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NOTES

PUTTING PARADISE IN THE PARKING LOT: USING ZONING TO PROMOTE URBAN AGRICULTURE

Stephanie A. Maloney*

Introduction

In March of 1997, Mary Seton Coroby and her then-business partner Tom Sereduk stood on the abandoned, trash-strewn lot of a former galvanized steel plant in Philadelphia.¹ The old industrial site located amongst the still-operating factories of York Street² and a neighborhood of tightly packed row houses was perhaps the furthest thing from an archetypal farm property.³ Undeterred, Mary and Tom capitalized on the beginnings of the "buy local" movement, planting and hydroponically⁴ growing thirteen varieties of lettuce and selling to the City's restaurants.⁵ Years later, Greensgrow Farm has transformed that once dilapidated industrial lot into a thriving business that earns close to one million dollars a year.⁶

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¹ See Greensgrow Farms, http://www.greensgrow.org/about-us/history (last visited Mar. 2, 2013); Jerry Kaufman & Martin Bailkey, Farming Inside Cities 35–36 (2000); David Hanson & Edwin Marty, Breaking Through Concrete 103–12 (2012).

² See April White, Best of Philly 2008: The Best Philadelphian, Philadelphia Magazine, Aug. 2008, http://www.phillymag.com/articles/best-of-philly-2008-the-best-philadelphian.

³ See id.

⁴ Hydroponic farming is a process that utilizes irrigation and mineral-enhanced water rather than soil. Growing by this process "allowed them to bypass the immediate concerns over the lot's one-time Brownfields status (presence of hazardous contaminants), a distinction it had earned from the Environmental Protection Agency (EPA) following the closure of its former occupant, an industrial steel plant." Hanson & Marty, *supra* note 1, at 109.

⁵ See White, supra note 2.

⁶ See Hanson & Marty, supra note 1, at 103; Chris Lazarus, Go in with Your Eyes Open: Greensgrow Farm, Philadelphia, Pennsylvania, New Village (2002), http://www.newvillage.

Urban agriculture and the local food movement are altering the way Americans think about and experience food production, creating a "new wave of conscious eaters" who want to buy fresh, local, and sustainably grown food. From Michelle Obama's organic vegetable garden on the South Lawn of 1600 Pennsylvania Avenue⁸ to rooftop growing beds in Brooklyn,⁹ Americans and their cities have begun to take notice of the urban agricultural movement¹⁰ as a way to encourage health, food security, environmental stewardship, and economic and community development.¹¹ While the success of urban farms is tied to the vision and industriousness of local producers,¹² such as Mary Coroby, it is also inextricably tied to the municipal zoning regulations of the cities the farms call home.

net/Journal/Issue2/2greensgrowfarm.html. Coroby differentiates an urban farm from a personal garden, defining an urban farm as "set inside a city... an operation that is—that exists to grow product for sale or for trade, as opposed to for your own pleasure and consumption." From Rooftops and Abandoned Lots, an Urban Harvest, NPR (May 18, 2012, 1:00 PM), http://m.npr.org/story/153015279 [hereinafter From Rooftops].

- 7 Jennifer Cockrall-King, Food and the City 11 (2012); see Neil D. Hamilton, Moving Toward Food Democracy: Better Food, New Farmers, and the Myth of Feeding the World, 16 Drake J. Agric. L. 117, 123 (2011) ("The energy, passion, and enthusiasm shown around better food, urban agriculture, new farmers, and related issues is deep and growing."). Urban agriculture is not only an American trend but has received international attention, particularly in the development strategies of the United Nations as a means of cultivating food security and income generation. See generally Agropolis (Luc J.A. Mougeot ed., 2005) (presenting detailed international studies linking urban agriculture with the United Nations Millennium Development Goals and demonstrating that urban agriculture fosters food security and household income).
- 8 See Marian Burros, Obama to Eat Local Produce (Really Local), N.Y. Times, Mar. 20, 2009, at A1, available at http://www.nytimes.com/2009/03/20/dining/20garden.html.
- 9 See Marian Burros, Urban Farming, a Bit Closer to the Sun, N.Y. Times, June 17, 2009, at D1, available at http://www.nytimes.com/2009/06/17/dining/17roof.html.
- 10 See Kate H. Brown & Andrew L. Jameton, Public Health Implications of Urban Agriculture, 21 J. Pub. Health Poly 20, 20 (2000) ("A 1991 report estimated that 33% . . . (696,000) of the 2 million farms in the United States are located within metropolitan areas. These farms produce 35% of all crops and livestock sales.").
- 11 See Carolin Mees & Edie Stone, Zoned Out: The Potential of Urban Agriculture Planning to Turn Against Its Roots, 5 Cities & Env't 1 (2012), available at http://digitalcommons.lmu.edu/cate/vol5/iss1/7; Nina Mukherji & Alfonso Morales, Zoning for Urban Agriculture, 3 Zoning Prac. 2, 2 (Mar. 2010), available at http://www.planning.org/zoningpractice/2010/pdf/mar.pdf; Patricia E. Salkin & Amy Lavine, Regional Foodsheds: Are Our Local Zoning and Land Use Regulations Healthy?, 22 Fordham Envil. L. Rev. 599, 600 (2011) ("Research indicates that community based food systems have the potential to 'simultaneously address issues of food security, public health, social justice, and ecological health in local communities and regions '" (quoting Kimberly Hodgson et al., Urban Agriculture 4 (2011))).
- 12 See Neil D. Hamilton, America's New Agrarians: Policy Opportunities and Legal Innovations to Support New Farmers, 22 Fordham Envil. L. Rev. 523, 526 (2011) (noting the grass-roots agricultural movement includes people who "represent a branch of the 'cultural creatives,' people who are savvy with new information technologies and who have the marketing skills to open new economic opportunities." (citing Paul H. Ray & Ruth Anderson, Cultural Creatives (2000))).

The establishment and operation of urban agricultural activities are significantly affected by municipal zoning and land use policies. ¹³ On a general level, urban agriculture can be defined as "the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities. ¹⁴ As cities begin to recognize the numerous forms and benefits of urban agriculture, some have taken steps to actively promote it through "protective zoning, ¹⁵ which sanctions agricultural production. Conversely, local policies can also place inhibitive restrictions on urban agriculture. Outdated zoning regulations frequently, and often unintentionally, present obstacles to urban agricultural development. ¹⁶ Restrictive zoning can prohibit city residents from raising farm animals, constructing greenhouses, and even selling produce from a backyard garden. ¹⁷ Examining the policy regimes of cities that have been leaders in urban agricultural zoning ¹⁸ can facilitate responsible consideration of the different kinds of zoning and the purposes those models are designed to serve.

This Note explores municipal zoning regulations related to urban agriculture and evaluates specific zoning mechanisms that can be implemented to promote the efficient accommodation of urban agriculture and access to locally grown food. Consideration of the benefits and costs of urban agriculture, alongside the zoning practices of leading cities, will assist in developing zoning laws that meet the needs of American cities and citizens. Part I of this Note introduces the concept and history of urban agriculture, providing an overview of its benefits and challenges. Part II examines municipal zoning and the principal zoning restrictions that impact farming and gardening in a

¹³ See Angel Arroyo-Rodriguez & Christopher Germain, Zoning Model for Urban Agriculture and Composting, BioCycle, July 2012, at 24; Mukherji & Morales, supra note 11, at 2; Salkin & Lavine, supra note 11, at 601 ("[T]hese local [land use] policies are often one of the most important factors contributing to food production potential."); infra Part II.

¹⁴ Katherine H. Brown et al., CMTY. Food Sec. Coal., Urban Agriculture and Community Food Security in the United States 1 (2002), available at http://www.foodsecurity.org/PrimerCFSCUAC.pdf (quoting Martin Bailkey and Joe Nasr); see also Hodgson et al., supra note 11, at 2 ("Urban agriculture entails the production of food for personal consumption, education, donation, or sale and includes associated physical and organizational infrastructure, policies, and programs within urban, suburban, and rural built environments." (emphasis omitted)). Hanson and Marty propose a working definition of urban farming focused on the intentionality of the farmer: "An urban farm is an intentional effort by an individual or a community to grow its capacity for self-sufficiency and well-being through the cultivation of plants and/or animals." Hanson & Marty, supra note 1, at 5.

