7. Accessed at [illegible]

106 BK Farmyards. Accessed on 3/10/12: [illegible]

107 Seattle, City of, Department of Transportation. (2011) "Department of Transportation Client Assistance Memo 2305: Gardening in Planting Strips." January 1. Available at: [illegible] (last accessed April 26, 2011). (Clarifies that residents may plant raised-bed gardens in the strip of the public right-of-way between the sidewalk and the curb.)

ed its zoning text in 2009 to require landscaped parking strips but allows only grass or groundcover to be planted.[108] **New York City could modify its zoning to allow growing vegetables in parking strips to encourage more residents to become active stewards of what is typically a neglected part of the streetscape.**

3.5 Strengthen infrastructure for food distribution and production

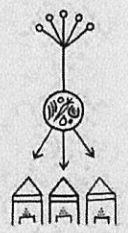
The city's farmers and gardeners could benefit from shared large-scale infrastructure and centralized facilities. Other municipalities have created facilities known as "food hubs" that combine the following:

- Shared trucks for farms and gardens to pick up material like soil and compost, and to deliver produce to farmers markets, vendors, or other retail outlets
- Refrigeration equipment to reduce the waste of unsold produce at farmers markets and enable weekly harvests to be sold on more than one market day
- Processing facilities to add value to and preserve the produce grown on farms and in gardens
- Warehouses to aggregate produce from multiple gardens and farms, and potentially serve as a distribution point to multiple markets

Food Hubs

The Stop Community Food Centre is a community-based facility in Toronto that includes an 8,000-square-foot garden, a greenhouse, a "global roots" garden to demonstrate culturally specific foods, and many other food-related projects. For example, the Stop runs a farmers market, a café, and a food share program that buys and redistributes produce through farm stands located across the city. The organization also has facilities to teach cooking and nutrition, an after-school program and summer camp, and other educational programs.

Detroit's Eastern Market is the city's wholesale food distribution facility, with a six-block farmers market for 250 local vendors surrounded by food distributors and other food establishments. Eastern Market has a demonstration urban farm, an after hours wholesale market, and special food-related public programming to draw customers to the market.



108 See http://www.nyc.gov/html/dot/html/pedestrians/street_tree_planting.shtml

The Economic Development Corporation could assess the costs and benefits of creating one or more such facilities to promote microenterprise opportunities. This assessment could include the following:

- The management structure, design, amenities, costs, and benefits of precedent projects, such as the Stop in Toronto, Detroit's Eastern Market, and La Marqueta, a kitchen incubator in East Harlem
- Demand and capacity among local farmers and gardeners for facilities to produce value-added items, such as jams and salsas, to store food from each harvest not given away or sold at farmers markets, and to share vehicles for distribution of food or to pick up materials such as soil or compost
- Opportunities and barriers to sharing existing, underused facilities, such as institutional kitchens in schools, universities, and community centers, and cold storage space
- Criteria for locating new microenterprise facilities, including proximity to farms, gardens, commercial districts, and socioeconomic indicators of need

3.5.1 Procurement

To stimulate the development of regional farms and supply City agencies with fresh food, Local Law 50 of 2011 requires the City Procurement Officer to develop guidelines for agencies to maximize the purchase of food produced in New York State, and to submit an annual report to the City Council each October 1 detailing agency efforts to do so. This legislation was crafted with the expectation that it would apply to regional farms outside New York City seeking an opportunity to compete in the City's purchasing process. However, **these guidelines also could direct agencies to purchase some produce from urban farms and gardens**, provided that the costs of doing so are equal to the costs to the City of produce procured from any of its current sources.

4. Address Disparities in New York City's Urban Agriculture Community

In many ways, disparities within the city's urban agriculture community reflect larger societal inequalities. Numerous philanthropic, nonprofit, and municipal programs attempt to address these disparities, targeting assistance, resources and funding to farmers and gardeners in low-income neighborhoods. Yet much more could be done to ensure that opportunities are equitably available to all farmers and gardeners in New York City, and that decision-making processes are transparent and engage a broad range of urban agriculture stakeholders.

4.1 Increase access to information about available resources

Numerous interviewees said the process of securing resources from the City was unpredictable, in part because not all farmers and gardeners have the time or resources to establish relationships with municipal agencies. In order to ensure that all farmers and gardeners have full access to information about funding opportunities and agency programs that support their missions, City agencies should establish clearer guidelines for how they work with farmers and gardeners, and make this information publicly available and easily accessible.

These guidelines could address the following questions:

- What materials are available for gardens, and what is the procedure for ordering and receiving them?
- What decision criteria will be used to allocate scarce resources across many gardens and farms?
- What are the needs of the urban agriculture sector for capital improvements, and how can those be addressed equitably across the city?
- How do agencies decide with whom to partner on projects and programming, and therefore how can organizations that have not historically had access to those resources compete for them?

Another step would be to publish a single list of all of the sources of public funding which are distributed to gardens and farms each fiscal year. Such information would reveal funding disparities, could help determine which organizations need help with capacity building to be able to access public funds, and would identify opportunities and priority areas for funding from private funders. The City Council already publishes a list of all Council Member grants to organizations (whether or not they are urban agriculture-related) within their own districts. In order to have a clearer picture of where and how much funding is being disbursed for urban agriculture overall, a singular and specific list would need to be compiled with data from individual agency budgets, the City Council, and the five Borough Presidents.

4.2 Support capacity building for underserved urban agriculture groups

Government agencies should support capacity building among urban agriculture organizations that historically have not received substantial public or private funds, particularly those focused on social justice and/or led by people of color. This support could include training and assistance on bookkeeping, fundraising and grant writing, organizational management, data collection, program evaluation, and business practices. For instance, one funder has piloted a targeted funding stream to support organizational and leadership development among food organizations led by people of color; this could provide a model for other funders, support organizations, or government agencies. This type of capacity building support would help groups compete for funding, manage their farms and gardens more efficiently, and potentially identify new sources of revenue.

The City also could provide additional funding to support organizations that already provide technical assistance to farmers and gardeners for food production so that they might expand their portfolios to include business planning, evaluation and service design, making sure that this assistance targets historically underserved groups.

Agencies could facilitate strategic partnerships between funders and support organizations to broaden their outreach. Large foundations without detailed knowledge of the city's urban farms and gardens can partner with local supporting organizations that may be better positioned to reach a broad range of applicants. For example, the nonprofit Green Guerillas worked with foundations to obtain sizeable grants, and then regranted funds to gardening or farming programs for the purchase of relatively low-cost supplies, such as garden tools.

Agency programs should also encourage urban farms and gardens to partner with each other and other organizations on projects and funding applications. This may create synergies and economies of scale among the urban agriculture community and encourage sharing of knowledge and resources, while assisting traditionally underfunded groups in securing grants. For instance, joint funding could be offered to a coalition of farms and gardens to share tools or to hire a single youth educator who could rotate among different sites.

4.3 Provide resources and assistance with community development and outreach

Urban gardeners and farmers are integrally connected to their neighborhoods, yet a number of interviewees indicated that they wanted to engage more people in the surrounding community. They also felt that City agencies did not always sufficiently value local residents' networks and expertise, missing opportunities to include farmers and gardeners in leading neighborhood-based education and outreach programs.

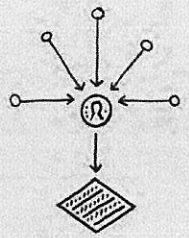
GreenThumb and support organizations such as Green Guerillas currently offer assistance on community organizing and public programming, but have limited funds to do so. The City could provide additional financial resources to these groups, enabling farmers and gardeners to expand their outreach and recruit more local residents to grow food and participate in programs, while avoiding practices which negatively affect their neighbors' quality of life. This assistance could also accommodate the growing number of New Yorkers who are interested in starting new gardens and farms.

4.4 Establish equitable and transparent participation in policy-making

Numerous interviewees said they felt disconnected from the policy-making process or were included only nominally in policy decisions. Interviewees also noted that City officials could benefit from collaborating more with farmers and gardeners, and their existing community networks, to implement agency programs.

City agencies should develop guidelines for public participation in policy-making about urban agriculture, including systems for ensuring representation of NYC's diverse communities and neighborhoods in these processes. For instance, **the City should establish, by law, a citywide urban agriculture task force.** This group, made up of farmers and gardeners, intermediaries, and City officials, would review the programs, policies, and budgets that affect urban agriculture and advise policy makers on strategies to strengthen and expand urban agriculture. There is ample precedent in New York City government for such advisory bodies which have addressed issues ranging from sustainability and waterfront management to solid waste disposal and recycling.

A task force could have an immediate impact on urban agriculture in New York City, helping to establish criteria for new sites for farms and gardens, advising the Office of Long-Term Planning and Sustainability on the urban agriculture–related commitments in PlaNYC, and shaping the scope of any future citywide urban agriculture plan. To ensure fair representation of the city's farmers and gardeners on the advisory board, and thereby address one aspect of the concerns about race- and class-based disparities in the urban agriculture system, the process for selecting advisory board members should itself be developed in consultation with a diverse range of key urban agriculture stakeholders.



Participatory budgeting

One precedent for democratizing the budget process in New York City is participatory budgeting, a process through which community members decide how to use part of a public budget. Four City Council members used participatory budgeting to allocate a portion of their discretionary funds in Manhattan, the Bronx, Brooklyn, and Queens, a process which began in late 2011 and was completed in April 2012. Through participatory budgeting processes an elected official convenes a broad range of stakeholders to discuss their priorities and how much specific budget items would cost. Participating stakeholders then vote for how the budget should be allocated.[109]

Participatory budgeting is new to New York City and is therefore in a preliminary stage of development. Although this process may need to evolve to address shortcomings, including the possibilities for unfair distribution of a public budget due to who is (and who is not) able to participate, and what those individuals' priorities might be, participatory budgeting offers one potential strategy for increasing community engagement in budget processes.

4.5 Engage the urban agriculture community in the budget process

New York City's budget process includes several opportunities at the neighborhood, borough, and citywide level for individuals and organizations to recommend increased funding for urban agriculture, but relatively few New Yorkers participate in these processes. An important role for city and elected officials would be to actively engage urban farmers and gardeners in the budget planning and adoption process, helping them to provide input to the budget process from the community board level up to the Mayor's preliminary and Executive budget.

4.6 Commit to improving agency-level capacities to address race- and class- based disparities

As noted above, race- and class-based disparities stem not only from individual and intentional biases, but also unintended and institutionalized patterns. There are numerous community-based and larger organizations in New York with experience addressing race- and class-based inequities. **The City should enlist the assistance of these groups to provide advice about how its agencies can address disparities in New York City's urban agriculture system in both the short and long term.** Specifically, City agency processes could be informed by consultation with citywide or national organizations and grassroots community groups whose urban agriculture activities center on food justice, community empowerment, and anti-racism.

109 Accessed at http://urbanyc.org/ on February 24, 2012.

5. Urban Agriculture Grantmaking

The philanthropic community has a significant opportunity to increase the capacity of urban agriculture organizations, and influence the scale, scope, and focus of their practices. At a time when vital municipal services are regularly under threat of budget cuts, foundations can not only fund specific farms and gardens but also leverage public investment in a wide range of initiatives to support urban agriculture.

The many foundations currently funding urban agriculture in New York City have diverse agendas and priorities. This section focuses on four broad areas that the philanthropic sector is perhaps uniquely positioned to address.

5.1 Equalize grant opportunities throughout the urban agriculture community

The philanthropic community can help to ensure that groups led by people of color and groups that have limited fundraising capacity have access to grant opportunities. This involves increasing the capacity of minority-led groups, and organizations that need board development and other organizational help, to compete for funds. Funders could identify geographic and resource gaps in the current distribution of philanthropic dollars, and encourage groups to partner on grant applications, pooling their resources rather than competing for funding.

5.2 Explore a sustainable funding source for urban agriculture

"All the not-for-profits have a lot of money problems right now... Demand [for urban agriculture] is huge, the more it gets promoted by the media, the Mayor, everybody else... but there's not people writing huge grants for [these organizations]."

Government Official

Obtaining funds and resources remains unpredictable for farms and gardens, agency programs such as GreenThumb, and support organizations. At the same time, many New Yorkers and private businesses have shown tremendous interest in supporting the city's urban agriculture movement. In partnership with farmers, gardeners, and support organizations, the philanthropic community could explore strategies to engage individual donors, corporations, and federal agencies (such as the Department of Agriculture) as potential sources of funding for urban agriculture and other resources such as soil and tools.

One funder interviewed for the project is involved in the creation of a funder affinity group to foster complementary and potentially collaborative funding for food- and health-related issues. A similar group could be formed to develop a shared funding strategy for the urban agriculture community. This group also could build the capacity of advocates to influence federal policy, enabling community-based urban agriculture organizations to link with national policy advocates.

5.3 Provide support for more networking among farmers

The city's farmers and gardeners have several opportunities to attend large-scale events attended by hundreds of people in the urban agriculture community. For instance, GreenThumb hosts Grow Together, an annual, low-cost educational and networking event focused on food production, and a number of organizations such as Just Food, the NYC Community Gardening Coalition, Black Urban Growers, and the Brooklyn Food Coalition also host well-attended conferences. Many urban farmers and gardeners also participate in regional events, such as conferences on sustainable agriculture hosted by the Northeast Organic Farming Association.

Farmers and gardeners would benefit from two other kinds of opportunities to meet each other and network: small groups that gather farmers and gardeners from a few adjacent neighborhoods, and meetings that connect urban and rural agriculture. For instance, Green Guerillas has helped organize regular meetings in Central Brooklyn for community gardeners to share information about how to recruit local residents to join gardens, apply for funding, and other best practices. Funders could support more of these types of neighborhood-level meetings.

Urban farmers and gardeners of all types cited the value of their ties to regional farmers, while noting that it is difficult for urban growers to make connections with their rural counterparts. Commercial farmers, in particular, said they welcomed more opportunities to share information about issues such as growing and marketing techniques and business planning with regional commercial farmers. A number of organizations and agencies could help urban and rural growers exchange information with each other through urban-rural growers' meetings or other networking strategies. These groups include Cornell Cooperative Extension, the NYS Department of Agriculture and Markets, American Farmland Trust, and GrowNYC, which has a network of regional farmers who sell at its Greenmarkets and participate in other programs.

Conclusion

Among a number of people interviewed for *Five Borough Farm*, there was a perception that urban agriculture can thrive without much municipal support. Many farmers and gardeners are extremely self-reliant and resourceful entrepreneurs, but as this chapter illustrates, the policies and practices of more than a dozen City agencies already affect urban agriculture in hundreds of different ways, even if they are not explicitly focused on food production. How the Sanitation department picks up and manages organic waste, whether or not an agency makes productive use of the land under its jurisdiction, how a developer designs a new affordable housing project, who gets public funds to create green space in neighborhoods plagued by stormwater discharges – these are all policy decisions made on a regular basis that could maximize benefits to farmers and gardeners, their communities, and the city as a whole.

This chapter outlines a plan of action to grow urban agriculture in all five boroughs, including strategies to more thoroughly integrate farms and gardens into the cityscape, and programs, policies, and practices that include urban agriculture in the day-to-day decision-making of a broad range of City agencies. Over the next year, in collaboration with the Department of Parks & Recreation, the Design Trust will work to implement *Five Borough Farm*'s policy recommendations. One initiative will be to develop a citywide process to make it easier for City agencies to identify land for urban agriculture. Working with Columbia University's Urban Design Lab, the Design Trust will help develop criteria to assess the suitability of city-owned land for urban agriculture. This process will enable agencies to review their land inventories systematically to meet citywide demand for farming and gardening, and to demonstrate that land is distributed equitably.

“Testimony for October 26, 2017 NYC Council Committee on Land Use, Public Hearing on Int. No. 1661 requiring a comprehensive urban agriculture plan for NYC.