¹⁵ See Mukherji & Morales, supra note 11, at 2.

¹⁶ See id.

¹⁷ See Amanda Rhoads et al., Portland Multnomah Food Pol'y Council, The Diggable City 8 (2006), available at http://www.portlandoregon.gov/bps/article/122595 ("Retail sales and service uses are not allowed in many of the zones where agriculture is either an allowed use or can be allowed as a conditional use."); see also Ecocities 248 (Richard Register ed., rev. 2006) ("The anti-zoning camp suggests that destructive segregation is intrinsic to all zoning."); infra Part II.B—D.

¹⁸ See infra Part III.

city. Part III reviews the varied efforts of municipalities to support urban agriculture by incorporating it into local zoning codes. Part IV concludes by offering recommendations for the municipal integration of agriculture into the urban fabric, with particular attentiveness to participatory policymaking in the form of food policy councils.¹⁹

I. THE CONCEPT OF URBAN AGRICULTURE

A basic definition and knowledge of urban agriculture—its history, evolution, characteristics, benefits, and risks—is necessary to realizing how municipal planning and policy can promote farming and gardening in cities. This Part provides an overview of urban farming, emphasizing the diversity of form and function within the urban agricultural movement. This will supply the framework needed to understand current agricultural initiatives and evaluate the extent to which municipal zoning for agricultural promotion can be developed.

A. Defining Urban Agriculture

Historically, discussion of farming in American cities has "focused primarily on private . . . and community gardens." Today's urban agriculture exhibits much greater diversity and is characterized by a "wide range of types,

As opposed to an urban farm that [might have] a manager and a staff of employees or volunteers who collectively plan, sow, tend, and harvest the produce and flowers for market sales, the community garden model allots small beds to individuals who apply for a plot, pay a nominal fee . . . , and adhere to a basic set of shared guidelines.

Hanson & Marty, supra note 1, at 13–14; see also Mees & Stone, supra note 11, at 1 (discussing the function performed by community gardens and arguing it should be treated differently from other urban agriculture projects). Indeed, the Seattle, Washington Land Use Code differentiates an urban farm from a community garden, the latter being understood as a "shared space" similar to a park. See Seattle Mun. Code. §§ 23.42.051, 23.42.053 (2010), available at http://clerk.ci.seattle.wa.us/~public/toc/t23.htm; see also infra Part III.C (discussing Seattle land use policy). The response that might be levied is that urban farming, even for-profit operations, frequently are public-oriented and seek to

¹⁹ Urban agriculture functions as part of a community's "food system," the "chain of activities and processes related to the production, processing, distribution, disposal, and eating of food." Samina Raja et al., A Planners Guide to Community and Regional Food Planning 3–4 (2008). Examination of the role and place of agriculture within a city should include consideration of the overarching community food system, emphasizing an interrelated and place-based food ethic that promotes strengthening local and regional networks of "producers, processors, distributers, and consumers of food." *Id.*

²⁰ Kimberly Hodgson et al., Funders' Network, Investing in Healthy, Sustainable Places Through Urban Agriculture 1 (2011), available at http://www.fundersnetwork.org/files/learn/Investing_in_Urban_Agriculture_Final_110713.pdf. For the purpose of this Note, urban farming and community gardening will be addressed without distinction. However, some question whether the community garden movement should be included in the category of urban agriculture. Those who advocate for distinguishing between the two reason that community gardening is about more than food production, rather it also provides a social place for the neighborhood to gather. One of the differences noted is that:

sizes, and locations."²¹ Urban farming is no longer just about vegetables; city-dwellers are raising chickens and pigs, farming fish, and even making honey on rooftops.²² The definition and vision of urban agriculture has expanded beyond the community garden to include "not only growing plants and raising animals for consumption, but also the processing, distribution, marketing and sale of food products and food by-products, such as compost."²³

Fundamentally, "urban agriculture" is an umbrella term meant to capture the breadth and variety of municipal food growing and distribution practices, from private family gardens to intensive, entrepreneurial urban farms, from street vendors to canning plants.²⁴ Urban agriculture can be

provide community and social benefits, bringing together the neighborhood. *See* Hanson & Marty, *supra* note 1, at 5; *see also infra* Part II.C.

- 21 Susan Wachter et al., Redevelopment Auth. of the City of Phila., Land Use & Pol'y Study 15 (2010), available at http://penniur.upenn.edu/uploads/media_items/urban-agriculture-final-report.original.pdf.
 - 22 See From Rooftops, supra note 6.
- 23 Hodgson et al., *supra* note 20, at 1; *see* Mukherji & Morales, *supra* note 11, at 2. To put real examples to this definition, urban agriculture can include everything from growing tomatoes and cucumbers on a condo balcony, to keeping chickens or bees in the backyard, to linking school gardens with hands-on science class, to cultivating crops in a vacant, industrial lot to sell at the local farmers' market (à la Greensgrow). *See generally* Hanson & Marty, *supra* note 1 (providing the stories of twelve uniquely different urban farming projects).
- 24 See Heather Wooten & Amy Ackerman, Nat'l Pol'y & Legal Analysis Network to Prevent Childhood Obesity, Seeding the City 4 (2012), available at http://changelabsolutions.org/sites/default/files/Urban_Ag_SeedingTheCity_FINAL_%28CLS_201205 30%29_20111021_0.pdf; Nina Mukherji, The Promise and the Pitfalls of Municipal Policy for Urban Agriculture 2 (2009) (unpublished M.S. dissertation, University of Wisconsin-Madison) (on file with ProQuest Dissertations & Theses). Urban agriculture may be differentiated into three broad categories: home gardens, community gardens, and urban farms. Each may be defined:

Home gardens are food-producing spaces on private, residential property (multifamily or single family) that are used primarily by the property's residents or guests.

Community gardens are smaller-scale urban agriculture sites (often serving a neighborhood) where individuals and families grow food primarily for personal consumption or donation.

Urban farms are larger-scale, more intensive sites where food [or livestock] may be grown by an organization or private enterprise, and often include entrepreneurial opportunities such as growing food for sale.

WOOTEN & ACKERMAN, *supra*, at 24. *See generally* Brown et al., *supra* note 14, at 12–13 (differentiating urban growers from backyard gardeners, community gardeners, and commercial growers); Rhoads et al., *supra* note 17, at 2 (providing general descriptions of the varying characteristics of urban agricultural activities, such as scale, intensity of use, consumer base, land ownership, etc.); Wachter et al., *supra* note 21, at 4 ("There does not appear to be universal consensus as to whether the terms [urban farm and community garden] differ in terms of scale, actors, or objectives.").

classified into many categories,²⁵ but for the purposes of this Note will be defined as "food production in cities, through plant cultivation or animal husbandry, and the processing and distribution of that food."²⁶ To that end, urban agriculture taps "resources (unused or under-used space, organic waste), services (technical extension, financing, transportation), and products (agrochemicals, tools, vehicles) . . . and, in turn, generates resources (green areas, microclimates, compost), services (catering, recreation, therapy), and products (flowers, poultry, dairy) largely for [the] urban area."²⁷

Within this overarching definition fall the many variations of urban agriculture: "home vegetable gardens, orchards, community gardens, school gardens, roof gardens, market gardens, urban farms, aquaculture, greenhouses, animal husbandry as well as urban farm stands, Community Supported Agriculture (CSA) and farmers' markets that sell produce from urban sources in urban areas."28 Each expression of urban agriculture employs a different and unique type of municipal land space, according to the types of land available. Urban farms and gardens are appearing in "almost every corner of our cities,"29 in backyards and window boxes, on rooftops and roadsides, beside railroads and city rivers, in vacant lots, and on the grounds of schools, hospitals, and prisons.³⁰ An abandoned quarter-acre lot behind Crenshaw High School in South Central Los Angeles was transformed into a vegetable garden for environmental education.³¹ In Seattle, underutilized City lands, public right-of-ways, and the ground beneath power lines have become home to community gardens coordinated by the P-Patch program.³² In Queens, New York, Brooklyn Grange farm occupies an acre rooftop, holding about 1.2 mil-

²⁵ See Hodgson et al., supra note 20, at 4-5 (detailing and describing typologies of urban agriculture).

²⁶ Mukherji, *supra* note 24, at 2 (emphasis omitted); *see* Hodgson et al., *supra* note 20, at 2 (including a comprehensive definition of urban agriculture developed in 2007 by the Community Food Security Coalition's Urban Agriculture Committee). This definition intentionally does not include peri-urban agriculture, which occurs at the fringes of urban areas. The policies used to support it have more to do with control of urban sprawl and rural farmland protection, which are separate issues from municipal zoning policies in cities. *See* Mukherji, *supra* note 24, at 3 n.1.

²⁷ Luc J.A. Mougeot, Growing Better Cities 4–5 (2006) (citation omitted).

²⁸ Mukherji, *supra* note 24, at 2–3; *see also* Dana May Christensen, *Securing the Momentum: Could a Homestead Act Help Sustain Detroit Urban Agriculture*?, 16 Drake J. Agric. L. 241, 245 (2011) (utilizing the same overarching definitions and variations of urban agriculture).

²⁹ Hanson & Marty, supra note 1, at 10.

³⁰ See MOUGEOT, supra note 27, at 5.

³¹ This garden was the beginning of the now highly successful natural food products company, Food From the 'Hood (FFTH), which today has an annual budget of over a half million dollars. *See* Kaufman & Bailkey, *supra* note 1, at 15. *See generally Food from the Hood*, Corp. for Educ. Radio & Television, http://www.certnyc.org/ffth.html (last visited Apr. 12, 2013) (providing a brief overview of the FFTH program).

³² See Hanson & Marty, supra note 1, at 13; P-Patch Community Gardens, Seattle Dep't of Neighborhoods, https://www.seattle.gov/neighborhoods/ppatch (last visited Nov. 28, 2012).

lion pounds of soil.³³ Indeed, "urban agriculture is anywhere and everywhere that people can find even the smallest space to plant a few seeds."³⁴

These varied forms of practice and location raise implications for urban planning and municipal zoning since much urban agriculture falls outside the range of traditional land use designations.³⁵ Land use controls, particularly zoning regulations, play an important role in the viability of urban agricultural production, infrastructure, and distribution. Municipal zoning policies govern the permissible land uses in any given area of the city,³⁶ often prohibiting a mixing of uses in an attempt to "order" the city.³⁷ As zoning is typically a restrictive regulatory mechanism,³⁸ urban agriculture is generally not permitted as of right in residential, commercial, or mixed use zoning districts³⁹—meaning, for example, residents may be unable to raise chickens, erect greenhouses, or even grow vegetables above a certain height.⁴⁰ This separationist "order-maintenance agenda"⁴¹ may be rooted in traditional zoning principles, but it does not necessarily parallel the history of urban agricultural activities.

B. Centuries of City Farming: The History of American Urban Agriculture

For most of human civilization, the histories of agriculture and cities have been closely connected. Food production is perhaps the most basic of all human activities, and many of the first great cities developed atop good farmland and were "designed . . . in part to defend and control the food supply. This intimate connection between urban and agricultural land physically and socially shaped the evolution of both for the better part of 11,000 years—"it is only in the last 100 years or so that we have attempted to separate the two." 45

³³ See Hanson & Marty, supra note 1, at 125; About the Farm, Brooklyn Grange, http://www.brooklyngrangefarm.com/about-the-grange (last visited Nov. 28, 2012).

³⁴ MOUGEOT, supra note 27, at 5.

³⁵ See Hodgson et al., supra note 11, at 2.

³⁶ See Kate A. Voigt, Note, Pigs in the Backyard or the Barnyard: Removing Zoning Impediments to Urban Agriculture, 38 B.C. Envill. Aff. L. Rev. 537, 540 (2011).

³⁷ See Nicole Stelle Garnett, Save the Cities, Stop the Suburbs?, 116 Yale L.J. 598, 624 (2006) (reviewing Robert Bruegmann, Sprawl (2005) and Joel Kotkin, The City: A Global History (2005)).

³⁸ See Mukherji & Morales, supra note 11, at 4.

³⁹ See Hodgson et al., supra note 11, at 28.

⁴⁰ See Mukherji & Morales, supra note 11, at 4.

⁴¹ Garnett, supra note 37, at 619-20.

⁴² See Deirdra P. Stockmann, The New Food Agenda: Municipal Food Policy and Planning for the 21st Century 1 (2012) (unpublished Ph.D. dissertation, The University of Michigan) (on file with ProQuest Dissertations & Theses).

⁴³ See Paul K. Conkin, A Revolution Down on the Farm, at x (2009).

⁴⁴ Stockmann, supra note 42, at 1.

⁴⁵ Id. at 2.

Agricultural production has been present in American cities for centuries, dating back to the residential kitchen gardens of the colonial period.⁴⁶ Given that food production was the basis of most eighteenth-century regional economies, colonial America understood agriculture as central to urban economic growth.⁴⁷ As cities industrialized in the nineteenth century—presumptively putting urban land to "higher and better uses"⁴⁸—land-intensive farming operations began shifting to the outlying rural and suburban areas.⁴⁹ Urban farmers downscaled to vegetable gardening, orchards, and other perishable crops. This transition coincided with the expansion of public markets, reducing the need for self-production of food.

The financial panic and recession of the late 1800s ushered in a period of school gardens and vacant lot cultivation intended to address poverty and economic need.⁵⁰ Detroit introduced a garden "potato patch" program,⁵¹ which was replicated by twenty other city governments, including Chicago, Philadelphia, and New York.⁵² Later on, during both World Wars and the Great Depression, federal and local governments responded to food shortages and low public morale by encouraging Americans to plant victory gardens,⁵³ as well as relief gardens on vacant lots to occupy and feed the unemployed and poor.⁵⁴ The economic boom in the aftermath of World

⁴⁶ See Hodgson et al., supra note 11, at 10.

⁴⁷ See id.

⁴⁸ Stockmann, *supra* note 42, at 3 (internal quotation marks omitted). Limiting the use of land for agricultural purposes allowed for proliferation of "the 'higher and better uses' that the raging American economy demanded: housing and highways, factories and financial districts." *Id.*

⁴⁹ This was facilitated by the introduction of paved roads, an advancement—along with others like canning, refrigeration, and processed and preserved products—that meant agricultural activities could take place farther away from population centers. *See Introduction, in Urban Agriculture* 14, 14 (Nancy Dziedzic & Lynn M. Zott eds., 2012); Stockmann, *supra* note 42, at 2; Voigt, *supra* note 36, at 541.

⁵⁰ Hodgson et al., supra note 11, at 11; see John E. Mogk et al., Promoting Urban Agriculture as an Alternative Land Use for Vacant Properties in the City of Detroit: Benefits, Problems and Proposals for a Regulatory Framework for Successful Land Use Integration, 56 Wayne L. Rev. 1521, 1527 & nn.21 & 22 (2010); Mukherji & Morales, supra note 11, at 2.

⁵¹ See Mogk et al., supra note 50, at 1527 n.21.

⁵² See H. Patricia Hynes, A Patch of Eden, at x (1996). But see Hodgson et al., supra note 11, at 11 ("While such small-scale urban agriculture efforts grew, professional planners at the beginning of the 20th century saw more intensive agricultural uses—such as animal production and meat processing—as threats to public health and safety, and they used the new tool of zoning to move such facilities out of central cities.").