Dear Friends:

I regret that I cannot be with you today—but our CSA and People’s Market are in full swing on Thursdays, so I really have to be here, on West 122nd Street, in Harlem. My thoughts on a comprehensive urban Agriculture Program are as follows:

1. **Please consult with those whose feet are on (and in) the ground: the city’s urban gardeners who have been at it the longest, and bring a wealth of knowledge and experience.**
2. **Please emphasize** the need for urban farms which include pollinator gardens and bees! Our cities are the chief offenders when it comes to the failing bee population and diminishing monarchs! Let’s **give** back—and produce more food with healthy pollinators! Humans will die off if our pollinators die off!
3. **DO NOT ALLOW** the selling of pesticides which destroy pollinators and contaminate our food! (Round-up, et al).
4. **PLEASE PROTECT AND SAVE every community garden!**
5. **Consider roof & hydroponic gardens, and give subsidies for same—**at once realizing their limitations, limited access, etc.
6. **Make room for urban gardens and farms. Not all land should first be used for building. Cement, asphalt, & concrete are literally choking us.**
7. **INVOLVE YOUTH, INVOLVE YOUTH, INVOLVE YOUTH**! Teach them the miracles, magic, and magnificence of growing healthy, beautiful stuff that’s good for our bodies!

Thank you.
Cynthia Nibbelink Worley
Project Harmony, Inc.
216 West 122nd Street
NYNY 10027

Subject: Testimony on Comprehensive Urban Agriculture Plan

Dear Chairman Greenfield, Council Member Espinal, and Members of the New York City Council Committee on Land Use:

I am a resident of Forest Hills, Queens and co-author of two recent studies on New York City urban agriculture: *Beyond the Kale: Urban Agriculture and Social Justice Activism in New York City*, a book published in 2016; and *Five Borough Farm: Seeding the Future of Urban Agriculture in New York City*, published in 2012.

I am writing to provide testimony on Int. 1661, a local law in relation to developing a comprehensive urban agriculture plan, to be brought before the committee on October 26, 2017. I am unable to attend the hearing in person, and was advised by Joshua Levin at Borough President Adams' office to submit via email.

Please find my testimony and adjoining material in the attached documentation.

Thank you for considering this testimony, and that of all New York City residents. I welcome the opportunity to provide further input on the bill as it is considered by the committee and the council, and on the plan if, and as it is developed in coming months.

Sincerely,

Kristin Reynolds

_____

Kristin Reynolds, Ph.D.
Forest Hills, NY
kristin@foodscholarshipjustice.org
+1-347-574-7395

twitter: @cultivatejust
website: www.foodscholarshipjustice.org
book project: www.beyondthekale.org

NYC Foodscape

Sprouting and Nurturing Healthy Ideas

Testimony in Support of Intro 1661 Comprehensive Urban Agriculture Plan
Carolyn E. Zezima, Esq., President

Good morning. I am Carolyn Zezima. I am the president and chief consultant for NYC Foodscape, a food systems & urban ag consulting business and blog. I want to express my general support for the proposed comprehensive urban farming plan creation process you are considering today, but will have some comments on the process. To begin, I commend the Council as a whole and specifically, Council Member Espinal and Brooklyn Borough President Eric Adams for taking this visionary step towards building long-term resilience, economic opportunity, food security, health and community sovereignty for all New York City residents.

By way of quick background, I am a lawyer, turned professional chef, turned urban farm founder, advocate and consultant. I have launched, managed, planned and/or assisted in implementing at least seven successful urban farming and youth gardening projects in Chicago and New York City in the past eleven years, including starting an urban farm and environmental learning center in 2006 in Evanston, Illinois called **The Talking Farm**. And in New York, partnering with numerous community organizations and settlement houses, including serving as technical advisor to help plan and install the Battery Urban Farm's inaugural 2011 season and advise participating schools and community groups about gardening techniques and food production.

But the New York City urban ag project I'm most proud to have spearheaded and still manage regularly is the **Children's Workshop Garden at Campos Community Garden** in the heart of the East Village on E. 12th Street near Avenue C. The children's garden was created in 2013 in the wake of Hurricane Sandy's destruction after Campos Garden lost nearly everything to the devastating surge from the East River that accompanied the storm. To help the garden recover, our neighbor, Children's Workshop School, went out of their way to obtain a Citizen's Committee grant on our behalf and on students urging, because the students loved walking by and seeing it every

day on their way to school and didn't want to lose it. In gratitude, we decided to use the funds to start a children's garden for all our community's children's benefit. The garden is a permanent therapeutic and safe space that produces hundreds of pounds of diverse produce and herbs each season and features a gorgeous herb spiral in its center. We just finished our fifth season of growing food, engaging the community and teaching and feeding kids from local schools, local youth organizations like the Boys Club, summer camps and group homes. This season culminated a couple of weeks ago with our very fun Garden Mystery basket program. Teams of third graders opened surprise bags of various combinations of produce and herbs that grow in our garden, and then working together, brainstormed, prepared, named and "styled" a dish designed not to feed themselves, but to feed the other teams. It was an amazing example of seed to plate, using almost every skill, including cooperation and teamwork, that a young person needs to develop into a self-sufficient, healthy and engaged citizen.

Thanks to this Council's earlier forward-thinking legislation that has supported the use of city-owned and other vacant land for urban farming, and the work of nonprofit and for-profit entrepreneurs and community organizations, New York City neighborhoods have enjoyed a significant increase in urban agriculture in recent years. Brooklyn Grange, East New York Farms, Eagle Street Rooftop Farm, La Finca del Sur in the Bronx, as well as the projects I 've worked on and mentioned above, are just a few varied examples of successful and diverse types of early urban initiatives that grow a lot of food, engage the community and provide education about gardening, farming and food production. I wrote a book last year about sustainability in affordable housing that included chapters on food access, community gardens, urban farms, and green roofs that prominently featured the good work in this area by New York City housing providers, such as NYCHA, Related Companies and Workforce Housing, who have begun to use land at their sites provide urban farming, gardening and other food access opportunities for residents at their sites, created with the help of local food and community garden organizations that work with them. Indeed, for decades, NYCHA in particular, with its Greening and Gardening program, as well as its recent partnership with urban farming organizations to create viable urban farms at its sites, has been an example for other housing authorities around the country to follow.

These are the kinds of projects that I think epitomize some of the current and potential economic,

environmental, health and community resilience benefits that having farms, gardens, rooftops and other places to grow food provide. These benefits--especially those in outdoor open spaces using healthy soil and those in, for and by underserved communities--can't be overstated, and are well-researched and supported with evidence. Increasing access to fresh healthy food, reducing monthly food costs and improving resident health; Teaching basic vocational skills; Beautifying communities; Encouraging self-reliance along with important civic behaviors such as water conservation, waste reduction, and recycling…these are just a few of the proven benefits that growing food in a city can provide.

But these wonderful projects I mentioned just touch the surface of the potential we can achieve in this city. We need more community-based as well as small commercial urban farming enterprises and more opportunities generally for growing of food in the city to meet the growing challenges our city faces in the future. As a critical mass, the amount of food we can grow in relatively small spaces around the city can be quite significant: A study of out of Newark found that 1,900 community gardens totaling 30 acres produced approximately $915,000 of food value in one year and almost $4 million over 4 years. Taking this to our own city, as one eponymously named organization estimates, there are 596 acres of city-owned and leased vacant land available in Brooklyn alone, and according to Urban Design Lab estimates, at least 5,000 acres of public and private vacant land that could be used to grow food citywide and 3,000 acres of appropriate rooftop space…think of the exponential dollar value that the Newark study's estimates total in New York City numbers in terms of the amount of food production, job creation and food security.

Beyond the economic considerations, urban farms and gardens are essential in other aspects of our city's resiliency plans. Since Superstorm Sandy wrought its destruction in 2012, many forward-thinking people in the city's administration, and in groups and projects such as Gardens Rising, in which Campos Community Garden proudly participates, are looking for ways to increase the city's resilience to climate change-related storm events, including mitigating the impacts, damage and water pollution from storm surges and from peak and combined sewer overflows. Gardens and farms—indeed, any green space with compost amended soils, as well as green roofs, are proven tools for achieving those goals. For example, numerous studies show that gardens and properly

installed green roofs significantly reduce the quantity and improve the quality of stormwater that enters our waterways. Additionally, gardens and urban farms, both on the ground and on roofs, can help mitigate the increasing detrimental impacts from the so-called “heat island effect” that large cities like ours experience as global temperatures rise by cooling the surrounding areas and improving the air quality.

Achieving the potential that urban ag has for truly improving the lives of residents translates into helping provide feasible access to land to individuals, nonprofit food organizations, and entrepreneurs who know how to and want to grow food in New York City. From my real-life experience launching the Talking Farm in Evanston and my work here in New York City, I understand how difficult it can be for small food and farming enterprises, let alone resident groups, to find suitable land for growing food, and how important and powerful a resource and partner city governments can be in supporting local food enterprises and resident groups find land and plan their garden projects and urban farming businesses. Every piece of land is unique and it is essential to know the specifics of a site in order to then determine whether it is suitable for urban agriculture and to what extent, and what resources are needed to make it healthy and productive. The proposed plan here today supports the development of additional innovative urban agriculture initiatives, food-producing community gardens and rooftop farms by pinpointing where there is vacant and appropriate land suitable for food production and exploring the policy and other considerations might make land use for agriculture more viable and accessible to those who wish to farm it.

In closing, the entrepreneurial, food access, environmental and public health potential of urban agriculture that this plan could lay the groundwork for is vast. The bill’s plan brings with it many areas that needs input from and engagement with all stakeholders, from residents and citizen groups, gardeners, community-based organizations, health providers, housing providers, educators, entrepreneurs, philanthropists and advocates. The plan will need the on-the-ground experience and expertise of those who have lead the way, and hear from those whose needs the plan seeks to address to delve deeper into specifics of the plan: 1) choosing the best options for creating urban ag zoning ordinances, 2) assessing and removing as appropriate, any land use, building department, health code and other administrative or bureaucratic barriers; 3) exploring and developing a

broad range of incentives and resources that can help make these spaces productive and viable; 4) tapping into the knowledge and experience of existing community, backyard and rooftop gardeners and farmers, including our youth and educators; and finally, 5) ensuring that the plan is equitable and gives New York City residents in all communities—especially those who need them the most--an equal and increased share of the land access and tenure necessary to grow their own food and retain some degrees of sovereignty over their food system.

Again, I urge the Council to undertake this bold and visionary plan. I would be happy to work with you and give continued input to develop this plan further as it progresses. Thank you again for letting me speak.

ASSISTED HOUSING MANAGEMENT INSIDER®

www.AssistedHousingInsider.com

Take 10 Steps to Create a Successful Community Garden for Residents

By Carolyn Zezima, Esq.

The popularity of community gardens has exploded in recent years to over 5,000 community gardens nationwide. Many assisted and public housing sites see the benefits of having community gardening programs for residents and have started these programs at their sites. For example, the New York City Housing Authority (NYCHA) has over 600 gardens at its housing sites, and even has an in-house "Garden & Greening" program that supports NYCHA residents who want to create a community garden at their sites. And HUD has several programs, such as its Neighborhood Networks program, that encourage assisted sites to start community gardens for residents.

We'll give you the basics about community gardens, describe the benefits you'll reap, and explain the steps to take to start and manage a community garden program at your assisted site.

What Are Resident Community Gardens?

Resident community gardens are shared spaces at assisted sites where residents gather to garden and grow food. They can range in size from one communal raised bed, to hundreds or thousands of square feet of individual plots, to several acres. They can serve just a few residents or as many as 50 or more, and can serve special populations of residents, such as seniors, youth, or residents with disabilities. Some sites have gardens that generate income to benefit the garden program or for residents themselves, and grow a diverse array of vegetables, flowers, and herbs for sale. Many sites use their gardens to teach classes, empower disabled residents, and train residents for employment.

Benefits of Community Gardens

Community gardens provide numerous benefits to residents and to assisted sites. Among the reasons our experts gave for creating a community garden at an assisted site, community gardens:

- Give residents access to fresh, healthy food;
- Reduce residents' monthly food costs;
- Improve resident health;
- Create social activities for isolated seniors;
- Reduce crime and drug activity;
- Teach residents basic vocational skills;
- Empower youth and disabled residents;
- Encourage resident self-reliance;
- Create income opportunities for residents;
- Encourage water conservation, waste reduction, and recycling;
- Beautify site grounds; and
- Increase site and overall area property values.

Many new construction sites include community gardens in the site's design, because owners often get incentives through financing, zoning, and green design programs, as well as state or federal tax credits under programs such the Low-Income Housing and New Market Tax Credit programs, says Shaina Burkett, Human Services Program Specialist at the Denver Housing Authority.

10 STEPS FOR STARTING AND MANAGING A COMMUNITY GARDEN

The *Insider* consulted experts around the country who have started and managed resident commu-

AUTHOR COPY—NON-COMMERCIAL USE ONLY

nity gardens at assisted sites. They gave us a list of 10 steps to take to start and manage a successful community garden program at your site:

Step #1: Assign Staff Member to Lead Program

Assign a point person from site staff to lead the planning process and oversee the gardening program. Many assisted sites have specific positions, such as "sustainability coordinator," which include gardening as part of the positions' sustainability and energy conservation duties. Other sites use their service coordinator office or HUD Neighborhood Networks program staff to oversee gardening programs, or even recruit AmeriCorps or Vista volunteers to do the major legwork. These volunteers often live at the site as part of their stipend and also become resident garden leaders.

The staff member's involvement can range from direct planning and supervision of the garden to being a point of contact for residents and partner organizations who will actually plan and run the garden program. Make sure the staffer you've assigned knows he or she must stay involved throughout the planning process and the gardening season, regularly visit the garden, and communicate directly and regularly with residents, says Michael Harris, sustainability projects coordinator at Foundation Communities in Austin, Texas.

Step #2: Determine Resident Interest

Success of your site's gardening program begins and ends with resident engagement and participation in the planning process, says Beth Keel, sustainability initiatives liaison for the San Antonio Housing Authority (SAHA), who oversees 12 community gardens for residents of SAHA sites. It's important to involve them from the beginning.

"Community gardens are 99 percent community, and 1 percent gardening," says Harris. He recommends you survey your residents to gauge their interest in gardening and their desired level of participation. You can also use the survey to recruit resident garden leaders who will help you plan and manage the garden through the season and ensure important garden duties like watering and weeding are completed throughout the season.

Depending on the type and size of your garden, you'll need to recruit at least 10 active gardeners and two resident garden leaders to make your garden a success, says Burkett. For an example of a survey you can use, see our Model Form: Use Survey to Recruit Residents to Garden Program.

PRACTICAL POINTER: Survey and involve maintenance and other site staff, as well as residents, even if they aren't assigned to manage the program, says Harris. Doing this helps get buy-in from maintenance and other site staff for the project and prevent problems from arising that affect general site operations and maintenance. It also builds employee morale and creates working relationships among staff members who would otherwise not interact, says Erika Slaymaker, environmental sustainability coordinator at Project H.O.M.E. in Philadelphia.

Step #3: Identify Community Partners

Many sites with community gardens don't plan and manage the garden program entirely by themselves. Instead, they partner with experienced community organizations to work with the site staff and residents to plan, fund, install, and/or manage the garden.

It's important to partner with organizations that are truly based in the community and have existing relationships with other organizations that can support your garden program, says Mac Levine, founder and executive director of Concrete Safaris, an organization that runs gardening programs at NYCHA sites involving thousands of residents and tens of thousands of square feet of growing space. You may want to partner with several organizations that can contribute to different aspects of the program, such as gardening supplies, soil and other resources, funding, technical assistance, access to volunteers, educational opportunities, and potential income or vocational training opportunities for residents. At least one of your partners should have local experience and expertise in gardening, soil health, and growing food in small spaces, says Levine.