⁵³ See Mukherji, supra note 24, at 11 ("[G]ardening was encouraged by both federal and local governments as a patriotic activity that would free up food for American troops abroad."). Even Eleanor Roosevelt planted a victory garden at the White House. Hodgson et al., supra note 11, at 11. Indeed it was the last garden at 1600 Pennsylvania Ave. until First Lady Michelle Obama planted her organic vegetable garden in 2009. See Burros, supra note 8.

⁵⁴ The urban gardens of both World Wars and the Depression were the "largest-scale urban agriculture initiatives in the United States to date." Hodgson et al., *supra* note 11, at 11. In 1943, the United States Department of Agriculture reported there were over

War II brought residential development to much of the land once used for gardening, and by the mid-twentieth century many cities' zoning codes no longer recognized agriculture as a legitimate land use.⁵⁵ Corporate-owned "agribusiness" replaced small, local family farms,⁵⁶ supermarkets and retail grocers displaced local food production, and urban gardening was relegated to a niche activity.⁵⁷

The social activism of the 1960s and 1970s revived urban farming in response to concerns over the "energy crisis, food quality and price, environmental problems, and urban decline." However, unlike past gardening movements, local governments largely ignored the reemergence of grassroots urban agricultural developments. Guided instead by local, community-based organizations operating as nonprofits, urban farming persisted and gained momentum throughout the end of the twentieth century—despite being somewhat "marginalized and occasionally imperiled by the development boom and [urban] gentrification [of the 1990s and 2000s]." The most recent expression of urban agriculture has brought with it new participants, as well as innovative and varied models of intensive farming and gardening practices, which are taking advantage of the ample vacant land in many of America's deindustrialized cities. This new generation of urban farmers—everyone from recent college graduates to local, city-based organi-

twenty million gardens, which produced an estimated nine to ten million tons of fruits and vegetable, more than 41% of the nation's crop that year. *See id.*; Mogk et al., *supra* note 50, at 1527. It is notable that these relief and victory gardens were largely supported and legitimized by campaigns of the federal government, which largely saw the gardening movement as a tool of food security. *See* Hynes, *supra* note 52, at xi; Mukherji & Morales, *supra* note 11, at 2–3; Mukherji, *supra* note 24, at 11.

- 55 See Darrin Nordahl, Public Produce 3 (2009); Hodgson et al., supra note 11, at 11. This was furthered by the increasing industrialization of farming. As farms grew in scale and began to utilize chemical fertilizers, pesticides, and preservatives there was little room or need for them to remain in the city. The food supply chain had grown to an international scope, diminishing the role of local agriculture in feeding city residents. Id. By the second half of the twentieth century the number of farms in America had shrunk from more than six million in 1940 to just two million at the beginning of the new millennium. Nordahl, supra, at 3.
 - 56 See Nordahl, supra note 55, at 3.
 - 57 See Hodgson et al., supra note 20, at 3; Mukherji & Morales, supra note 11, at 3.
- 58 Mukherji & Morales, *supra* note 11, at 3; *see* Brown & Jameton, *supra* note 10, at 22; Symposium, *Overstudied and Underserved: Uses of the Law to Promote Healthy, Sustainable Urban Communities; Session IV: Land Use/Planning/Community Economic Development Tools, 9 Rutgers J.L. & Pub. Pol'y 177, 456–57 (2012) [hereinafter <i>Overstudied and Underserved*] (explaining how the industrialization of Baltimore has led to massively poor health indicators, such as the highest levels of lead poisoning and asthma in the State of Maryland, and noting the connection "between loss of natural resources and the need to restore those natural resources in order to restore the overall health and quality of life of the people").
 - 59 See Mukherji & Morales, supra note 11, at 3.
- 60 *Id.*; see Hodgson et al., supra note 20, at 3; Hodgson et al., supra note 11, at 12; Mukherji, supra note 24, at 12.
- 61 See Mukherji & Morales, supra note 11, at 3; Jane E. Schukoske, Community Development Through Gardening: State and Local Policies Transforming Urban Open Space, 3 N.Y.U. J.

zations—is challenging the exclusion of agriculture and forcing city planners and governments to rethink land use regulations for the support and integration of food systems into the local landscape and economy.⁶²

The popularity and resurgence of interest in urban agriculture is motivated, at least in part, by a growing demand for local food production. The growth of farmers' markets is representative of the consumers' desire to connect with farmers. In August 2012, the United States Department of Agriculture (USDA) released a report indicating there are now close to 8000 farmers' markets across the country, a 9.6% increase since 2011. Thus, consumers, in addition to farmers, are playing an important role in building this new agricultural and food system. By caring about the quality of food, how it is produced and by whom, and by becoming invested in the issues surrounding food, health, and farming, consumers are translating interest into action. In "creating demand for locally produced, farm fresh, high-quality food, consumers can [secure] a future for farmers and, in so doing, obtain a healthier,

Legis. & Pub. Pol'y 351, 353 (2000) ("According to a recent [1998] study, approximately twenty-three percent of the land in the average American city lies vacant.").

62 See Hodgson et al., supra note 11, at 13; Stockmann, supra note 42, at 9; Michael Abelman, Agriculture's Next Frontier: How Urban Farms Could Feed the World, Earth Island J. (November 2000), available at http://www.utne.com/2000-11-01/AgriculturesNextFrontier.aspx. Abelman writes of the profound consequences of urban agriculture:

A quiet revolution is stirring in our food system. It is not happening so much on the distant farms that still provide us with the majority of our food: It is happening in urban neighborhoods, suburbs, and small towns. It has evolved out of a basic need to know our food and to have some sense of control over its safety and its security. It is a new agricultural revolution that provides poor people with a safety net, an opportunity to provide nourishment and income for their families. And it offers an oasis for the human spirit where urban people can gather, preserve something of their heritage through the native seeds and foods . . . they've brought from other places, and teach their children about food and the earth.

The revolution is taking place in small gardens, under power lines, on roof-tops, at farmers' markets, and in the most unlikely of places. It is a movement with the potential to affect a number of social issues—economic justice, environmental quality, personal health, community empowerment, and cultural connection.

Id. at 3.

- 63 See Christensen, supra note 28, at 241–42; Neil D. Hamilton, Farms, Food, and the Future: Legal Issues and Fifteen Years of the "New Agriculture," 26 J. Envil. L. & Litig. 1, 2 (2011).
- 64 See Farmers Markets and Local Food Marketing, USDA AGRIC. MKTG. SERV., http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateS&leftNav=Whole-saleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers%20Market%20Growth&acct=frmrdimkt (last updated Aug. 3, 2012) (presenting the USDA farmers' market directory); see also Hamilton, supra note 63, at 8 (noting that "[f]armers' markets are in many ways the most critical element in not just the local food movement, but in the trend toward a new agriculture").

better tasting, food supply."⁶⁵ Overall, these actions make visible the food system and draw attention to urban agriculture as a key component of a sustainable system.

In reaction to this community pressure, responsive cities have begun forming and implementing policy to protect and promote urban farming. Local governments are recognizing that urban agriculture can "improve public health, contribute to neighborhood revitalization and community economic development, and help promote 'green' cities." ⁶⁶ By considering the myriad of benefits that flow from urban agriculture and the individuals and institutions impacted by farming and gardening in the city, it is possible to realize the significant role urban agriculture may play in the future of American cities and the lives of their citizens. ⁶⁷

C. Benefits and Burdens of Growing Food in the City

Urban agriculture is embedded in communities, yet it is part of the larger food-system continuum.⁶⁸ It is thus uniquely situated to provide a wide range of tangible benefits both to local residents and to the city itself. Farming in cities can provide fresh, inexpensive produce to low-income residents who might not otherwise have access to wholesome food.⁶⁹ These farms can contribute economically by creating jobs, developing new industries,⁷⁰ and even offering training programs for those with a history of homelessness, substance abuse, or incarceration.⁷¹ Community gardens on neglected, vacant lots can lead to the beautification and greening of neighborhoods, the fostering of social capital, and the prevention of trash accumulation and illegal dumping.⁷² Accordingly, urban farms and gardens also deliver environmental benefits by creating green space, reducing pollution, and productively reusing contaminated lands.⁷³ Nevertheless, there are trade-offs. Urban agriculture can pose potential health and environmental risks. Urban gardens sited in close proximity to automobile traffic or industrial sites risk contamination. There are also potential nuisance and qualityof-neighborhood concerns with, for example, livestock located in residential

⁶⁵ Neil D. Hamilton, Tending the Seeds: The Emergence of a New Agriculture in the United States, 1 Drake J. Agric. L. 7, 12 (1996).

⁶⁶ Mukherji & Morales, supra note 11, at 3; see Hodgson et al., supra note 11, at 20; Wachter et al., supra note 21, at 1.

⁶⁷ See Hamilton, supra note 65, at 13.

⁶⁸ See Hodgson et al., supra note 20, at 14.

⁶⁹ See Mukherji & Morales, supra note 11, at 2.

⁷⁰ See Mogk et al., supra note 50, at 1530.

⁷¹ See Mukherji & Morales, supra note 11, at 2. For example, Growing Home in Chicago, Illinois provides transitional employment for individuals with histories of incarceration, homelessness, or substance dependence. Growing Home, http://growinghomeinc.org/learn-more/transitional-employment (last visited Mar. 2, 2013).

⁷² Mogk et al., supra note 50, at 1530; Schukoske, supra note 61, at 354-56.

⁷³ HODGSON ET AL., supra note 11, at 21.

communities. Weighing these benefits and burdens is necessary in considering the effectiveness and place of farming in cities.

1. Access to Healthy Food

Many city residents have limited access to unprocessed, fresh food. Cities such as Detroit—devoid of supermarkets but dotted with fast-food restaurants and convenience stories—can be food deserts⁷⁴ for poorer populations, contributing to hunger and high rates of obesity and diabetes.⁷⁵ Urban agriculture helps to close this food gap⁷⁶ and reduce hunger by increasing the amount, availability, and affordability of nutritious, minimally processed food.⁷⁷ It promotes community health by expanding access to fresh, inexpensive, locally grown produce,⁷⁸ which retains greater nutritional value than food shipped into the city. On average, produce travels an estimated 1500 to 2500 miles from farm to plate.⁷⁹ This globalization of food increases the price of produce and causes it to lose nutritional value when transported long distances and subjected to heavy chemical preservatives.⁸⁰ Urban agriculture offers the possibility of growing and selling food directly within the community, thereby ensuring higher quality produce with a higher nutri-

- 74 A food desert can be defined as a geographical area with inadequate access to fresh, healthy food. This is due to many factors including lack of area supermarkets, insufficient access to transportation, and poor food planning. Typically food deserts occur in low-income urban areas and lead to a dependence on "fast food restaurants and small neighborhood convenience stores and markets which tend to have . . . considerably more processed and less healthy food options." Nina Haletky & Owen Taylor, *Urban Agriculture Helps Create Food Security for Poor Americans, in* Urban Agriculture, *supra* note 49, at 27, 30.
- 75 See Nordahl, supra note 55, at 39; Christensen, supra note 28, at 246; Mogk et al., supra note 50, at 1532 ("A study of all food stores in the three low-income zip codes in Detroit found that only nineteen percent, or fewer than one in five stores, carried a minimal 'healthy food basket' (products based on the food pyramid).").
- NORDAHL, *supra* note 55, at 4–5. *But see* Judith Warner, *The Locavore's Illusions*, TIME, Oct. 14, 2011, *available at* http://ideas.time.com/2011/10/14/the-locavores-illusion (quoting Joel Berg, executive director of the New York City Coalition Against Hunger, as saying "these small, local, well-meaning, if trendy efforts, however important and beneficial, can't come close to accomplishing the large-scale good of a government program like the unsexy, old standby, food stamps").
- 77 See Brown et al., supra note 14, at 7; Haletky & Taylor, supra note 74, at 33 ("A study by the Philadelphia Urban Gardening Project found that low-income people who garden each save an average of \$150 in food costs per growing season."). But see Warner, supra note 76 (arguing for a reality check to be given to anti-hunger advocates who are "enchanted with the vision of a foodie utopia where a rainbow coalition of backyard farmers will solve the nation's food ills by growing charmingly mottled heirloom tomatoes").
- 78 See Hanson & Marty, supra note 1, at 8–9; Wooten & Ackerman, supra note 24, at 5.
 - 79 See Cockrall-King, supra note 7, at 51–52.
- 80 See Brown et al., supra note 14, at 5–8; Nordahl, supra note 55, at 20–21; Mogk et al., supra note 50, at 1532. To provide an example of the dysfunction of the system: For residents of Chicago, which is located in the second-largest corn producing state in the nation, the average sweet corn travels 813 miles to reach them. Nordahl, supra note 55, at 21.

tional value. To those who participate in its cultivation, urban agriculture also offers exercise opportunities and the potential for a healthier lifestyle: "Gardeners also eat a more balanced diet, consuming fewer sweets and sugar-sweetened beverages and a wider variety of vegetables."

Beyond nutritional needs, urban agriculture contributes to food security⁸² and helps to alleviate the many costs of our current industrialized food system.⁸³ Increasingly concentrated industrial food production⁸⁴ and processing has raised concerns about crop diversity,⁸⁵ safety,⁸⁶ and environmental degradation. Farmers and gardeners in cities are smaller-scale and more diversified producers. They often have direct oversight of production

⁸¹ Wooten & Ackerman, *supra* note 24, at 4; *see* Christensen, *supra* note 28, at 246; Mogk et al., *supra* note 50, at 1533.

⁸² Food Security can be defined as "daily access to an adequate supply of nutritious, affordable, and safe food." Nordahl, *supra* note 55, at 5; *see* Allison Hagey et al., PolicyLink, Growing Urban Agriculture 14 (2012), *available at* http://www.fairfoodnetwork.org/sites/default/files/UrbanAg_FullReport.pdf ("One nationwide study found that low-income zip codes have 25 percent fewer chain supermarkets than middle-income zip codes. Compared to predominately white zip codes, majority African American zip codes have about half the number of supermarkets, and mostly Latino zip codes have about a third as many.").

⁸³ See Marcia Caton Campbell, Building a Common Table: The Role for Planning in Community Food Systems, 23 J. Plan. Educ. & Res. 341, 345 (2004).

⁸⁴ Currently over ninety-eight percent of the United States food supply is produced by industrial agribusiness farms. As Michael Pollan contends, "the bigger and more global the trade in food, the more vulnerable the system is to catastrophe." Michael Pollan, Farmer in Chief, N.Y. Times, Oct. 12, 2008, § SS1 (magazine), at 62, available at http://www.nytimes.com/2008/10/12/magazine/12policy-t.html; see Richard Britz, The Edible City Resource Manual 3 (1981) (maintaining corporate control of food production is expanding at an alarming rate and estimating a "mere 50 corporations now reap 90 percent of the profits of the entire food industry"); Jodi Soyars Windham, Putting Your Money Where Your Mouth Is: Perverse Food Subsidies, Social Responsibility & America's 2007 Farm Bill, 31 Environs Envil. L. & Pol'y J. 1, 4 (2007) (describing America's food production system as heavily reliant on unsound mechanical and chemically intensive farming methods); Kathryn A. Peters, Note, Creating a Sustainable Urban Agriculture Revolution, 25 J. Envil. L. & Litig. 203, 207 (2010).

⁸⁵ See Cockrall-King, supra note 7, at 10; Elisabeth Rosenthal, Food for Thought: Crop Diversity Is Dying, N.Y. Times, Aug. 17, 2005, available at http://www.nytimes.com/2005/08/17/world/europe/17iht-food.html.