Here are the types of organizations you may want to consider contacting and recruiting as potential partners:

- Food access organizations;
- Urban farming organizations;
- City departments of parks and recreation;

AUTHOR COPY—NON-COMMERCIAL USE ONLY

MODEL FORM

Use Survey to Recruit Residents to Garden Program

Use the following survey, prepared with the help of Michael Harris of Foundation Communities in Austin, Texas, to determine if residents support a garden program. You can also use the survey to recruit resident garden leaders to help you plan and manage the garden through the season.

RESIDENT SURVEY — COMMUNITY GARDEN

We are considering creating a community garden here at ABC Apartments. Your input is valuable to this process. Please return this completed survey to the management office.

1. Do you think a community garden would improve the site?
   ❑ Yes ❑ Maybe ❑ No
2. Would you like to participate at the garden?
   ❑ Yes ❑ Maybe ❑ No
   If yes, how often? ❑ Once or twice a week
   ❑ Once or twice a month
   ❑ Once or twice a year
3. Do you have any prior gardening experience?
   ❑ Yes ❑ No
4. Would you like to be a garden leader?
   ❑ Yes ❑ No

RESIDENT NAME: _____

UNIT #: _____ TEL. #: _____

EMAIL: _____

- Community development organizations;
- Botanic gardens;
- Horticulture societies;
- Green building councils;
- Open lands organizations;
- Mayors' initiatives for food and fitness;
- Churches;
- Foundations;
- Volunteer service organizations; and
- Housing authorities' garden or greening programs.

The degree of involvement of your partner organization is up to you, depending on the size and needs of your garden program. But choose partners that have the time and capacity to help manage the program and will stay involved along with your site's staff, says Harris.

Step #4: Select Appropriate Location

The location and type of garden depends on a number of factors. Not all locations on your site are suitable for gardens, says NYCHA's Garden and Greening program coordinator Robert Bennaton. Walk your site with landscape or other maintenance staff and knowledgeable partner organizations to assess the site for the following features:

Sunlight. Most vegetables need at least six hours of sun per day. Visit the site location at different times of day to see how many total hours of sun it gets each day.

Space. How large is the site? How many beds can you fit in the space? Is there room for other features, such as a shed, seating, and composting? Will the garden block any paths, doorways, or take away from an existing use?

Water. Water access is vital, and ideally, your site should have access to a spigot or other water source. If not, or as a water supplement and conservation measure, consider collecting rainwater from rooftops.

Soil. Plants grow best in soil that drains well and doesn't dry out too quickly. Avoid areas where puddles form when it rains or are too sandy and dry. An ideal soil for direct planting has good fertility and good drainage, with no history of contamination or industrial use. If plants are currently growing in the area, make sure they are healthy.

PRACTICAL POINTER: Consider having your soil tested. Almost all states have an agriculture extension service or soil-testing lab where you can send soil samples for testing for fertility and the presence of contaminants and heavy metals such as lead or arsenic. Soil tests cost between $15 and $150, depending on what you request.

AUTHOR COPY—NON-COMMERCIAL USE ONLY

Slope. Locate your garden in a flat area with little slope.

Access. Make sure that the site has adequate access to deliver soil and other heavy supplies. If the area doesn't have room for storage, do you have an existing accessible storage area for gardening equipment and tools? And be sure that disabled residents will have access into and around the garden area to avoid violating HUD rules and the Americans with Disabilities Act standards for accessibility, says Keel.

Existing structures. Assess existing structures, fences, rocks, cement, shrubs, and trees to determine which you'll need to move and which you can keep or reuse for the garden (for example, using a cement area for garden tables, or large trees as a shady area for resident gatherings). Determine if gas lines, water mains, or septic tanks exist below the area.

Step #5: Hold Planning Meeting(s) to Plan and Design Garden

Once you've chosen your garden's location, hold planning meetings with partners, assigned staff, and resident leaders to: (1) spell out the vision and features for the garden; (2) design the space; and (3) assign planning, design, and construction tasks. You'll probably have to hold more than one meeting to make sure everyone understands his role and responsibilities in garden planning, installation, and day-to-day management, says Levine. The garden team should create a plan that addresses the following topics:

Type of garden. The type of garden depends on who will be using the garden, the purpose of the garden, the amount of space you have, how much food you'll want the garden to grow, the soil quality at your site, and resident preferences, says Keel. Two key factors to consider when planning the type of garden are:

Planting beds. You'll want to decide what type of planting beds works best for your garden—for example, planting in raised beds or planting directly into the ground. If your garden is primarily for elderly or disabled residents, for example, you'll want to install raised beds that are wheelchair accessible and high enough so residents can reach from all sides without heavy bending, says Keel. She recommends making at least a portion of any garden accessible for residents with disabilities and to make all of it accessible if you manage sites specifically for or have a large percentage of elderly and disabled residents. Many of SAHA's residents are elderly or disabled, so Keel uses ADA-compliant raised beds that are 24 inches high, with paths at least 36 inches wide, in all SAHA gardens.

But if your garden is for families or youth, and your soil is in good health, planting in beds directly in the ground is fine. Other options include planting using fences and other climbing gardens, or if your site has no open space on the ground, even rooftop container gardening.

Communal or individual plots. You'll also want to decide if the garden spaces will be communal, meaning the residents share all the space and work on the garden together, or will consist of individual plots or raised beds, says Burkett. Communal gardens work well for smaller garden spaces so more residents can participate and learn together, but they won't necessarily grow that much food for themselves. If your garden's purpose is education, youth empowerment, community building, or therapy for older or disabled residents, you can use shared growing spaces that residents can plant and harvest together, says Sandra Gray of Bickerdike Redevelopment Corporation. If the purpose is to give residents access to fresh, healthy food and lower their food budgets, you'll need more space to give residents individual plots to grow their own food.

PRACTICAL POINTER: If you tested your soil, the test results can affect what type of beds you choose. All soil can be improved with compost, but if your soil has poor fertility or has a history of contamination, raised beds with new soil will be a much safer option than planting directly into the ground. Also, you can keep better track of individual plots if they are in raised beds, and gardeners have less risk of plants being trampled or eaten by animals.

Types of plants. Decide what kinds of plants residents will grow in the garden. You don't need to chose the varieties—leave that up to the resident gardeners to decide—just consider the types so you can better plan the overall design. Types of plants residents can grow in community gardens are:

- Vegetables;
- Herbs;
- Grains;
- Fruit and nut trees;

AUTHOR COPY—NON-COMMERCIAL USE ONLY

- Flowers and flowering bushes;
- Berry and other food bushes;
- Native and medicinal plants;
- Perennials and perimeter landscaping; and
- Climbing plants for fences, trellises.

EDITOR'S NOTE: Some sites also have beehives to help pollinate the garden and create honey, and even animals such as chickens, at their site. But some municipalities bar the raising of bees, poultry, or other farm animals, and you can face fines if you don't follow the law. If you're considering having a beehive or raising chickens for eggs, be sure to consult your site's attorney to find out what local laws govern these practices.

Structures and other features. Determine what structures and other features to your garden you want or need, and whether you'll have to buy them, build them, or if any currently exist at the site that you could reuse in the garden. Common garden structures include:

- Sitting areas with rain/shade shelter;
- Fencing with lock to reduce vandalism, theft, and animals;
- Shed with lock for storing tools and seeds;
- Greenhouse to start plants;
- Work table;
- Water source;
- Irrigation systems;
- Rainwater collection tanks;
- Compost collection area;
- Vermiculture (worm composting) bin;
- Educational signage and hands-on learning tools;
- Bulletin board for displaying rules and updates;
- Fire pit/barbecue;
- Children's garden/play area; and
- Public art.

Garden installation process. Decide the timeline for installing the garden and whether you'll pay professionals or use volunteers to do the work, including cleaning the site, turning sod, building raised beds and structures, ordering soil, filling beds, ordering or starting plants, and setting up the watering system.

Educational and vocational activities. In addition to growing food for residents to use at home, many gardens have educational and vocational activities. For example, Village Gardens in Portland, Ore., creates gardens at public housing and assisted sites for at-risk youth, who help plan, plant, harvest, and sell the garden's vegetables at an area farmers market. The program pays the youth an hourly wage through a local grant, says Jason Skipton, community programs supervisor at Village Gardens. Village Gardens also runs resident gardens for families that includes 15 hens for laying eggs, a kids gardening and cooking program, and a training program for community health workers using the garden to advocate for good resident health, says Skipton.

HUD rules encourage site owners and managers to create educational and vocational opportunities, and a garden is a good way to create these opportunities (see HUD Handbook 4381.5, Chapter 9: Neighborhood Networks Fact Sheet). Decide what kind of activities your garden will have throughout the season.

Skills of gardeners and training needs. Make a list of the gardening skills you'll need to install and manage the garden during the season. Ask which of these skills your garden team currently has and find out where to get additional experts, technical assistance, and training for the skills the team doesn't have. Skills you should look for or may want in gardeners include:

- Analyzing and improving soil health;
- Making compost;
- Installing and operating irrigation;
- Managing pests;
- Starting plants;
- Saving seeds;
- Planning planting calendars; and
- Cooking and preserving.

Sustainability. A garden is a great place to grow food, but you can also use the garden as a living classroom for your residents to learn about other sustainability and conservation practices. HUD rules encourage owners and managers to educate residents on energy and other conservation issues, so incorporating these practices into your garden could help reduce water, energy, and waste costs at your site in the long run. Consider whether your garden will:

AUTHOR COPY—NON-COMMERCIAL USE ONLY

MODEL RULES

Set Garden Rules for Residents

The *Insider* drafted these rules with the help of staff at Bickerdike Redevelopment Corporation in Chicago and Foundation Communities in Austin, Texas. Ask your attorney about adding these rules to the garden-specific rules residents helped draft to create a complete set of garden rules to use for your site.

ABC COMMUNITY GARDEN RULES

1. **Security and keys.** Residents are responsible for ensuring garden safety and must lock up the garden when they leave. Residents will get one key to the garden and any lost keys are subject to a replacement fee. Residents must not duplicate or give their key to any other person and doing so will result in lost key privileges.
2. **Damage to garden structures.** Residents are responsible for any damage to garden structures, fences, and other site property.
3. **Guest policy.** Residents are responsible for the behavior of their guests and must ensure that guests abide by garden rules, and do not create excessive noise or disturb the residents of ABC Apartments.
4. **Prohibited behavior.** Smoking, drinking alcohol, using drugs, firearms, or fireworks, or starting fires outside of the barbecue are prohibited.
5. **Use of major garden equipment.** All major garden equipment and power tools, such as rototillers, lawn mowers, power trimmers, and saws, must be used only by maintenance staff or by specified trained individuals over the age of 16.
6. [*Optional, if you charge fees*:] **Fees.** Residents must pay a nonrefundable fee of $[*insert fee amt.*] per year to use the garden. The fee is payable by check or money order. The fee for a replacement garden key is $[*insert fee amt.*].
7. **Warning and termination.** Residents who violate the garden rules will get one oral warning from the garden leader(s). Residents have two weeks to respond and correct the violation. If the resident does not do so, garden leaders will notify management, and the resident will get a written warning notice and two additional weeks to correct the problem. If the resident still doesn't, or if the resident gets two separate complaints resulting in written notices, the resident will get a final notice terminating his or her gardening privileges.

- Be organic and avoid chemical pesticide and herbicide use;
- Create biodiversity through planting native and rare seeds and plants;
- Reduce water consumption by using rainwater tanks, mulching, efficient irrigation, and low-water plants; and
- Reduce waste by composting, mulching, and using recycled materials.

Troubleshooting. Discuss ways to prevent problems with:

- Vandalism;
- Pests;
- Animals;
- Cleanliness; and
- Nonresident access.

Step #6: Create Garden Budget

Garden programs can cost tens of thousands of dollars to create, but smaller gardens don't have to be that expensive, says Harris. He has installed gardens at his assisted sites for as little as $2,000 to $4,000 each for gardens with four to eight raised beds. The initial costs of planning and installing can be high, but ongoing maintenance costs are modest, and the cost of starting up each subsequent season is far less than the first year.

Before starting your garden, create a budget to know how much the garden will cost to install and where you'll get the funds to pay for the garden materials and labor. Grants and donations from partner and other organizations, in-kind donation of materials, and volunteer labor will reduce actual cash outlays to pay for the garden.

Planning and installation costs. These may include labor, such as landscape consultants, designers, and gardening and construction labor, and materials, such as:

- Materials to build raised beds;
- Soil;
- Soil testing costs;
- Machine rentals, such as sod cutter or rototiller;
- Mulch;
- Compost;
- Compost bin;
- Fencing;
- Storage shed or chests;

AUTHOR COPY—NON-COMMERCIAL USE ONLY

- Path materials (wood chips, straw, pebbles, flagstone);
- Wheelbarrow;
- Hand tools, such as clippers, cultivator, and hammers;
- Large tools, such as rakes, shovels, spades, and hoes;
- Irrigation supplies;
- Water fixtures;
- Hoses;
- Watering cans;
- Buckets;
- Trellises and bamboo poles;
- Lights;
- Tables, chairs, and benches; and
- Trees, perennial plants, shrubs, and large bushes for shared/perimeter gardens.

Annual gardening and maintenance costs. These are the costs to plant and maintain the garden each year. These include:

- Plants, seeds, bulbs, and flowers;
- Mulch;
- Compost;
- Fertilizer;
- Replacement tools;
- Repair costs;
- Training costs; and
- Additional liability insurance (find out if your current liability insurance covers resident gardening and if not, whether you can put a rider on the policy to cover any potential liability from resident injuries in the garden).

Step #7: Hold Launch Meeting, Create Garden Rules

Present the garden plan to all interested residents before you begin installing the garden to get them excited about the program and to enlist their help in installing the garden. At this meeting, ask the residents to help draft garden rules that will work for your garden and your assisted site. Don't leave residents out of the rule-making process, says Burkett. Having residents create rules will keep them invested in the garden throughout the season and empower them to help prevent problems later.

Rules residents can create. Residents who'll be using the garden should come to an agreement about rules for:

- Garden opening and closing dates and times;
- Plot assignment procedure;
- Minimum garden use requirements;
- Garden bed neglect and abandonment;
- Communal vs. individual activities;
- Watering instructions;
- Composting instructions;
- Prohibited plants, pesticides, and fertilizers;
- Complaint procedure and communication with management;
- Volunteer requirements, such as number of hours and tasks; and
- Procedures for the storage and use of tools, seeds, and plants.

Rules management should create. To make sure that any problems that arise in the garden don't spill over into the rest of your site, create some garden rules of your own and add them to the residents' suggested garden rules. We've drafted a set of Model Rules: Set Garden Rules for Residents, that you can add to the rules that residents create. Here's what your rules should cover:

♦ **Security and keys.** Require residents to lock up the garden when they leave. Tell residents that they must not give their key to any other person and that doing so will result in them losing their key privileges [Rules, par. 1].

♦ **Damage to garden structures.** Require residents to pay for any damage to the garden's structures, fences, and other site property contained within the garden [Rules, par. 2].

♦ **Guest policy.** Spell out residents' responsibility to supervise the behavior of nonresident guests [Rules, par. 3].

♦ **Prohibited behavior.** Spell out prohibited behavior, such as use of drugs, alcohol, firearms, tobacco, fireworks, and open fires (other than barbecue) [Rules, par. 4].

♦ **Use of major garden equipment.** Require that all major garden equipment, such as rototillers, lawn mowers, power trimmers, and saws be used only by maintenance staff or by specified trained individuals over the age of 16 [Rules, par. 5].

♦ **Fees.** If your garden plan is funded in part by garden membership fees, spell out the fee policy, as well as any additional fees for items like replacement keys. It's a good idea to run any fees

AUTHOR COPY—NON-COMMERCIAL USE ONLY

and deposits by your local HUD office before you start charging residents fees [Rules, par. 6].

♦ **Warning and termination.** State written warning notice and termination procedures for not complying with garden rules. Some sites give residents oral notice first, followed by a written notice with time to remedy the violation, and then terminate residents' gardening privileges if they don't comply or after two written notices [Rules, par. 7].

After you install the garden, laminate and post the complete rules on a bulletin board in the garden so all residents and their guests can see them, says Slaymaker.

Step #8: Have Participating Residents Sign Garden Agreement

Have each resident who wants to participate in the garden complete and sign a garden agreement before she's assigned a bed or gets a set of keys. Ask for basic resident contact information and gardening experience, and then incorporate your garden rules into the agreement so residents will know what the rules are when they apply and agree to comply. Make sure residents know where to get the agreement and post it on your site's Web site with other resident documents, says Levine. Your agreement will vary based on the rules you've created. Sign the agreement and give one copy to the resident, another to the resident garden leader(s), and keep the original in your site's files.

If more residents apply than there are available individual beds, take their agreements anyway, and put their names on a waiting list. Then give the agreements and the waiting list to the resident garden leader(s), and they can monitor garden availability. Depending on the garden program, waitlisted residents still may participate in communal activities. Plus, a few garden spots usually open up during the season if gardeners abandon their site or violate the rules, and the garden leaders can contact the waitlisted residents to see if they're still interested in gardening.

Include indemnification clause. Be sure to add an indemnification clause to any garden agreement to avoid liability for injuries and damage caused by residents. Show the clause and the agreement to your site's attorney before using it. Here's a sample clause you can use:

➤ *Gardening and Funding Resources*

Most funding for gardening programs comes from relationships with local organizations and businesses, but there are some national organizations that fund gardening programs. Here are examples of sources that you can use to fund the garden:

- Grants from partners, local government, and gardening, educational, and environmental organizations;
- Private and corporate donations;
- In-kind donations of materials, tools, and volunteer labor;
- Membership fees (be sure to check with your HUD office before you charge residents fees to use the garden to avoid violating HUD Handbook rules on extra fees, see, e.g., Handbook 4350.3, par. 6-25 and 4381.5, par. 4-6);
- Sales of produce;
- HUD funding, including grant funds for service coordinator, residual receipts, owner's equity, funds borrowed from the reserve for replacement accounts, rent increases, special rent adjustments, and excess income (be sure to follow HUD Handbook rules regarding use of these sources of funds);
- Fundraising events; and
- HUD grants (the HUD Web site provides a frequently updated list of funding opportunities at: *www.hud.gov/offices/hsg/mfh/nnw/fundingopps/fundingopps.cfm).*

Here's a list of Web sites with more information about starting your garden program, including where to find funding, technical assistance, volunteers, and supplies:

- American Community Gardening Association (*www.communitygarden.org*)
- American Horticulture Society (*www.ahs.org*)
- HUD Community Development Block Grant program (*http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs*)
- HUD Neighborhood Networks (*www.neighborhoodnetworks.org*)
- Housing Services Corporation (*www.hscorp.ca/our-programs-and-services/social-innovation-and-partnerships/seed*)
- National Gardening Association (*www.garden.org*)
- Trust for Public Land (*www.tpl.org*)
- State agricultural extension services

AUTHOR COPY—NON-COMMERCIAL USE ONLY

Model Language

To the extent permitted by law, Resident shall indemnify and hold harmless ABC Apartments, its managing agent, and its respective officers, directors, beneficiaries, shareholders, partners, agents, and employees from and against all fines, suits, damages, claims, demands, losses, and actions (including attorney's fees) arising out of, or relating to, all acts, failures, omissions, and negligence of Resident, his or her agents, employees, visitors, guests, invitees, and contractors, arising out of or in any way relating to Resident's use of the garden. This indemnification shall apply to both claims of third parties and claims of the resident or any guest of the resident.

Step #9: Hold Regular Garden Meetings

Holding regular meetings will keep residents involved in the garden and ensure that any problems that arise are solved quickly. Residents with gardening experience can share knowledge of garden practices with inexperienced gardeners. Use meeting times to:

- Fine tune garden rules;
- Troubleshoot problems like pests, noise, and vandalism;
- Hold training and educational programs;
- Conduct group activities, such as soil preparation, communal planting, composting, weeding, and harvesting; and
- Get resident feedback to aid in next season's planning.

Step #10: Document and Publicize Progress and Successes

Document the progress and successes in the garden with photos and updates in site newsletters or on its Web site. Doing this can help create a favorable "buzz" about the garden and enhanced image for the site, while helping to reduce opposition from staff, nongardening residents, or neighbors in the area. Plus, funders love to see photos of gardeners in action and hear about bottom-line successes, like the total pounds of produce grown or the amount of money residents saved in food costs throughout the season, says Slaymaker. ♦

ABOUT THE AUTHOR

Carolyn Zezima, Esq.

This Special Issue of the ***Insider*** was written by Carolyn Zezima, Esq., who is the president of NYC Foodscape (*www.nycfoodscape.com*), and a consultant with a track record of grass-rooting and managing organizations in the nonprofit sector. She has worked with food and farming enterprises and food policy organizations in Chicago and New York to promote urban agriculture and regional farming, including founding The Talking Farm, *"The Farm with Something to Say,"* an urban farming and educational enterprise in Evanston, Ill.

While in Illinois, Ms. Zezima also served as director of Chicago's Green City Market and on several food policy councils that helped to create new community farmers markets and draft and pass legislation, such as the Illinois Food, Farm and Jobs Act.

Ms. Zezima recently joined American Farmland Trust's Farmland Advisors program, and serves on several food-related committees and boards, including Harvest Home Farmers Markets, Partnership for a Healthier Manhattan, and NYC Food and Farm Bill Coalition. She is currently co-chair of the Food Systems Network NYC policy committee and has co-drafted several food policy and sustainability proposals, including food policy recommendations to include in the revised PlaNYC2030, and the recently released *Recipe for the Future of Food in New York City.*

Ms. Zezima also practiced law after graduating from Duke University School of Law, and is a licensed member of the New York, California, and Illinois bars. She can be reached at *nycfoodscape@gmail.com* or (847) 507-1785. ♦

Insider Sources

Robert Bennaton: Coordinator, Department of Resident Engagement, New York City Housing Authority, 90 Church St., New York, NY 10007; *www.nyc.gov/html/nycha/html/community/garden.shtml.*

Shaina Burkett: Human Services Program Specialist, Denver Housing Authority, CONNECTIONS @Mariposa, 1089 Osage St., Denver, CO 80204; *www.denverhousing.org.*

Sandra Gray: Associate Director, Bickerdike Redevelopment Corp., 2550 W. North Ave., Chicago, IL 60647; *www.bickerdike.org.*

Michael Harris: Sustainable Projects Coordinator, Foundation Communities, 3036 S. 1st St., Austin, TX 78704; *www.Foundcom.org.*

L. Beth Keel, M.A.: Sustainability Initiatives Liaison, San Antonio Housing Authority, 818 S. Flores, San Antonio, TX 78204; *www.saha.org/NewhousingM/housingmatters11/health.html.*

Mac Levine, MPH: Founder & Executive Director, Concrete Safaris, 315 East 113th St., New York, NY 10029; *www.concretesafaris.org.*

Jason Skipton: Community Programs Supervisor, Village Gardens, 8652 N. Swift Way, Portland, OR 97203; *www.villagegardens.org.*

Erika Slaymaker: Environmental Sustainability Coordinator, Project H.O.M.E., 1515 Market St., Ste. 1428, Philadelphia, PA 19102; *www.projecthome.org.*

AUTHOR COPY—NON-COMMERCIAL USE ONLY

Alice Forbes Spear, 462 Halsey Community Farm

Hello my name is Alice Forbes Spear and I am a founding member of 462 Halsey Community Farm in Bed Stuy. Since 2012, our space has gone through a number of transformations: long-abandoned lot to community garden, community garden to NYC Park to its latest iteration as a fully functioning, volunteer-run urban farm. We've struggled through myriad projects in this time, from the age old question "how do we get water," to the age-older question, "how do we channel all of our differences as a community to create something valuable?" Our successes have been greater than our struggles: every week more 100 families participate in GrowNYC's Fresh Food Box at our farm; we have a sliding-scale farmer's market that allows every resident in our gentrified neighborhood to buy affordable, organic vegetables with dignity and respect; we have diverted nearly 100 tons of food waste into compost to nourish our crops. Perhaps most importantly, we are a thriving community space utilized every day by Bed Stuy residents who need a green space, who want to teach their children about flowers and bees, who understand the importance of food sovereignty and want to learn more.

But I'm not here today to talk about our successes - we have this handy little book for that. Instead, I am here to talk about how we aren't reaching our potential. Taking great pride in our resourcefulness does not mean that we don't wish that we had more support from the city. For the past two years, our space has thrown all of its resources into installing a long-term irrigation system powered by solar panels. This will transform the way we farm, and is also an infrastructure project that transforms our little park. With proper institutional support, it would not have been a two year project that spent our entire meager budget. As projects like ours get more ambitious in scope, as we become more necessary in the face of climate change and rising food prices, we need more from the city. Some

of us need support for infrastructure projects like ours; all of us could use more people power - which is an opportunity for the city to invest in urban agriculture as well as green jobs for young people.

I got my start on Eagle Street Rooftop Farm; like many young hipsters, I thought I was as the forefront of the urban agriculture movement. The more I learned, the more I realized the error and arrogance of my beliefs. I was not part of the vanguard - the vanguard was the Karen Washington's, Yonnette Flemming's, Brenda Duchene's, and my own personal garden hero, Ena K McPherson. These women, and others like them, have been getting the job done and then some for decades. They've created farmers markets, green jobs and community spaces - labors of love that nourished their neighborhoods long before kale was trendy. If you want to learn what will feed our city in the future, look to our past.

Thus far, investment in urban agriculture has meant millions being poured into indoor farms that grow microgreens that sell at place like Foragers and Whole Foods. This perpetuates the same capitalism-serving inequities that always existed in our food system. And while New York City probably has a high proportion of people who eat only micro-greens, those of us who aren't voluntarily starving need more than baby kale to survive. We need calorie and nutrient rich foods like squash and beans. Foods that the market hasn't deemed profitable but that humanity needs for survival. The city could invest a small fraction of those millions and get all of our small urban farms reaching their full potential. As an example, if our space could afford to hire a farm manager for 15 hours a week, not only would our crop production increase, not only would our capacity for education programs increase, but we'd be able to partner with the city to hire green teens. Community gardens and farms are full of potential: for healthy affordable food, for waste diversion and green jobs. We provide more bang for

the buck than any start up ever could. Let's cut out the venture capitalists and invest in these important public works.

2017 has been a rough year for America. We've all watched as climate change has hit our country with tenacity that can't be ignored, magnifying a threat facing all of us. Many of us feel the same way about rising income inequality in the city, the country. We can't talk about food justice without talking about racial justice, housing justice and economic justice. It is vital that as the city plans for our future, it financially supports infrastructure, including green jobs, for community-run farms and food-growing gardens. As the federal govt miserably fails its most vulnerable citizens again and again, it's time for the NYC Council to show leadership. Give New Yorkers what we deserve - real affordable housing for low and middle income New Yorkers and support for our green spaces that grows our food, our kids and our communities. Thank you.

Committee on Land Use- October 26, 2017
Testimony of Green City Force
Re: Intro 1661
In Relation to Developing a Comprehensive Urban Agriculture Plan

Green City Force (GCF) applauds this legislation that seeks to expand urban agriculture in NYC. We thank Councilmember Espinal for introducing this important bill, and for being a champion of local agriculture and opportunity youth.

For over 5 years, GCF has been building and maintaining urban farms in partnership with the New York City Housing Authority (NYCHA) and local community-based organizations specialized in this area, while creating career pathways into related fields for young adults who live in public housing. Farms at NYCHA, powered by GCF, is a citywide initiative to expand urban agriculture while creating career pathways for young adults who live in NYCHA, part of the City's broader Building Healthy Communities initiative, that includes NYCHA, The Mayor's Office of Strategic Partnerships, and The Fund for Public Health in New York with Added Value, East New York Farms, Isabahlia Ladies of Elegance Foundation, and Harlem Grown as local partners to each farm across the city. We are not able to be with you in person today as our teams of young NYCHA residents serving as members with GCF are busy building a new urban farm in Forest Houses in the Bronx.

Our approach demonstrates the power of urban agriculture to improve access to healthy produce while expanding economic opportunity for young adults. GCF's Urban Farm Corps is the only service program in the country through which young residents of public housing lead the transformation of public housing land into large-scale farms generating tons of organic produce for fellow residents, while preparing for careers. We are honored to have been recognized locally and nationally as a model for the country and to lend our example to support efforts to grow urban agriculture tied to building equity and opportunity in the new economy, across New York City.

Green City Force constructed and maintains 4 urban farms in NYCHA developments across the city, with a 5th farm under construction in the Bronx. Our track record stands as testimony to the potential of expanding this field:

Farms at NYCHA 2017 Service Initiative Outcomes (through September):

- 16,500+ pounds of free organic produce distributed to NYCHA residents in exchange for compost scraps or volunteer hours;
- 4,600+ pounds of organic waste collected from NYCHA residents and diverted from the municipal waste stream;
- 3,000+ farm visitors welcomed;
- 360+ NYCHA resident volunteer shifts;
- 340+ students educated in farm-based learning;
- 90+ events hosted at the farms, (includes Farm Stands).

Farms at NYCHA 2016 Service Initiative Outcomes:

- 12,400 pounds of free organic produce distributed to NYCHA residents in exchange for compost scraps or volunteer hours;
- 3,100+ pounds of organic waste collected from NYCHA residents and diverted from the municipal waste stream;
- 3,300+ farm visitors welcomed;
- 230 NYCHA resident volunteer shifts;
- 340+ students educated in farm-based learning;
- 60+ events hosted at the farms, (includes Farm Stands).

Cohort 12 *(March, 2016- January, 2017)* **Career Outcomes:**

- 94% secured employment or enrolled in college within 6-months of graduating.

In addition to GCF's service and training program, our graduates are working in composting, food and farm-based learning and entrepreneurship. For example, GCF graduate Paul Philpott owns his own hydroponic farm, Gateway Greens, incubated by Square Roots, and is inspiring other GCF graduates to pursue creating their own businesses in this area. Expanding urban agriculture will increase opportunities for family-supporting work and allow young adults to build solid career paths.

As you consider this legislation to facilitate the growth of urban agriculture, we urge you to include measures to ensure that opportunity youth, young adults who live in public housing and in other low-income neighborhoods are actively and specifically included as key actors. Thank you.

Subject: Testimony for October 26, 2017 NYC Council Committee on Land Use, Public Hearing on Int. No. 1661

I am writing to you to express my support for the development of a comprehensive urban agriculture plan to strengthen and expand urban agriculture in the City.

As a science educator for 25 years at one of our City's world renowned science institutions I have had a chance to work with science learners of all ages and backgrounds. Some of the most powerful educational experiences I have seen have occurred in our parks and gardens, large and small. These places are our "wilds" places where plants and animals are interacting in a variety of ways. Where behaviors, adaptations and interactions can be observed first hand in our community backyards.

In our age of "nature deprivation" that can be magnified in our urban settings, it is important that we encourage these green places where we can observe and learn first hand form the interactions of real live organisms. Darwin himself refined and tested his own understandings in the gardens of his back yard and of his neighborhood.

A comprehensive plan is important to make sure that all New York City communities benefit from these rich science learning opportunities. The plan should encourage and support gardens in all communities and in connection with schools in all neighborhoods. There should be efforts made to support educators in guiding students in exploring these places as well as allowing independent exploration in after school hours and non-school times of the year.