⁸⁶ The recent food-borne epidemics and outbreaks of Escherichia coli (E. coli) and Salmonella reveal the safety hazards of industrial farms and distribution centers. See Nordahl, supra note 55, at 5; Nina Planck, Op-Ed, Leafy Green Sewage, N.Y. Times, Sept. 21, 2006, available at http://www.nytimes.com/2006/09/21/opinion/21planck.html. It should also be noted that the question of relative safety of urban versus industrially grown food is hard to answer definitively. The national outbreaks "provide reasons to believe that there are perhaps inherent risks associated with our centralized system of agriculture that are simply not prevalent with local produce." Nordahl, supra note 55, at 27. One basic reason for this has to do with distribution, as "[a] decentralized system of many small, local farms and garden plots simply could never have the potential of infecting that many people over so large a geographic area." Id.; see Hanson & Marty, supra note 1, at 9; Hamilton, supra note 65, at 10.

and distribution methods—typically marketing foods for immediate consumption with little need for preservatives or packaging.⁸⁷ Urban agriculture can play a key role in reform and the transition from reliance on industrial agricultural processes to a more sustainable food system.

2. Environmental Remediation and Neighborhood Greening

Urban agriculture promotes environmental sustainability by reversing the decline of urban areas. In creating green spaces and adding organic content to the urban environment—such as the compost, leaf mulch, and soil needed to support plant growth—city farms and gardens help reduce pollution, improve urban air quality, prevent storm water runoff, and mitigate urban heat island effect.⁸⁸ Local food production reduces carbon and greenhouse gas emissions associated with transporting food, using less fossil fuel and requiring less packaging, refrigeration, storage, and chemical inputs.⁸⁹ Urban farmers also frequently employ sustainable techniques to ensure closed-system farming, transforming wastewater and other agricultural byproducts into recycled resources to be used again.⁹⁰

3. Community Building and Education

Beyond sustainable food production, urban agriculture plays a profound role in advocacy, education, and community development. City residents are able to achieve a "sense of empowerment" and "well-being" by having greater control and personal investment in their food system.⁹¹ Community and school gardens, farmers' markets, and CSA programs can provide opportunities for community involvement, social interactions and relationships among diverse sections of the community, ⁹² and nutritional and environmental edu-

⁸⁷ See Mukherji, supra note 11, at 21 ("[U]rban agriculture provides opportunities for growing a greater diversity of crops, since food production in gardens and urban farms tends to be geared towards tastes at the scale of the individual or the neighborhood, rather than what will be most profitable on a large scale.").

⁸⁸ See Wachter et al., supra note 21, at 1; Wooten & Ackerman, supra note 24, at 4–5; Adrienne Lyles-Chockley, Building Livable Places: The Importance of Landscape in Urban Land Use, Planning, and Development, 16 Buff. Envil. L.J. 95, 114 (2009) ("Rooftops typically comprise at least 30% of a city's total land area and offer prime space for food protection with the added benefits of reduced energy consumption and decreased greenhouse gas emissions."); Mogk et al., supra note 50, at 1534.

⁸⁹ See Nordahl, supra note 55, at 6; Wooten & Ackerman, supra note 24, at 4–5.

⁹⁰ For example, Growing Power, an urban agricultural project begun by Will Allen, composts more than six million pounds of food waste a year, including "the farm's own waste, material from local food distributors, spent grain from a local brewery, and the grounds from a local coffee shop." Roger Bybee, *Urban Agriculture Feeds and Empowers People, in* Urban Agriculture, supra note 49, at 36, 38; *see* Brown et al., *supra* note 14, at 8; Mougeot, *supra* note 27, at 7; Mogk et al., *supra* note 50, at 1534.

⁹¹ Brown et al., supra note 10, at 3.

⁹² See Wachter et al., supra note 21, at 1; Dorothy A. Borrelli, Filling the Void: Applying a Place-Based Ethic to Community Gardens, 9 Vt. J. Envill. L. 271, 277 (2008); Garnett, supra note 37, at 625–27 (discussing the New Urbanists and the claim that mixed-use environ-

cation.⁹³ In communities with high rates of unemployment, urban farms and gardens are sources of employment, job training, and educational programming.⁹⁴ Urban agriculture can also work to stabilize distressed neighborhoods through the conversion of blighted and vacant properties into productive spaces.⁹⁵ Vacant lots often become sites for illegal dumping, trespass, vandalism, and arson.⁹⁶ Farms and gardens capitalize on this available land. Serving as low-cost alternative property uses,⁹⁷ urban farms and gardens have been shown to decrease crime and violence, acting as a catalyst for community and economic development.⁹⁸

ments foster more inclusive and healthy communities by providing opportunities for informal social interaction).

- Ponnis Fomod, Operations Manager of Food from the 'Hood, a community garden program designed to involve and educate inner city youth, spoke about the program as allowing community residents to be "constructive" rather than "destructive." Food from the Hood, supra note 31. Compare Hanson & Marty, supra note 1, at 6 (discussing the educative benefits of school gardens), and Brown et al., supra note 14, at 6 (noting the social and health benefits of urban agriculture for children), and Nathan Crane McClintock, Cultivation, Capital, and Contamination: Urban Agriculture in Oakland, California 76–81 (Fall 2011) (unpublished Ph.D. dissertation, University of California, Berkeley) (on file with ProQuest Dissertations & Theses) (detailing the successful garden-based curriculums in California schools), with Hanson & Marty, supra note 1, at 129–36 (profiling the success of an alternative curriculum farm in a Detroit high school), and Caitlin Flanagan, Cultivating Failure: How School Gardens Are Cheating Our Most Vulnerable Students, The Atlantic, Jan./Feb. 2010, available at http://www.theatlantic.com/magazine/archive/2010/01/cultivating-failure/307819 (arguing school farms act as a distraction from the learning and standardized test preparation needed to prepare underserved students for college).
- 94 Haletky & Taylor, *supra* note 74, at 33 (providing examples of urban farming sponsored job training and rehabilitation programs).
- 95 Vacant lots are a significant and increasing problem in American cities: "Chicago now has an estimated 70,000 vacant parcels of land. Philadelphia has 31,000, and in nearby Trenton, New Jersey, 900 acres—18 percent of its total land area—is currently vacant." Martin Bailkey & Joe Nasr, From Brownfields to Greenfields: Producing Food in North American Cities, CMTY. FOOD SEC. NEWS, Winter 1999, at 6, 7.
- 96 See Catherine J. LaCroix, Urban Agriculture and Other Green Uses: Remaking the Shrinking City, 43 Urb. Law. 225, 230 (2011); Mogk et al., supra note 50, at 1534; Schukoske, supra note 61, at 353.
- 97 See Green for All, Successful Entrepreneurial Urban Farming Requires Financial Investment, in Urban Agriculture, supra note 49, at 87, 89; see Mogk et al., supra note 50, at 1521, 1534.
- 98 See Hodgson et al., supra note 20, at 6; Kaufman & Bailkey, supra note 1, at 4; Sinye Tang, New Haven Land Trust, The Impact of Urban Farms on New Haven Community Safety and Property Values 3 (2011), available at http://www.yale.edu/cbl/Sample Projects_files/Tang_ImpactOfUrbanFarmsOnNewHaven.pdf ("This report supports the hypothesis that community gardens help reduce crime rates."); Borrelli, supra note 92, at 277; Mogk et al., supra note 50, at 1534; Schukoske, supra note 61, at 356; Emily Badger, Greening Vacant Lots Linked to Reduced Gun Violence, The Atlantic (Nov. 21, 2011), http://www.theatlanticcities.com/neighborhoods/2011/11/greening-vacant-lots-linked-reduced-gun-violence/526/#; Alex Kotlowitz, Plant Tomatoes, Harvest Lower Crime, MotherJones (July/Aug. 2012), http://www.motherjones.com/media/2012/07/chicago-food-desert-urban-farming. But see Brown et al., supra note 14, at 17 (noting there continue to be

4. Economic Development

City farming and gardening present many opportunities to increase urban economic productivity. The USDA estimated that the market for locally grown food would rise to a seven billion dollar industry in 2012.⁹⁹ Notably, the commercial marketing and sale of agricultural products is often heavily regulated. Zoning ordinances that prohibit street parking, signs, or commercial activity in residential zones may prohibit urban farms and gardens from taking advantage of this lucrative local food market.¹⁰⁰ Purposeful consideration of these barriers must take into account that money spent on locally grown food—whether it is sold through farmers' markets, CSAs, or wholesale to restaurants—is likely invested back into the community. Urban agriculture is a useful contributor to economic development and serves to encourage entrepreneurship, create jobs, provide skills training for underserved populations,¹⁰¹ and stimulate local commerce.¹⁰² These economic

concerns about vandalism and theft in urban gardens); Kaufman & Bailkey, *supra* note 1, at 69 (acknowledging vandalism, specifically theft, mentioned as a problem by some urban farm managers).