Great science and great learning has and can happen in gardens and agricultural settings. Those of us in the concrete jungle need to make an extra effort to make sure our communities are not deprived of these real, live, rich learning environments.

Thank you for your time and attention.

Sincerely,

Jay Holmes

3657 Broadway

New York, NY 10031

Testimony in favor of Bill 1661:

In 2016, Teens for Food Justice, our social justice/Urban Agriculture not for profit, built its second indoor hydroponic farm at a school in Bed Stuy. This farm has become a treasure trove of hands-on learning and teaching opportunities for the students of UA Unison School and a touchstone for the surrounding neighborhood.

UA Unison is a Title 1 Community School, where more than 90% of students are eligible for free and reduced lunch, and serves a largely food insecure community. The wholesome produce grown by the students at our farm nourishes the bodies of the students who plant the seeds and watch over the crops until harvest. In the 2016 school year our farm, situated in a repurposed science classroom, grew more than 1,100 lbs of produce, which students enjoy in the cafeteria and distribute to school families. This nourishing effect ripples outward, placing students and their families on a path towards improving their health through greater consumption of fruits and vegetables and better nutrition.

In addition to serving as a rich laboratory environment for teaching topics such as chemistry, biology, and entrepreneurial skills, the lessons taught on the farm spark a greater awareness of self. As they grow food for their school cafeteria and community, our students learn about nutrition, health, food policy and social justice and share this knowledge with others, transforming them into advocates who can help their community gain access to the resources it sorely needs.

Independent evaluations over the past three years have shown that more than 50% of TFFJ students feel more confident in science, see themselves as leaders, and believe that they can make a difference in their communities after completing just one semester with the program. In addition, 70% report understanding the importance of eating fruits and vegetables and now consider themselves healthy eaters.

We are currently completing construction of our third youth built/youth run farm at DeWitt Clinton High School in the Bronx--which is set to grow more than 20,000 lbs, 10 tons, of produce annually. This food will be consumed by students in the cafeteria each day and distributed, for free and affordably, directly into the local food desert community significantly increasing healthy food access in that area. Funded through a public/private partnership that includes support from Councilmember Andrew Cohen and Green Mountain Energy Sun Club, the farm will provide hands-on, integrated STEM learning to 100 students annually, real-life preparation for urban agriculture careers and higher education, and a nutrition education and healthy food access hub

33 West 60th Street, Suite 1138, New York, NY 10023 • 929 241 1029 • teensforfoodjustice.org

Teens for Food Justice (formerly Students for Service) is a 501(c)(3) tax-exempt public charity. All contributions are tax deductible to the fullest extent allowed by law.

that can improve health outcomes for thousands of community members. Additional farms on this scale are in development in Manhattan and Brooklyn with support from Borough President Gale Brewer, City Councilmember Helen Rosenthal, Borough President Eric Adams, Councilmember Laurie Cumbo, as well as Whole Foods Market and Maimonides Medical Center. 1661 would expedite and streamline the implementation process, enabling youth-run farms, such as these, to rapidly expand throughout the city.

To ensure the proliferation of projects such as these, that both nourish New Yorkers of all ages in all boroughs and provide rich educational and workforce development experiences for the next generation, we highly support this bill. In addition, we support the development of a comprehensive urban agriculture policy that can build this growing industry, thus providing a workforce pipeline for the students we train.

Thank you.

Presented by:

Katherine Soll, CEO/Founder Teens for Food Justice
Harrison Hillier, Hydroponics Manager, Teens for Food Justice

33 West 60th Street, Suite 1138, New York, NY 10023 • 929 241 1029 • teensforfoodjustice.org
Teens for Food Justice (formerly Students for Service) is a 501(c)(3) tax-exempt public charity. All contributions are tax deductible to the fullest extent allowed by law.

Testimony for October 26, 2017 NYC Council Committee on Land Use, Public Hearing on Int. 1661

By Qiana Mickie, Executive Director, Just Food

Thank you City Council Member Espinal and other committee members for the opportunity to submit testimony. My name is Qiana Mickie and I am the Executive Director of Just Food. Like my colleagues and urban ag community partners, I am interested in any legislation that will impact our communities and want to ensure that equity is embedded in the process and outcomes. It is well known and documented, that New York City has a long history of urban ag and food access. From abandoned lots turned into community gardens to larger urban farms- long standing residents, in particular those that are under-resourced have turned soil into rich soil to grow food when others left. Urban farmers like Sheryll Durrant garden manager of Kelly Street Garden and New Roots Community Farms, the youth at East New York Farms!, Yonette Fleming at Hattie McCarthan garden, Cindy Worley of Wilson garden in Harlem and many others are environmental stewards, change makers, and urban leaders. There gardens are places for trainings, youth, and community development.

I have concerns and reservations with Int. 1661. To be comprehensive, it must include and benefit those who have worked the soil, grown food, and developed community at great expense and livelihood. Most of this work was done with little resources, much grit, sweat equity, and by folks of color. The value and contribution of community-based urban ag must not be marginalized.

Organizations like Just Food, New York City Community Garden Coalition, Farm School NYC, and other community partners and growers possess immense and valuable expertise, knowledge, and should be at the table in developing urban ag legislation. I worry that the 7/1/18 deadline is not sufficient time to build a comprehensive urban ag plan that ensures equitable engagement of historically marginalize voice-in particular low-income and people of color.

The term “food deserts” has been used often today. I do not ascribe to that term nor do many of my social justice counterparts because it doesn’t address the lack of equity and the intentionality of segregation of resources in it. We use the term **“food apartheid”.** If this plan does not include the most impacted, this bill will perpetrate food apartheid under the pretense of urban ag. I’m hearing “advocates”, but to date the advocates I know and partner with from the community have not been a part of the development of Int. 1661. Many of us, including me did not know this was happening until recently.

Food access in this bill should also be addressed with a lens of equity and community. While there are different forms of urban ag in our diverse city, the variety and bounty of soil based urban ag cannot be minimized or lost. A bill that is to be comprehensive must support healthy food access that encompasses seasonal and culturally relevant food that our communities grow and want. An urban ag bill should support models of resiliency. History has shown that grassroots urban ag is that and a future bill should support their efforts.

Subject: Re: Molly Culver / The Youth Farm Testimony on Bill #1661

Hello again,

My testimony should be amended to include remarks I made on the made on the fly during my verbal testimony:

-that urban farms and school gardens such as the Youth Farm also rely on production and sales to survive; (it is not only for profit, commercial or start up hydroponic farms that rely on production); we all need clarification of rules and true support from the city to increase production and food safety protocol

- School gardens and farms need a comprehensive plan for how we can begin to sell or provide food we grow to Title One high schools where the need for food security and nutrition is highest amongst the student body; The Youth Farm as the largest in ground school garden has helped the city adopt regulations around soil safety; we would love to become a model for NYC and other cities for how DOE can contract with urban farms to get fresh culturally relevant food into cafeterias; resources are needed here, and we hope this plan can help allot some resources in this direction as the city can not afford to pay the increased emergent care costs associated with obesity and diabetes; it is imperative we invest in the engagement and education of young people from the most historically marginalized communities!

- I want to acknowledge my white privilege, privilege of college education, fluency in English, my heterosexual privilege and simply acknowledge it can be easier for people who share similar privileges to gain power in these kinds of spaces. My main concern is around equity in this planning process. I believe that the way the Urban Agriculture Collective has operated as a seemingly mostly white, mostly male, well resourced/highly privileged group has not been inclusive. For this planning to be inclusive, we need to avoid at all costs the gentrification of urban agriculture, a movement begun and pioneered by people of color. An influx of venture capital for white male led tech startups who purport to save the world, and who "just want everyone to be able to eat healthy," is an easy way to help the privileged get richer and to gain a false sense of pride while doing so. My fear is that on the ground, local and federal financial resources and the apparatus for policy making will all be shifted towards shiny white entrepreneurship and away from the grassroots communities of color who have been pushing and educating their electeds on the importance of urban agriculture, with incredible persistence and effort for decades. How quickly we lose that traction when white wealth appears. Those of us with privilege, especially white and/or male privilege need to become guardians of equity and make sure that the original leaders in this movement are at the table.

Thanks for your time today and I look forward to more follow up discussions!

Molly

Testimony to the New York City Council Committee on Land Use

On Int. No. 1661

Kristin Reynolds, Ph.D.
Forest Hills, NY

October 26, 2017

Dear Chairman Greenfield, Council Member Espinal, and Committee Members,

I am a resident of Forest Hills, Queens and co-author of two recent studies on New York City urban agriculture. *Beyond the Kale: Urban Agriculture and Social Justice Activism in New York City,* a book published in 2016, illustrates how some urban farmers and gardeners work to advance social and economic equity, in addition to growing healthy food for their communities. *Five Borough Farm: Seeding the Future of Urban Agriculture in New York City,* a report published in 2012, documents farming and gardening throughout the city, and identifies opportunities to strengthen this practice through citywide policy. I am currently conducting research on economic equity in commercial urban agriculture in New York City and Paris, and I work closely in an advisory capacity with several citywide urban agriculture groups.

I have researched, written about, and practiced urban agriculture for the past ten years, through the Cooperative Extension system in California's Bay Area before arriving in New York, and I have studied its evolution, nationally, which dates to the late 19th century. It is exciting to see urban agriculture grow in new directions with the expansion of for-profit urban farms in the past several years. Indeed, New York is leader in rooftop, commercial, and indoor farming, and by my count, there are at least twenty for-profit urban farms in the city.

New York City has in fact long been a leader in urban agriculture, and this is well recognized. **What is less well acknowledged is that farmers and gardeners in low-income communities throughout the city have been growing healthful food in community and backyard gardens for decades.** Most often this has been done with few-to-no monetary resources beyond individuals' personal household budgets, and ephemeral support from city government. The majority of these, among them over 1,200 community gardens and community farms, are located in historically low-income communities and communities of color. Many are led by people of color and long time neighborhood residents. Many sell their fresh fruits and vegetables at low costs on-site to low income neighbors and support the development of community-based microenterprises. A chapter in *Beyond the Kale,* attached to this testimony, documents this history and diverse landscape.

I am intrigued by Int. 1661 and the possibility that a comprehensive urban agriculture plan may at last put into place a more transparent policy environment in which decisions are made about the use of city land, buildings, and structures to grow healthy food. And

yet, food system-planning efforts in the city have, in the past, excluded meaningful *and respectful* participation from community based groups, *particularly those led by people of color and low income city residents.* **A process that involves direct, regular, and mutually beneficial representation of all who farm and garden in the five boroughs would help to ensure that such a plan contributes to a stronger and more just city.**

There are several longstanding, citywide urban agriculture organizations that would have important insights into how a comprehensive urban agriculture plan could best address the needs of low income New York City residents, community gardeners and farmers. Just Food, the New York City Community Garden Coalition, and Farm School NYC, in particular, have histories of working with urban farmers and gardeners to strengthen food access, environmental resilience, opportunities for youth, and address economic needs in some of the city's lowest income neighborhoods through urban agriculture and food microenterprise development. Each has deep knowledge of the day-to-day realities of residents in their communities. **Ongoing and formal participation by such groups in the plan's development would help to ensure that**:

a) land use, zoning, and building issues identified in Int. 1661 are addressed equitably in the plan. This point refers specifically to the following items in the bill:

> (i) cataloguing existing and potential urban agriculture spaces;
> (ii) classification and prioritization of urban agriculture uses;
> (iii) potential land use policies to promote the expansion of agricultural uses in the city;
> (iv) an analysis of those portions of the zoning resolution, building code, and fire code that merit reconsideration to promote urban agriculture

b) measures to address food access, urban resiliency, youth development, job creation, and community economic development through urban agriculture recognize and support existing initiatives created and managed by organizations in low-income communities. This point refers to the following items in the bill:

> (v) expand the availability of healthy food in low-income neighborhoods;
> (vi) integrate urban agriculture into the city's conservation and resiliency plans;
> (vii) youth development and education with regard to local food production;
> (viii) direct and indirect job creation and impacts from urban agriculture production.

Additionally, inclusion of these—and possibly other community groups with longstanding histories of working in and for low-income New York City communities—in the development of the plan would help to ensure that assessment of the feasibility to create an office of urban agriculture (item (ix) in the bill) includes an assessment of whether, and to what extent such an office will be designed and resourced to address the priorities of low income community gardeners and farmers throughout the city, *as expressed by members of these communities*. Without this, there is risk of neglecting, if only inadvertently, a significant part of the city's urban agriculture system.

The need for a comprehensive urban agriculture plan for New York City is clear: As not-for-profit community farmers and gardeners are joined by for-profit farmers, a plan will help to clarify and make more transparent decision making, procedures, and allowed land uses for growing food throughout the city. **Inclusion of all parts of New York's urban agriculture community in developing the plan will ensure its integrity.**

I welcome the opportunity to provide further input on the bill as it is considered by the committee and the council, and on the plan if, and as it is developed in coming months.

Sincerely,

Kristin Reynolds, Ph.D.
Forest Hills, NY
kristin@foodscholarshipjustice.org

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

Beyond the Kale

URBAN AGRICULTURE AND SOCIAL JUSTICE ACTIVISM IN NEW YORK CITY

KRISTIN REYNOLDS

AND NEVIN COHEN

THE UNIVERSITY OF GEORGIA PRESS
Athens

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

CHAPTER 2

New York City's Urban Agriculture System

Just a short walk from Yankee Stadium, in the Highbridge neighborhood of the South Bronx, Abu Talib tends a nearly half-acre oasis of vegetables, cherry trees, space for a flock of chickens, and a play area for neighborhood children. In 1992 Talib, together with his son and other community residents, cleaned what was then a trash-strewn lot and turned it into Taqwa Community Farm. Vacant parcels like the one that became Taqwa were the consequence of public policies ranging from urban renewal to scaled-back city services that disrupted social networks, destroyed housing, and contributed to environmental, economic, and public health ills in the South Bronx and other low-income communities of color. Taqwa was created as the neighborhood was rebounding from decades of neglect. Despite New York City's economic growth in the early 1990s, the problems of alcohol abuse, drug trafficking, and gang violence persisted in the streets surrounding the farm. Motivated by a desire to improve conditions in his community, Talib organized a group of volunteers and met with officials from the New York City Department of Parks and Recreation to get permission to garden the site. He and the other neighborhood volunteers turned it into what has since become one of the city's best-known community gardens.

Today, Talib manages Taqwa with his fellow gardeners.[1] During the growing season they gather at the farm to grow food, socialize, and provide a place for neighborhood youth to spend time outdoors with adult mentors. Other neighborhood residents shop at a farmers' market held at the site. Like many gardens and farms that operate on city land, Taqwa has regular open hours for non-gardeners, and it also hosts workshops and classes conducted by the New York Botanical Garden's Bronx Green-Up program and a not-for-profit training program called Farm School NYC. The farm is truly a community space, and it illustrates the power of neighbors to join together, take ownership in revitalizing abandoned lots, and steward them to meet neighborhood needs.

Although Taqwa stands out as an exemplary project, it is grounded in a long history of urban food production and community-based activism in New York.

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

As noted in chapter 1, New York's farms and gardens are as diverse as the city itself, ranging from small patches of green space to larger, even commercial-scale, operations, and urban agriculture programs are led by people with varied interests and occupations—hobbyists, activists, farmers, entrepreneurs, chefs, students—who are part of different racial, ethnic, and socioeconomic groups.

As is true in many diverse systems, individuals and organizations involved in urban agriculture in New York City experience different levels of privilege that in turn affect the extent to which their farms and gardens are successful or help achieve social justice goals. Urban agriculture in New York is rooted in the broad social, political, and historical contexts of the city itself; yet it is also a system composed of different individuals, organizations, and agencies, as well as networks, policies, material resources, and physical spaces (see appendix 2 and appendix 5 for descriptions of this system).

As discussed in chapter 1, some urban agriculture activists explicitly connect their farming and gardening efforts to broad social change objectives. Others, like Talib, see their everyday activities of growing food, mentoring neighborhood youth, and maintaining community spaces as a way to address day-to-day symptoms of structural oppression in communities that have long suffered political and economic disenfranchisement and government neglect, even if they do not describe their work as activism per se. To these de facto activists, the significance of their farm and garden programs lies not only in the activities in which they engage and the leadership they exemplify but also in their deep and long-standing relationships with the places and cultural communities in which they work. People like Talib have long histories in New York City's urban agriculture system, even if their work is overshadowed by higher-profile initiatives. This chapter reviews the overall system, including the pivotal moments that explain the shape of the city's contemporary urban-agriculture-based activism.

The Roots of New York's Urban Agriculture

Urban agriculture is often portrayed as the latest fad, but food has always been produced in cities. In New York, farming and gardening have been important sources of sustenance for low-income residents since the city's founding. Though early forms of urban agriculture in New York City were pragmatic, addressing the need for nearby and relatively low-cost food prior to modern transportation, processing, and preservation technologies, city food production has also been promoted during specific historical moments for social and political reasons. Farms and gardens have been thought of as a means to inculcate patriotism in wartime, as a way to augment classroom education, and as a remedy for what Progressive Era reformers believed were the ills of urbanization. Agriculture in the city has also long been intertwined with class differences, the politics of urban economic inequality, and the use of public space; since the 1960s and

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

1970s, some participants have engaged in it as a response to urban policies that have exacerbated racial and class disparities.

EARLY FORMS OF URBAN AGRICULTURE IN NEW YORK

Until the early nineteenth century, many New York City residents kept livestock and home gardens for subsistence, but by the midcentury commercial food production became common within the city. Commercial dairies were established during this time because the lack of refrigeration and efficient transportation made it impossible to be far from customers, and some neighborhoods, like the area in Manhattan that is now known as Chelsea, came to have sizable dairy herds (Egan 2005). Other livestock, notably hogs, were kept to manage urban food wastes and for their meat (Blecha and Leitner 2014; McNeur 2011; Tremante 2000). Many of these commercial businesses were owned by recent immigrants seeking financial stability (Tremante 2000). Animals raised for commercial purposes were often crowded into lots close to breweries, rendering plants, and manure lots located in industrial neighborhoods inhabited by low-income city dwellers (Tremante 2000). Although they provided food for the city's growing population, these commercial livestock yards often posed a nuisance to surrounding neighborhoods; indeed, they were among the earliest examples of class-based urban environmental and health disparities related to food.

Public health consciousness took hold in the mid-nineteenth century, and city officials, along with some city residents, became increasingly concerned about the risks of consuming products derived from livestock kept in unsanitary conditions, not to mention the nuisance and health risks of the effluent and carcasses created by these businesses. These concerns set the stage for class-based battles over the legality of urban animal husbandry. As technology allowed for long-distance transportation of perishable products, and in the wake of professional public health campaigns against so-called swill milk (milk produced by cows raised in cities to which some proprietors added whitening substances to improve the appearance), wealthier residents began to buy dairy products from farms located outside of the city, which were deemed more sanitary and of higher quality. Some urban dairies continued production, at times adulterating their products to drive costs down and attract lower-income customers, but in the late nineteenth century, the establishment of a Dairy Commission led to sanitary standards that, with the advent of refrigeration and rail transport, pushed dairies out of the city altogether (Tremante 2000).

Hog production in New York City also differentiated social classes in the nineteenth century. Only the poorest residents in lower-income neighborhoods kept pigs for subsistence and waste disposal, and the efforts of wealthier residents and government officials to eliminate the animals from the city were met with staunch resistance (McNeur 2011; Blecha and Leitner 2014). After a num-

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

ber of cholera outbreaks during the 1830s and 1840s, however, the combination of new municipal regulations, greater enforcement of public health standards, and an expanded inspection and police force resulted in the elimination of hogs from the city by 1859, and of virtually all livestock from public spaces soon thereafter (McNeur 2011).

Vegetable gardens and farm plots persisted throughout the nineteenth and early twentieth centuries even as the city's population grew, in large measure because they were more environmentally benign than livestock. Beginning in the 1890s, New York City's municipal government, like those of other large US cities, supported public gardening programs as a way to address food insecurity among poor residents and prevent civil unrest during economic crises (L. Lawson 2005, 2004). New York replicated a well-known Detroit effort, the Pingree Potato Patch program (named after that city's mayor), which allocated land for subsistence food production to provide relief from poverty during the worldwide economic depression of 1873–1879 (L. Lawson 2004). As economic conditions improved in New York and elsewhere in the United States, these gardening programs generally gave way to development of the land they occupied. Growing one's own food was seen as an emergency measure to stave off hunger and avert protests in times of economic crisis, rather than a means of long-term sustenance for individuals and families living in or at the brink of poverty. Policy makers and planners viewed industrial, commercial, and residential development as better and more profitable use of the land than food production, and the economic activities resulting from development as more appropriate for city dwellers than farming.

PROGRESSIVE-ERA, WARTIME, AND DEPRESSION-ERA GARDENS

During the Progressive Era, a period of social activism and political reform in the late nineteenth and early twentieth centuries, political leaders supported garden projects as an antidote to industrialization and rapid urbanization (Hayden-Smith 2006, 4–5). Gardens and farms were seen as a means to teach agricultural and life skills to a growing urban populace alienated from its rural roots, and to engender cultural reform and "shape cultural values" (Hayden-Smith 2006; L. Lawson 2005). In 1917, the educational philosopher John Dewey advocated expanding the number of school gardens to inculcate "constructive patriotism" in children as well as to supplement food production (Dewey 1917).

During World War I, the US War Department funded initiatives such as the US School Garden Army, the Liberty Garden program, and the Women's Land Army to create new urban gardens, engage schoolchildren in gardening, and train young women to work on farms in place of male farmers sent to war (Hayden-Smith 2014). For the government, the purpose was to augment the output of rural farms, compensate for food sent to troops abroad, free up wartime shipping capacity by reducing food transport, and build support for the

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

war effort by engaging civilians in what was promoted as a patriotic activity (Hayden-Smith 2014, 2006; Hynes 1996; L. Lawson 2005). The programs substantially boosted urban agricultural production. For example, in 1918 Liberty Gardens provided an estimated $520 million worth of food nationally (Hynes 1996, xi). At the municipal level, local organizations in New York City promoted the federal programs by sponsoring demonstration gardens in prominent places like Bryant Park and Union Square in Manhattan and by providing technical assistance to gardeners (L. Lawson 2005). Through the government-funded Women's Land Army of America, women were recruited to work on farms near cities. Barnard College, a private women's liberal arts college in Upper Manhattan, organized a women's agricultural camp in the then-rural suburb of Bedford, New York, to teach 142 "farmerettes" the skills needed to work in area farms (Lai 2009).

After World War I, many of the garden program sites were developed for real estate and other nonagricultural uses, though during the 1920s and 1930s some city planning departments incorporated gardens into their land-use plans (Hayden-Smith 2006). During the Great Depression, the federal Works Progress Administration sponsored relief gardens for food production in urban areas, but these programs were also abandoned after the federal government adopted the Food Stamp Program for farm surplus in 1937 (ibid.). Livestock were still present in urban areas in limited numbers until the 1930s, though they were used more for aesthetic purposes and landscaping than for human sustenance. Indeed, sheep were kept on lawns at the White House during the Wilson Administration, and in New York City's Central Park, until 1934 (Blecha 2007, 14–15).

After the United States entered World War II, four different federal agencies launched a second national garden initiative. As during the First World War's Liberty Garden campaign, the Victory Garden campaign of World War II promoted gardening in rural, suburban, and urban areas as a duty of civilians to participate in the war effort. Wartime propaganda encouraged Americans to grow their own food to enable the government to divert commercial agricultural products to the troops and Allies abroad (*Victory Gardens* 1999; L. Lawson 2005, 170–181; Hayden-Smith 2014). In part because many urban residents were already growing their own food, often in response to scarcity in the Great Depression, World War II–era Victory Gardeners were able to produce an estimated 44 percent of the nation's vegetables during this period (Hayden-Smith 2006, xii; Hynes 1996). Many families also raised chickens and livestock along with vegetables, though animal husbandry was not a part of the national Victory Garden campaign (Blecha 2007; Bellows et al. 2000).

By 1943 New York City had an estimated four hundred thousand Victory Gardens, and an additional fifty thousand were added in the 1944 growing season—an unprecedented increase in urban food production (Jenkins 1944,

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

1943). Mayor Fiorello LaGuardia's administration supported the effort, yet not with significant financial resources, as the city was struggling to recover from the Great Depression. Moreover, the city was ambivalent about the feasibility of maintaining sizable spaces for food production in densely built areas. A report on Victory Gardens in New York City published by Cornell University, the state's land-grant college, cautioned that "in the closely built areas, particularly in Manhattan, Victory Gardens are out of the question. . . . The [smaller] home garden is by far the most satisfactory" (New York State College of Agriculture 1943).

POSTWAR URBAN AGRICULTURE

Urban agriculture waned during the 1950s. Government wartime gardening programs ceased, the US economy grew, and the food distribution and retail system industrialized and centralized. Supermarkets replaced smaller grocers as the predominant source of food for urban (and suburban) residents. As public policies like federal funds for interstate highways and federally insured mortgages for veterans supported the growth of racially segregated suburbs, aesthetic preferences among the white, middle-class suburbanites who populated these communities turned toward manicured lawns instead of vegetable patches (Hynes 1996, xiii–xiv; L. Lawson 2005, 205–7). Some of the wartime Victory Gardens remained as urban community gardens, and public housing authorities in larger cities like New York actively promoted gardening for beautification and to engage residents in sponsored social activities (Hynes 1996, xxiii–xiv; L. Lawson 2005, 205–7). Urban livestock husbandry also continued in this period, especially among immigrants who carried on the cultural practices and dietary customs of their home countries, which often emphasized freshly raised meat (Bellows et al. 2000; Blecha 2007, 14–15). Still, city gardening and farming were far less prominent than they had been in previous decades.

The Re-emergence of Urban Agriculture in New York City

Urban gardening re-emerged in the 1960s and 1970s, this time as a grassroots effort, in contrast to the government-led programs that had been designed to meet the pragmatic and political needs of wartime mobilization and the Depression (L. Lawson 2005). One of the most visible manifestations of urban agriculture in this period was the proliferation of neighbor-led projects to create community gardens on vacant lots.

The resurgence of urban gardening was a response to broad economic, political, and social changes in New York and other large cities. In the postwar period, most suburban developments were racially and socioeconomically segregated through neighborhood covenants, deed restrictions, and bank redlining—the practice of not lending money in communities of color, areas bankers identified as financial risks, indicated by red boundaries drawn on lenders' maps.

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

As middle-class white families moved from cities to suburbs, so did retailing, resulting in reduced tax revenues for municipalities. An increasingly interconnected global economy also meant that firms were more easily able to relocate to locations with lower-cost labor, inexpensive land, and newer infrastructure. These developments led to an exodus of industry from older cities, along with stable manufacturing jobs and associated tax revenues. Often, the only infrastructure that remained consisted of obsolescent and contaminated industrial sites. Remaining residents were left to fend for themselves in accessing necessities from medical care and fire protection to healthy food.

These changes accelerated the flight of middle-class whites, causing population declines in inner cities. Beginning in 1949, federal funds became available for cities to condemn and clear low-income neighborhoods (designated by city planners as slums) to entice new development, a process known as urban renewal. These urban renewal projects often targeted communities of color, uprooting large numbers of black and Latino/a residents, and in the process increasing racial segregation within cities, breaking up the social networks in these neighborhoods, and disrupting intact low-income communities. Federal housing funds also financed the construction of public housing, which in New York City took the form of high-rise towers. These projects concentrated low-income people of color in buildings that were often physically isolated and class-segregated, further disrupting communities and social networks.

In New York City, these economic, demographic, and policy changes reduced the city's tax base while increasing the need for public services, putting the city on the brink of bankruptcy by 1975 and shutting it out of the capital markets (Fuchs 2010). To stave off bankruptcy and regain access to capital, the state created the New York State Financial Control Board, which had the power to require the city to cut its budget. The board reduced the discretionary portion of the city's operating budget, slashing services funded by municipal tax revenue, such as garbage collection, firefighting and policing, schools, hospitals, and libraries. Over the course of the 1970s, some one in five city jobs were lost due to attrition or mandated layoffs. The police department was reduced from 31,000 employees in 1972 to 22,000 in 1980 (Newfield and Du Brul 1981, 7). Despite increases in political power among people of color during this period, from a successful campaign for community control of public schools to a strong mayoral run by Puerto Rican political leader Herman Badillo, these cutbacks still fell disproportionately on low-income communities of color from the South Bronx to Central Brooklyn.

More insidiously, the budget cuts were part of a strategy of "planned shrinkage," in which services were reduced in neighborhoods with declining populations, ostensibly to improve efficiency by concentrating remaining resources in neighborhoods with stable populations and income to support them, but also to accelerate the depopulation of low-income communities that were labeled "pathological" by political leaders like Daniel Patrick Moynihan. Paradoxically,

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

the reduced services in the communities designated for planned shrinkage led to initial population losses that were considered evidence of community decline, justifying further service cuts.

Reductions in municipal functions like policing and sanitation had pernicious effects, but the city's decision to close and consolidate fire companies in low-income neighborhoods was particularly damaging. Relying on modeling by the Rand Corporation that was subsequently discredited, in the 1970s the city closed or consolidated dozens of fire companies and reduced the Fire Department's workforce, mostly in low-income communities of color in the Bronx and Brooklyn, even though these were often densely populated, with older yet more intensively used housing that was therefore at greater risk of fires and fire damage. Closures of fire companies continued throughout the 1970s, even as the numbers of building fires grew to a peak of 56,000 in 1976. Fires forced mass movements of low-income residents within and between neighborhoods, directly and indirectly displacing an estimated 600,000 black and Latino/a residents (Wallace and Wallace 1998, 18). The fires destroyed large numbers of housing units, prompted landlords of nearby buildings to neglect and abandon their properties, and accelerated the movement of middle-income residents to other neighborhoods and out of New York City. The psychological, social, and physical disruptions caused by these upheavals led to declining public health, reduced public safety, and shorter life expectancy (ibid., 17–19). Many of the city's gardens and farms are on the vacant lots created by this period of malignant government and property-owner neglect of low-income communities of color.

In the wake of the city's fiscal crisis, municipal leaders in the 1980s adopted neoliberal growth strategies that relied increasingly on business subsidies and fiscal austerity to stimulate economic activity (Fainstein and Fainstein 1989). Then-mayor Ed Koch, mirroring a political philosophy espoused by the Reagan administration, played a significant part in lowering expectations of the city government's responsibility for solving urban problems, emphasizing the need for public-private partnerships and private-sector leadership to produce needed affordable housing and to stimulate economic development, responsibilities that in the past had been assumed to a much larger degree by city government with federal funds. Though motivated by different political views, the shift to neoliberal municipal policies was consistent with demands for greater citizen engagement and self-help at the neighborhood scale, supporting the growth of activities like vacant lot cleanups and community gardening. But it also had negative effects on low-income communities of color that depended to a large extent on public services because residents lacked the personal wealth to supplement diminished city functions like education, health care, parks, libraries, and sanitation with private services.

Economic and demographic changes during the 1980s also played a role in the growth of community gardening activity. Cities began to grow economically,

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

particularly those like New York that were centers of finance connected to the global economy. Population losses began to reverse, and cities attracted young, white, affluent residents who were able to compete in the postindustrial economy, even as large numbers of low-income residents remained disconnected from the rapidly growing financial and real estate sectors.