99 See Hodgson et al., supra note 20, at 7 ("[I]n 2008, community and squatter gardens in Philadelphia produced summer vegetables worth approximately \$4.9 million"); Brown & Jameton, supra note 10, at 26 ("With a ready and eager market for their products, and given a good climate and business savvy, an urban farmer in the United States can expect an income of \$1,000 to \$10,000 and more from an acre of land."). At the time of publication of this Note, the Agricultural Marketing Service of the USDA had yet to release data on the exact growth of the local food industry.

100 See Mogk et al., supra note 50, at 1549; Casey Miner, Urban Farming vs. Urban Zoning, Terrain Magazine (Spring 2010), available at http://ecologycenter.org/terrain/issues/spring-2010/urban-farms-vs-urban-zoning.

101 For example, Growing Home's Wood Street Urban Farm on Chicago's South Side offers paid internships and a job training program for the unemployed, homeless, and previously incarcerated; the majority of its interns are referred to the program by their parole officers. See Growing Home, supra note 71. "Over 150 people have gone through the program [with] 65 percent mov[ing] into employment or educational training and 90 percent find[ing] stable housing." Hanson & Marty, supra note 1, at 143 (internal quotation marks omitted). The program has a five percent recidivism rate. Id. For Harry Rhodes, who helped start Growing Home, this success shows "that when people are given a chance to work and change their lives, they will do everything they can to stay out of prison." Id.

102 But see Introduction, in Urban Agriculture, supra note 49, at 15–16 ("[O]n a visit to [Detroit] in 2010, the Reverend Jesse Jackson alienated those in the urban farming movement by calling the notion of agriculture in Detroit 'cute but foolish,' adding in a subsequent interview, 'Detroit needs investment in industry, housing, and construction—not bean patches.'"); Richard Longworth, The Urban Poor Need Supermarkets, Not Urban Agriculture, in Urban Agriculture, in Urban Agriculture, supra note 49, at 166, 166–170 (contending that "urban farms show civic failure" and that cities with high rates of food insecurity need the affordable prices and quality products of supermarkets); Hamilton, supra note 63, at 9 (noting the USDA's "Know Your Farmer Know Your Food" campaign generated a backlash of opposition from representatives of Big Agriculture and Congressmen, such as Senator John McCain, who described it as "completely detached from the realities of production agriculture," and "aimed at small, hobbyist, organic producers").

benefits can overlap with benefits to the community, particularly when gardens and farms replace vacant lots.¹⁰³ This transition increases surrounding neighborhood property values¹⁰⁴ and decreases the costs of vacant lot maintenance and crime prevention, thereby saving cities money.¹⁰⁵

5. Negative Impacts

While urban agriculture offers a multitude of benefits, it also poses potential health and environmental challenges. The evaluation and balancing of these is complicated by the fact that "costs are borne and benefits enjoyed at different levels by different stakeholders." ¹⁰⁶ Urban farmers or gardeners may overuse or misuse fertilizer or pesticides, posing risks to the farmers and neighborhood. ¹⁰⁷ Farms and gardens may be located in proximity to industry, automobile traffic, and other pollutants, or sited on former industrial or commercial spaces leading to contamination concerns ¹⁰⁸—the farms' "[s]oil and water may be contaminated with industrial wastes and pollutants... [and] [i]nadequate assessment, cleanup, or containment of a site can pose serious health problems to both producers and consumers." ¹⁰⁹

¹⁰³ See Hanson & Marty, supra note 1, at 10.

^{104 &}quot;A recent study of New York City community gardens found that within five years of a community garden's opening, neighboring property values increased by as much as 9.4 percent and continued to increase over time," and community gardens led to "increases in tax revenues of about half a million dollars per garden over a 20-year period." Hodgson ET AL., *supra* note 11, at 21 (internal quotation marks omitted).

¹⁰⁵ See Mukherji, supra note 24, at 20.

¹⁰⁶ Wachter et al., *supra* note 21, at 18. The placement of urban farms and gardens may raise concerns about the equitable distribution of environmental hazards and locally unwanted land uses. Consideration and caution should be paid so that nuisance or noxious land uses are not confined to low-income and minority neighborhoods. *See* Craig Anthony Arnold, *Planning Milagros: Environmental Justice and Land Use Regulation*, 76 Denv. U. L. Rev. 1, 3, 29 (1998) (documenting the "disproportionately higher amount of industrial and other non-residential land uses in census tracts where low-income people of color live, based on a study of thirty-one census tracts in seven cities nationwide"); Luke W. Cole, *Empowerment as the Key to Environmental Protection: The Need for Environmental Poverty Law*, 19 Ecology L.Q. 619, 620, 635–36, 647–48 (1992) (arguing that "[p]oor people bear the brunt of environmental dangers . . . and their negative effects on human health and safety" because the poor have the fewest resources, legally and politically, to combat the siting of these dangers).

¹⁰⁷ MOUGEOT, *supra* note 27, at 9; Brown & Jameton, *supra* note 10, at 30–31 ("Carried by the wind, sprays of these chemicals [fertilizers and pesticides, including herbicides, insecticides, and fungicides] can easily overshoot a garden's boundaries and contaminate the surrounding neighborhood.").

¹⁰⁸ See Hodgson et al., supra note 11, at 22; Brown & Jameton, supra note 10, at 31; Mogk et al., supra note 50, at 1535–40.

¹⁰⁹ Hodgson et al., *supra* note 11, at 22; *see* Mougeot, *supra* note 27, at 9; Mogk et al., *supra* note 50, at 1535–37 (recording the significant concern posed by the hazardous amounts of lead that have been documented in the backyards and communities of Detroit, New York, Baltimore, Boston, Chicago, Los Angeles, Minneapolis, and Philadelphia). *But see* Brown et al., *supra* note 14, at 17 (detailing measures, such as raised beds and sheltered production, to counteract the potential for contamination of urban farms' soil and

Residents and municipalities are also often concerned that urban farms or community gardens may generate unpleasant sounds or smells. The usage of agricultural equipment and the raising of livestock—such as chickens, goats, and bees—undoubtedly affect neighbors and other adjacencies. In order for urban agriculture to be successful long-term, it is necessary to identify and manage these potential problems.

II. ZONING AND URBAN AGRICULTURE

Municipal zoning regulations provide a means by which city governments may "effectively coordinate land uses among neighboring landowners and resolve community conflicts before they occur." Zoning ideally functions to ensure compatibility and stability amongst land uses, balancing the needs and desires of the community. As such, it is uniquely situated to be both responsive to the demand for farming in cities and the local place-specific variations necessary to minimize health, safety, and nuisance concerns. When used thoughtfully and effectively, zoning is particularly well-suited to reconcile the benefits and burdens that come with the placement of agricultural activities alongside, and in close proximity to, residential and other uses. This Part presents an overview of zoning regulations and details zoning restrictions that impede urban agriculture.

A. Overview of Zoning Regulations

Zoning is the principal means of municipal land use regulation. Local governments divide localities into geographic districts—or "zones"—and stipulate appropriate land uses. This division holds significant implications for urban agriculture as it is often premised on the isolation and separation of functions. As ex ante land use regulations, zoning laws are prospectively designed and often reflect the "long-standing judgment that the appropriate way to order different land uses is to separate them from one another into

produce); Kaufman & Bailkey, *supra* note 1, at 68 (suggesting a variety of methods to combat the contamination of urban land parcels).