Moreover, as private investment began to return to some low-income neighborhoods close to the central business district, like Manhattan's Lower East Side, many of the black and Latino/a residents who had borne the brunt of city disinvestment in the 1970s but were not protected by tenancy in public housing were displaced. The city and the private sector supported this process of gentrification by promoting a vision of low-income communities as the "urban frontier," encouraging young, middle-class, white people to act as urban "pioneers" and "homesteaders" by populating these communities building by building, block by block (N. Smith 1996). As noted in chapter 1, these so-called pioneers often used the cleanup of rubble-strewn lots and the creation of gardens as a way to beautify, and take control of, the neighborhoods in which they were "settling," though perhaps disregarding the fact that their "homesteading" drove up real estate values and intensified efforts to displace longtime residents, many of them low-income people of color who were already gardening. In gentrifying communities, however, people of color and new residents did often work together to create gardens, focusing on the immediate benefits of lot cleanups and safer green spaces and not the secondary effects of these gardens on real estate values and how a real estate boom induced by neighborhood greening might make the gardens vulnerable to development pressures. Many of the gardens were created on city properties taken from private owners who stopped paying their taxes on properties that lost much of their value due to municipal disinvestment. In areas of the city not yet subject to gentrification, such as Harlem, the South Bronx, and Central Brooklyn, residents were focused on reclaiming sites lost to urban renewal, abandonment, and fires, creating safe and healthy spaces and growing food to improve their neighborhoods.

URBAN AGRICULTURE AND THE GRASSROOTS

Community gardening, the most prevalent form of urban agriculture in 1960s and 1970s New York, was thus a response to interconnected economic and political trends, although gardeners were motivated by other factors as well. For residents unwilling or unable to leave their neighborhoods, creating something positive by turning a rubble-strewn lot into a garden was often a survival strategy. For neighborhood newcomers, whether conscious of their role as gentrifiers or unaware of the consequences of their actions, turning vacant spaces into gardens was a process of "taming" that urban frontier (N. Smith 1996). For some activists involved in civil rights, feminist, and mainstream environmental movements, urban gardens were both spaces for community organizing and op-

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

portunities to solve problems like crime, environmental injustice, and the need for more educational opportunities for youth (Hynes and Howe 2004; Stephens et al. 1996). In contrast to gardening programs led by progressive reformers in the late nineteenth and early twentieth centuries, or those sponsored by federal government programs during wartime and the Depression, urban agriculture in this period grew out of grassroots organizing (L. Lawson 2005).

Many discussions of urban agriculture activism of this era point to the theatrics of white activist Liz Christy and her self-proclaimed band of "green guerillas [*sic*]" composed of Christy and other young, middle-class artists living on the Lower East Side (known as Loisaida by Latino/a residents). In an effort to reclaim the many abandoned lots in the community, Christy organized neighborhood residents to toss seed "green-aids" (a mixture of mud and flower seeds) over fences separating lots from the street, plant flowers in median strips, and transform a heavily trafficked corner into a community garden. The organization she helped form, Green Guerillas, emphasized neighborhood residents' "self-help" over reliance on city services to clean up abandoned and rubble-strewn city lots (Hynes and Howe 2004, xiii; L. Lawson 2005, 205–8).

Christy's goals were to improve conditions for the existing residents, to emphasize the value of urban greening, and to support community control of land. However, these intentions and her success in creating gardens notwithstanding, the long-term results were decidedly mixed. The gardens contributed to increased property values on the Lower East Side and to the neighborhood's gentrification, while also serving as spaces of resistance to development. Green Guerillas exists to this day; it emphasizes a grassroots-organizing and community-driven model of change.

Less frequently included in written accounts, yet arguably more important in terms of the extent of New York City community gardening, are the many black and Latino/a gardeners in Upper Manhattan, the Bronx, and Brooklyn who were also early leaders during this era (New York City Community Garden Coalition n.d.). Low-income neighborhood residents, including many black and Latino/a gardeners, also took managing the effects of government abandonment and private disinvestment into their own hands. They, too, organized neighbors to clean and plant rubble-strewn lots that were abandoned by landlords and taken over by the city for unpaid taxes. They turned these lots into green spaces and community centers, often with vegetable plots, botanical landscaping, and, in some gardens, *casitas* (traditional Puerto Rican wooden structures used as meeting places within gardens) for community activities. Churches, community organizations, and associations of neighbors often supported these activists.

The sweat equity of neighborhood residents often filled in for diminished municipal services like sanitation and policing. From this perspective, the gardens can justifiably be understood as supporting government devolution and neoliberal policies. Yet the spaces also served as community gathering places for grassroots organizing and political activism (L. Lawson 2005). Though writ-

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

ten historical accounts to date do not pinpoint one individual as a spearhead of these initiatives led by people of color, their efforts to convert vacant spaces into gardens and farms, in addition to the work of white-led groups like Green Guerillas, set the stage for the unfolding of urban-agriculture-based activism throughout the city.

GOVERNMENT SUPPORT AND DEVELOPMENT CONFLICTS

New York City's urban agriculture in the late 1960s and early 1970s was enabled by urban policies, even if municipal agencies didn't set out to create a large network of gardens. By the late 1970s, however, City Hall stepped into the field of urban agriculture, recognizing that gardeners were cleaning up vacant parcels and restoring order to communities at virtually no cost to the city. In 1978 the Koch administration allocated federal Community Development Block Grant funds to create Operation Green Thumb (today the New York City Parks and Recreation Department's program called GreenThumb), which provided technical support to gardeners and helped them manage city-owned garden sites.

The Green Thumb program supported hundreds of urban agriculture projects throughout the city's low-income communities, as required by the funding. In contrast to the wartime and Depression-era programs, the goal of the Green Thumb program was not to simply encourage production. New York City's decision to launch Operation Green Thumb was based largely on the desire to engage city residents as stewards of vacant city-owned land until development opportunities arose. Another consideration was the potential for gardens to spur investment by making the surrounding neighborhoods attractive to higher-income individuals and real estate developers. In the words of the parks commissioner under both the Koch and Giuliani mayoral administrations, the program was "where you could park land for interim use. . . . You don't want a rubble-strewn area, so you park it in Green Thumb and let it be used as a garden. But the key word is 'interim'" (Raver 1997). The increasing popularity of community gardens and the availability of federal community development dollars to fund Operation Green Thumb eased the political decision to support this interim use.

Additional government programs that supported urban agriculture in New York during this time included the Garden and Greening program of the New York City Housing Authority (NYCHA) and local cooperative extension programs (typically funded by the US Department of Agriculture [USDA], county governments, and state land-grant universities). NYCHA's Garden and Greening program evolved from a 1963 citywide resident garden competition (New York City Housing Authority 2014a). Initially a flower garden contest, it expanded to include a vegetable gardening competition and eventually a full-fledged program that today also includes tree plantings and environmental education (New York City Housing Authority 2014b). This program was motivated by the desire to provide what NYCHA viewed as wholesome activities for residents of low-

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

income public housing facilities and to put to productive use some of the vast, yet frequently barren, landscapes of the city's high-rise "tower in the park" housing projects. Cornell University Cooperative Extension's Master Gardener Program (part of a national system of similar programs initiated in the early 1970s, which still operate throughout the United States) trained volunteers to provide advice on home gardening (Stephens et al. 1996; Reynolds 2011), and the USDA-sponsored Urban Garden Program, which existed from 1976 through 1994, employed cooperative extension agents to teach about gardening, small-livestock husbandry, and nutrition in twenty-six cities, including New York (ibid.). These programs were designed to help low-income city residents access fresh food at a low cost.

By 1980, real estate development had begun to pick up in Manhattan (and to a lesser extent in other boroughs), and displacement of lower-income residents was occurring in neighborhoods adjacent to the city's central business districts (Sites 1997, 545). City agencies and private developers sought to capitalize on increasing demand for housing, and the city adopted policies to create more units. During the previous decade, property abandonment and disinvestment had made the gardens, and the sweat equity of gardeners, appealing to city officials. However, as the economy rebounded, many of these sites were viewed as valuable development parcels, and the gardeners as obstacles. This shift was particularly true in neighborhoods like the Lower East Side, where a decade of gentrification had made market-rate housing construction financially feasible and the garden sites more lucrative to developers. In 1986, the city's destruction of the Garden of Eden, a revered community garden in this neighborhood, contributed to the 1988 riot in neighboring Tompkins Square Park, which was largely a reaction against city policies supporting gentrification, and foreshadowed what would become a much larger conflict over garden displacement in the 1990s (Zukin 2011).

While the gardens of the East Village and Lower East Side were targeted for development, the gardens in low-income communities of color in Brooklyn, Queens, and the Bronx faced less pressure from real estate development but were not invulnerable. These neighborhoods had ample vacant public land and faced far less private-development interest than communities in Manhattan; as a result, community gardens continued to be created on city-owned lots there throughout the 1980s. Yet seeds of conflict were being sown. In 1986, the Koch administration announced a $5 billion housing plan to build or rehabilitate 250,000 apartments in ten years in communities that had suffered from property neglect and abandonment in all five boroughs. Production of affordable housing in low-income neighborhoods accelerated as the administration formed partnerships with nonprofit housing development organizations to construct new units. The city began transferring the control of some gardens from the Parks Department to the Department of Housing Preservation and Devel-

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

opment (HPD) so the latter could assemble easy-to-develop sites for larger-scale housing projects (ibid.).

The conflict between housing production and community gardens continued through the 1990s as the local and national economies grew. Land values in some communities with gardens continued to increase, and news of plans to convert particular sites into housing caused all community gardeners to worry about their tenure on city-owned parcels (Howe 1994). Under Mayor Rudolph Giuliani, the city stopped approving new GreenThumb gardens in 1994 and attempted to sell off all of its vacant land, including parcels occupied by gardens, in 1996 (Elder 2005, 777). A critical moment for New York's urban agriculture system came in 1998 when the city stopped renewing existing GreenThumb licenses and initiated the process of auctioning 114 garden sites (Englander 2001). Mayor Giuliani framed the issue in terms of needing the land to build new housing, emphasizing that constructing new apartments to open up units for lower-income residents was more important than gardens, that housing (and not food production) was a basic right for city residents, and that property owners of newly constructed market-rate housing would stabilize "impoverished" neighborhoods and help existing residents of all income levels. Activists in the community gardening, environmental justice, parks and open space, and affordable housing movements countered by arguing that "the public the Giuliani administration was interested in cultivating was that of the white middle class, real estate and development interests, and potential donors," pointing out that there were many other parcels of vacant land available for housing, and suggesting that the administration feared the garden sites as places for the mobilization of people opposed to its policies (Staeheli, Mitchell, and Gibson 2002, 200).

The ensuing struggle involved legal challenges by the gardeners and public protests (C. Smith and Kurtz 2003; Elder 2005). Lawsuits were filed based on claims that the proposed sale violated state and city environmental review laws and that they disproportionately harmed people of color, in violation of the Civil Rights Act of 1964 (Elder 2005). The courts dismissed these claims, holding that the city had the right to balance the benefits of housing development, community facilities, and construction jobs against the loss of open space (ibid., 783). Despite these legal losses, however, advocates for the gardens were able to convince then–New York State attorney general (and gubernatorial candidate) Eliot Spitzer to file a lawsuit against the city, largely based on the original claim of city officials' failure to follow environmental review laws. The suit resulted in a temporary restraining order barring the sale, opening up an opportunity for singer-actress Bette Midler's nonprofit New York Restoration Project (NYRP) to buy fifty-one gardens and for the national nonprofit Trust for Public Land (TPL) to buy an additional sixty-three parcels, most in communities of color and gardened by people of color.

In the wake of the Spitzer lawsuit, the purchases by NYRP and TPL, and

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

the emergence of a newly energized and organized activist urban agriculture community that extended beyond community gardeners to environmental justice and other activist groups, the Giuliani administration agreed to NYRP's and TPL's purchases and eventually relented on the sale of many other gardens. Giuliani's successor, Mayor Michael Bloomberg, settled the attorney general's lawsuit shortly after taking office in 2002, maintaining most of the remaining gardens by transferring their control back to the Parks Department or to other nonprofit groups (Eizenberg 2013). As a result of this battle, most existing garden sites were spared from development, though community garden preservation and land tenure remain contentious issues between gardeners and New York City government to this day (Cohen, Reynolds, and Sanghvi 2012; Moynihan 2013). Gardens on city property do not have permanent or even long-term tenure, which many gardeners feel is important for maintaining community green spaces in their neighborhood, in addition to justifying the gardeners' significant investment of time and energy in maintaining the sites. As this book is going to press, the Housing Preservation and Development Department has solicited private developers for new residential buildings to be located on HPD-controlled vacant land, including active community gardens.

GARDEN ACTIVISTS

Overall, the period that began in the late 1990s galvanized a strand of activist-oriented urban agriculture in New York that characterizes an important part of this system today. The experience of fighting to save community gardens strengthened advocacy groups that support urban agriculture, like the New York City Community Garden Coalition, a grassroots group formed in 1996 (largely to address the threats to community gardens discussed above). These events had helped frame gardens as an integral part of the city's landscape. Also, some residents saw gardening as a way to claim a "right to the city" (Eizenberg 2012b, after Mitchell 2003), even as New York's prodevelopment municipal government continued to regard urban agriculture as merely an interim use of city-owned parcels. The development of some garden sites and continued threats to community gardens overall highlighted their vulnerability.

One lasting outcome of this battle was the creation of a group of community gardens with permanent land tenure and management staff, namely those operated by NYRP, various land trusts, and larger nonprofit organizations. These privately held gardens are recognized as productive spaces providing instrumental value to the city. They have helped establish food production as a legitimate urban land use. However, for those GreenThumb gardens on city land (mostly in communities of color) and thus not protected with permanent tenure, it has become ever more apparent both that the act of gardening in New York City is politically charged, and that the stakes of *not* engaging in political activism can be high for the gardens, the gardeners, and the residents of neighborhoods in which gardens are situated.

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

By 2010, as urban agriculture gained popularity throughout the country and concerns about diet-related public health disparities became politically salient, the city adopted new rules granting licenses for gardens in the city's GreenThumb program to operate on city property. The rules include provisions for automatic renewal provided that gardens comply with the license terms and conditions, with a mandatory public review if the city wishes to evict gardeners and develop a site (City Record 2010). Despite these required procedures, the city is still able to develop garden sites for housing or any other public purpose.

New York City's Contemporary Urban Agriculture System

Urban agriculture in New York City today builds on the farming and gardening movements of previous eras but with growing spaces, practices, and motivations that make use of new technologies and take advantage of a moment in which concerns about the food system and addressing social inequities are both popular and politically salient. In addition to long-standing community gardens, small-livestock husbandry (notably chicken keeping) has become more common, and beekeeping has been legalized. Food production intended to address urban food insecurity has also returned, as has commercial farming. "Guerrilla" gardening has become more sophisticated, with the use of geographic information systems technology to map vacant lots and publicize property ownership data to help would-be gardeners identify and gain access to possible sites.

Conflicts over the use of vacant space for food production versus development remain intense, especially as the number of vacant city-owned parcels has declined and real estate values have risen. Yet the Bloomberg administration, which drew to a close in 2013, for the most part spared community gardens and other urban agriculture sites even as it rezoned many neighborhoods to increase development density. Moreover, the notion that farming and development are incompatible has begun to change as city housing agencies and private developers have found ways to integrate urban agriculture spaces into the city's infrastructure, including on rooftops of new affordable housing projects and older commercial buildings, in upscale restaurants and supermarkets, and on temporarily stalled development sites.

Yet as noted above, conflicts remain as the administration of Mayor Bill de Blasio, who was elected in 2013 on a platform of addressing inequality throughout the city, seeks to build or preserve 200,000 units of affordable housing. In fact, there is no formally adopted city policy to preserve existing gardens and farms on public land or to expand urban agriculture. Strategy documents issued by elected officials (e.g., New York City Council 2010; Office of Manhattan Borough President 2009, 2010, 2015) and iterations of the city's sustainability strategy (City of New York 2007, 2015) discuss the value of urban agriculture and describe plans to create new gardens and farms. However, short of issuing long-term licenses for gardens and farms, mapping the sites as parkland (which

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

cannot be developed without state approval), or turning the sites over to land trusts or nonprofits, these remain merely intentions of the administration.

Historically, New York City's position on urban agriculture as a way to use public space has shifted in response to the social, political, and economic climate of the moment, and there is no guarantee that current support will continue. In the absence of firmer commitments to urban agriculture, activism remains a key focus for some farmers and gardeners, but it extends beyond preserving gardens themselves. Activists such as Abu Talib and Yonnette Fleming continue to use farm and garden spaces as venues to address both neighborhood-level concerns and much broader social and political issues.

Disparities in New York City's Urban Agriculture System

Urban farmers and gardeners in New York City must confront many of the same challenges faced by their counterparts in other US cities. As discussed in more detail in chapter 6, in addition to garden tenure, these challenges include accessing clean soil, compost, seeds, and tools; finding sufficient funding to support food production and related programs; working with city policies affecting farming and gardening; and identifying enough people to manage a variety of activities and program tasks. And yet within New York's urban agriculture system, individuals and organizations often experience these challenges differently according to their own race, gender, and class, as well the demographics of the communities in which they work (e.g., see Cohen, Reynolds, and Sanghvi 2012; Reynolds 2014). For example, accessing clean soil and compost for raised beds is important in many urban environments, since urban soils tend to be low in nutrients and high in contaminants (McClintock 2012; Duchemin, Wegmuller, and Legault 2008). However, contaminated soil is particularly common in areas with mixed industrial and residential land, and these areas often are communities of color and/or neighborhoods with predominantly low-income residents (e.g., see Sze 2007). As a result, these farm and garden organizations must take additional precautions (often requiring financial and material resources and technical help) merely to ensure the safety of the food they produce (see Vigil n.d.). Soil quality is just one example of how general challenges to urban agriculture may be different from community to community, often with disproportionate burdens placed on farmers and gardeners situated in historically low-income communities and communities of color in New York.

Disparities also exist between urban agriculture groups themselves. Interviewees in the Five Borough Farm project (discussed in the preface and Appendix 1) characterized the city's urban agriculture system as two distinct communities, one with significantly more financial resources, stronger relationships with influential groups, and/or a white leadership that created or took advantage of opportunities to expand their operations. As one (white) farmer noted:

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

> There are two very unique and distinct aspects of this urban farm movement going on. . . . One is very middle class and white, and one is not. One is of color and very low income. And they are . . . very separate. Unless they are brought together, I don't know that the success of either is going to continue. The needs [of each group] are completely different.

When asked for examples of the different needs, this farmer suggested that lower-income gardeners in communities of color often lack financial resources and carry out their work without being paid, while white middle-class urban farmers are more concerned about whether they can make a living farming—covering basic expenses is less of a problem. Other interviewees in that study claimed that organizations led by people of color faced greater difficulty securing resources, in part because they were less connected with political leaders and groups with financial resources (e.g., foundations and private donors). The interviewees based their opinions about these disparities on their own experiences in trying to obtain funds and other resources for their projects, as well as their observations of resources available to urban farms and gardens led by middle-class whites (Cohen and Reynolds 2015). But these opinions also suggest that white privilege and intersectional forms of oppression, as discussed in chapter 1, may be one source of the disparities among urban agriculture groups. One (African American) farmer cautioned that disparities made New York's urban agriculture system unsustainable, stating:

> I'm afraid right now that the way [urban agriculture is] looking is white-led. And people of color are being pushed to the side. I don't want crumbs. . . . And . . . if this movement is [going to be] sustainable, it has to be equal. Because right now I'm starting to see a trend whereby the people with the most power, the most voices, are getting the money and the people who can't speak as well are [not].

While New York's urban agriculture system is a network of diverse people, organizations, policies, materials, and physical spaces like farms and gardens, disparities between groups, particularly disparities based on race and class, keep this system from being as successful as possible. As discussed in chapter 6, recognizing these as significant challenges that are rooted in uneven dynamics of power and privilege is key to urban agriculture as social justice activism. As one farmer proclaimed, urban agriculture "can empower people to have political . . . and economic power," though only if the disparities in power are reduced or eliminated.

Roots of Urban Agriculture Activism

As this chapter has illustrated, New York City has a long and diverse history of urban agriculture that has been about politics and social justice as much as it has

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

been about food production. Gardening and livestock husbandry performed by poor city residents and commercial operators in the nineteenth century gave way to Progressive reform-oriented garden projects at the turn of the twentieth century and subsequent government-sponsored programs that were prominent throughout the United States during the two world wars and the Depression. After a hiatus in the mid-twentieth century, urban agriculture re-emerged in New York City in the form of grassroots "guerrilla" and community gardening beginning in the 1960s and 1970s. The roots of contemporary urban agriculture activism in the city can be most directly traced to this era, when community gardening was a means to rebuild neighborhoods that had borne the brunt of public and private disinvestment. Despite a frequent association of this movement with white, middle-class activists, people of color throughout the city were also leaders in this period of urban agriculture.

As the economy grew in the 1980s and 1990s, community gardeners and urban agriculture organizations had to defend their rights to the spaces they occupied and reaffirm the value of the gardens to city officials who viewed them largely as a temporary use for sites that were slated for development. This galvanized a strand of urban agriculture activism focused primarily on preserving and maintaining gardens situated on city-owned land. The Giuliani administration's largely unsuccessful attempt in 1999 to sell a large number of city-owned garden sites required gardeners and farmers to become more politically active and to ally with sympathetic political officials, nonprofits, and philanthropic organizations.

The 1999 crisis produced several outcomes that have stabilized urban agriculture while also creating tensions in this system: the gardens preserved through the New York Restoration Project and the Trust for Public Land became permanent (privately held) green open spaces, establishing the viability and value of working urban landscapes; and a strand of activist-oriented urban gardening took hold through the organizing efforts of the New York City Community Garden Coalition. However, the process of protecting the gardens also made what had been a transgressive use of public space part of the status quo. Most of the gardens remaining on city land were spared development and were given additional protections from eviction—though not permanent tenure—alleviating some but not all of the tensions between gardeners and City Hall.

Contemporary New York City urban agriculture comprises an increasingly diverse network that builds on historical legacies but makes use of innovations like aquaponics and rooftop farming and engages with current social and political concerns. A small number of larger community and commercial farms have also joined long-standing community gardens, while relatively new technologies have been used to publicize key information about existing and potential farm and garden spaces. City agencies, including those responsible for low-income housing and environmental protection, have invested in integrating urban

Reynolds and Cohen 2016. Beyond the Kale © University of Georgia Press

agriculture into housing facilities. They have also subsidized urban farms and gardens as stormwater management infrastructure and have established policies to help commercial urban farms and greenhouses, thereby advancing the notion of urban agriculture as a source of entrepreneurship, job creation, and tax revenue for the city. The embrace of urban agriculture at the city level has mirrored the growing popularity of the practice at the national and global scale. Yet race- and class-based disparities among urban farmers and gardeners detract from the sustainability of individual projects and the system overall.

Since 1999, urban agriculture activism has continued to gather momentum and has also diversified. Today, gardeners and farmers still advocate for policies affecting their day-to-day and long-term agricultural practices, most notably garden tenure and legalization of specific activities like beekeeping. However, some urban agriculture activists also focus on broader social, environmental, and economic justice concerns. An overlapping group of New York City activists, many of them people of color and women with long-standing roots in their communities, use urban agriculture as one strategy to address tangible inequities such as community food insecurity and lack of green space, as well as much deeper historical social problems including structural and intersectional forms of oppression.

As discussed in chapter 1, some of these activists frame their work in terms of specific concepts or in line with various activist and intellectual traditions. Others, like Abu Talib, simply speak of their farming and gardening efforts as a proactive way to address the ongoing effects of concentrated poverty in their communities. While their labors bring important benefits that reach far beyond providing food in their communities, these activists' work is often overlooked in mainstream accounts of urban agriculture, reproducing cycles in which public recognition and social capital reinforce disparities between comparatively privileged (often white) groups and those with fewer economic and political resources.

Simply documenting what is wrong with this system does not go far enough in shifting the narrative toward one that supports the leadership of people of color and women whose work is focused on dismantling oppression. Highlighting existing leadership among activists of color (and like-minded white activists) and the various ways in which they use farm and garden programs to advance social justice is a key element of this project, to which we turn next.

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661-2017 Res. No. _____

☑ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: RAYMOND FIGUEROA, JR.

Address: _____

I represent: THE NEW YORK CITY COMMUNITY GARDEN COALITION

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Josh Levin

Address: 209 Joralemon Street

I represent: Brooklyn Borough President Eric Adams

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: JASON GREEN

Address: 234 JOHNSON AVE BK NY

I represent: EDENWORKS

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Adriana Espinoza

Address: _____

I represent: NYLCV

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Deborah Martin

Address: 234 W. 31 St. 10th Floor, NY, NY 10001

I represent: NYRP

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Molly Culver

Address: 808 Lincoln Place BK 11216

I represent: The Youth Farm

Address: 600 Kingston Ave. Brooklyn 11203

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/2017

(PLEASE PRINT)

Name: Alina Ortiz

Address: 217 MANHATTAN AVE BK NY 11206

I represent: MYSELF

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. ~~1661~~

☐ in favor ☐ in opposition

Date: 10/24/17

(PLEASE PRINT)

Name: Chiara Miclie

Address: 114 West 47th St. CI-35

I represent: JUST FOOD

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1685 Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Paula Segal

Address: ~~Community Development Project~~

I represent: Urban Justice Center

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: MARA KRAVITZ

Address: _____

I represent: 596 Acres

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Katherine Sp11

Address: 322 w. 72nd St. 8B NYC 10023

I represent: Teens for Food Justice

Address: 33 w. 60th St. NYC 10023

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26

(PLEASE PRINT)

Name: Harrison Hillier

Address: _____

I represent: Teens for Food Justice

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Annel Hernandez

Address: 322 Irving BK, NY

I represent: New York City Environmental Justice Alliance

Address: 166a 22nd Street

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: 10-26-17

(PLEASE PRINT)

Name: Barry Rothstein

Address: 1664 George St Apt 2L

I represent: _____

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. 1661

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Victor Flores

Address: 2010 Fulton St BSCAH

I represent: _____

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Paula Segal, Esq.

Address: _____

I represent: Self.

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/2017

(PLEASE PRINT)

Name: Kendra Valle

Address: 613 New Lots Ave Brooklyn

I represent: East New York Farms! United Community Land Co.

Address: 613 New Lots ave Brooklyn

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: 10.26.17

(PLEASE PRINT)

Name: SIMON ROBERTS

Address: 188 BROADWAY, BROOKLYN, 11211

I represent: ALLOTT

Address: " "

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Claudia Josephi

Address: 375 2nd St, BK. NY 11215

I represent: The Old Stone House + Washington Park

Address: 336 3rd St, BK. NY 11215

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Molly Hartmann, Senior Advisor

Address: _____

I represent: Office of Food Policy

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1685 Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Anita Laremont, Counsel DCP

Address: _____

I represent: DCP

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1685 Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Erik Botsford, Manhattan Borough Director

Address: _____

I represent: DCP

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Barry Dinerstein, Planner

Address: _____

I represent: DCP

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10-26-17

(PLEASE PRINT)

Name: Greg Todd

Address: 85 Schenectady Ave Bklyn

I represent: Organic Committee, BSWAB

Address: Brooklyn Boro Hall

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10-26-2017

(PLEASE PRINT)

Name: Tinia Pina

Address: 63 Flushing Ave, Broolyn, NY 11205

I represent: Re-Nuble, Inc.

Address: 63 Flushing Ave., Brooklyn, NY 11205

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1667 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Tatiana Z. Pawlowski

Address: c/o Brooklyn Law School 250 Joralemon St, BK, NY

I represent: N/A

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1685 Res. No. _____

☐ in favor ☒ in opposition

Date: 10/

(PLEASE PRINT)

Name: Michael Slattery

Address: 570 Lexington Ave

I represent: Real Estate Board of New York

Address: S/A

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Mariel A Costa

Address: _____

I represent: Bushwick City Farm

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/2017

(PLEASE PRINT)

Name: [illegible]

Address: 7 Pineapple St. #3R, Brooklyn, NY 11201

I represent: myself (researcher)

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Luisa Santos

Address: 4502 6th Ave Brooklyn, NY

I represent: Design Trust for Public Space

Address: 40 Worth St, Suite 603 NY, NY

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Ricky Stephens

Address: 225 DeKalb Ave #2, Brooklyn, NY 11205

I represent: AgTech X LLC

Address: 164 Meserole St, Brooklyn, NY 11206

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Daniel Wohl

Address: 3147 Broadway, Apt. 1B, New York, NY 10027

I represent: Myself

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Aziz Dehkan

Address: 379 1st Ave NY NY 10003

I represent: New York City Community Gardens Coalition

Address: 232 E 11th St NY NY 10003

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Elliott Fisher

Address: 630 Flushing Ave Brooklyn, NY 11206

I represent: Square Roots

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Allee Forbes Spear

Address: 302 Macon Street Apt 1 11216

I represent: 462 Halsey Community Farm

Address: 462 Halsey Street Brooklyn 11233

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: John Rudikoff

Address: 505 LaGuardia PL #2B NYC NY 10012

I represent: CURE at Brooklyn Law School

Address: 250 Jackson PL BK NY 11201

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Henry Sweets

Address: 182 Green St Apt 1 BK NY 11222

I represent: North Brooklyn Farms

Address: 320 Kent Ave BK

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: DANIEL GOODINE

Address: 2015 UNION ST

I represent: BEEBLY FARM IN BEDFORD STUYVESANT

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: NEVIN COHEN

Address: 534 W. 47 ST SR NYC

I represent: CUNY URBAN FOOD POLICY INSTITUTE

Address: 55 W. 125th ST Rm 605, NYC 10027

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. 1661

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: ROBERT LAING

Address: 15 WILLIAM ST #14B, NEW YORK NY 10005

I represent: FARM ONE

Address: AS ABOVE

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Carolyn Zezima

Address: 455 E. 14th St #8A

I represent: NYC FoodScape

Address: S/A

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: ELYSSA ROTHE

Address: 95 Beekman Ave, 10591

I represent: ~~AG~~ myself

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☐ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Holly O'Grady

Address: 72 E. 3rd St. #5D, NYC 10003

I represent: Art Horizons Foundation + Garden stories Leadership Workshops

Address: same as above

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Albert Williams

Address: 558 E 31st St, Brooklyn, NY, 11210

I represent: CUNY School of Public Health

Address: 55 W 125th St

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26

(PLEASE PRINT)

Name: Betty Mackintosh

Address: 340 W. 28th St, 17F, NY, NY

I represent: Self

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: October 25th

(PLEASE PRINT)

Name: Henry Gordon-Smith

Address: 27 Arion Place #213, Brooklyn, NY, 11206

I represent: Agritecture Consulting

Address: 40 Bushwick Ave Brooklyn, NY, 11211

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/2017

(PLEASE PRINT)

Name: ELIZABETH VAKNIN

Address: 9 WEST 70 ST #1F NY NY 10023

I represent: OUR NAME IS FARM, LLC.

Address: 69 WEST 71 ST #1L NEW YORK, NY 10023

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1661 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/26/17

(PLEASE PRINT)

Name: Jacob Roday

Address: 42 Chestnut St.

I represent: Myself

Address: _____

Please complete this card and return to the Sergeant-at-Arms