¹¹⁰ See Wachter et al., supra note 21, at 5, n.7 (noting local governments can play a role in mitigating these negative externalities by stating allowed and disallowed land uses); Mogk et al., supra note 50, at 1542–43 (suggesting an important first step to raising livestock in the city is to "define at the outset what a municipality means by the term," possibly by specifically listing acceptable animals).

¹¹¹ Mogk et al., *supra* note 50, at 1535.

¹¹² See Voigt, supra note 36, at 538; see also William W. Buzbee, Urban Sprawl, Federalism, and the Problem of Institutional Complexity, 68 FORDHAM L. Rev. 57, 92–94, n.147 (1999) (arguing state and local governments are best situated to tailor land use policies to constituent needs and desires).

¹¹³ See The Practice of Local Government Planning 251 (Frank S. So & Judith Getzels eds., 2d ed. 1988); Ecocities, supra note 17, at 247; Mukherji & Morales, supra note 113, at 4 ("[P]lanners interested in urban agriculture can do valuable work by reviewing and redesigning [zoning] ordinances related to urban agriculture.").

single-use zones."¹¹⁴ This concept of zoning dates back to the early twentieth century, when local governments sought to manage the emerging land use conflicts and disorder that arose with industrialization and the expansive growth of cities.¹¹⁵ Municipalities began to prohibit the mixing of different land uses, sectioning urban centers into zones and segregating supposedly incompatible land uses.¹¹⁶ Thus, these regulatory schemes dictated what structures and uses were permitted within particular zones and on any given individual's property.¹¹⁷

Property owners eventually challenged the validity of these laws in the landmark land use case *Village of Euclid v. Amber Realty Co.*¹¹⁸ The Supreme Court rejected the challenge and upheld the constitutionality of municipal planning and land use regulation as a valid exercise of the states' police power. The Court agreed that a local government could decide the permitted land uses within its borders, thereby endorsing and instantiating the concept of Euclidean zoning, a concept that continues to form the foundation of many municipal regulatory systems. ¹²⁰

Under the theory of Euclidean zoning, a city divides "its land into zones, stating the permitted uses and physical and spatial building requirements or

- 114 NICOLE STELLE GARNETT, ORDERING THE CITY 3 (2010); see THE PRACTICE OF LOCAL GOVERNMENT PLANNING, supra note 113, at 252 ("[A] philosophical underpinning[] of zoning is the notion that different land uses are incompatible and ought to be separated from each other."). But see Ecocities, supra note 17, at 247–48 ("[Z]oning has divided the city and precluded the natural development of land uses in complementary relationship with one another . . . destructive segregation is intrinsic to all zoning.").
- 115 The industrialization of cities brought many changes and conflicts that were beyond the corrective powers of the doctrines of nuisance and servitude. *See* Property 925 (Jesse Dukeminier et al. eds., 7th ed. 2010); LaCroix, *supra* note 96, at 239; Voigt, *supra* note 36, at 546.
- 116 See The Practice of Local Government Planning, supra note 113, at 252–53; Matthew J. Parlow, Greenwashed?: Developers, Environmental Consciousness, and the Case of Playa Vista, 35 B.C. Envil. Aff. L. Rev. 513, 515 (2008).
- 117 See Parlow, supra note 116, at 515.
- 118 272 U.S. 365 (1926). The Village of Euclid, a suburb of Cleveland, Ohio, had adopted a zoning scheme that divided the municipality into a number of zones, ranging from the most restrictive, where relatively few land uses were allowed, to the least restrictive, where all land uses were allowed. *Id.* at 380–83. In the absence of such restrictions, the land owned by Amber Realty could have likely been profitably developed for industry, but as a consequence of the zoning, a portion of Amber's land was zoned for only residential use. *Id.* at 384. Amber Realty raised a facial challenge, arguing the zoning scheme violated Section 1 of the Fourteenth Amendment by depriving the company of its property without due process of law. *Id.* at 386; *see* The Practice of Local Government Planning, *supra* note 113, at 252; LaCroix, *supra* note 96, at 240.
- 119 Vill. of Euclid, 272 U.S. at 397; see Charles M. Haar, In Accordance with a Comprehensive Plan, 68 Harv. L. Rev. 1154, 1154 (1955). Through the police power, states may regulate to protect the health, safety, welfare, and morals of the community. See Property, supra note 115, at 941; The Practice of Local Government Planning, supra note 113, at 254.
- 120 See LaCroix, supra note 96, at 240. The Euclid decision also "endorsed a principle of deferential review of local land use legislative decisions" and held that "a zoning restriction can be valid even if it reduces the value of an individual parcel of land." Id.

limitations for each zone; property owners . . . then build on and use their property accordingly." ¹²¹ City planners often structure these zones in accordance with a comprehensive plan ¹²²—a provision frequently required by the enabling act of the respective state, which effectively empowers the local government to enact zoning ordinances. ¹²³ The comprehensive plan sets out the long-term guidelines and goals of the municipality ¹²⁴—zoning is one of the tools used to give it effect. ¹²⁵ Consequently, to the extent possible, zoning schemes are intended to be aligned with and responsive to the needs and best interests of the local community. ¹²⁶ Even as the forms and specifics of zoning laws vary amongst cities, there are certain basic components to most regulatory land use systems. Generally the local government, in dividing the community into districts, imposes differing regulations on each that dictate allowable land uses, placement of buildings, lot size and shape, and intensity

¹²¹ Parlow, *supra* note 116, at 515.

¹²² Also called the "city," "general," or "master" plan. See Property, supra note 115, at 942; Haar, supra note 119, at 1154–55.

¹²³ See Property, supra note 36, at 941; Voigt, supra note 36, at 547. Almost every state has adopted enabling acts modeled after the 1924 Standard Zoning Enabling Act drafted by the United States Department of Commerce, though a few have added modifications over the years. Property, supra note 115, at 941. The first three sections of the Standard Act state the key elements and purposes of the zoning power. Haar, supra note 119, at 1155–56. The subsequent sections permit the adoption of legislation and amendments, and call for the establishment of planning (or zoning) commissions. Id. The state delegation of the zoning power to local governments thus provides a specific tool for local land use control. See Property, supra note 115, at 929, 941; LaCroix, supra note 96, at 239; Allyson Spacht, Note, The Zoning Diet: Using Restrictive Zoning to Shrink American Waistlines, 85 Notre Dame L. Rev. 391, 402, n.82 (2009).

¹²⁴ See Arnold, supra note 106, at 106–07. But see Property, supra note 115, at 942 ("[O]nly about half of the states require comprehensive plans, and sometimes only in the weakest of terms."); Daniel R. Mandelker, Planning and the Law, 20 Vt. L. Rev. 657, 657 (1996) (reviewing the limited role of the comprehensive plan in land use planning law).

¹²⁵ See Haar, supra note 119, at 1155–56; Voigt, supra note 36, at 547; see also Advisory Comm. on Zoning, U.S. Dep't of Commerce, A Standard State Zoning Enabling Act 9 n.41 (1926), available at https://www.planning.org/growingsmart/pdf/SZEnablingAct 1926.pdf ("It is highly desirable that all zoning schemes should be worked out as an integral part of the city plan.").

¹²⁶ See Sheila R. Foster, Collective Action and the Urban Commons, 87 Notre Dame L. Rev. 57, 79 (2011); Charles M. Haar, The Twilight of Land-Use Controls: A Paradigm Shift?, 30 U. Rich. L. Rev. 1011, 1020 (1996) (arguing that in zoning "the public interest of a larger society asserts itself"); Lea S. VanderVelde, Local Knowledge, Legal Knowledge, and Zoning Law, 75 Iowa L. Rev. 1057, 1059 (1990). Though there have been constitutional challenges to what qualifies as a legitimate public interest for the purposes of zoning, the Court has consistently applied a broad interpretation. See Berman v. Parker, 348 U.S. 26, 33 (1954) ("The concept of the public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled." (citation omitted)); LaCroix, supra note 113, at 241.

of land uses and structures.¹²⁷ The traditional categories are residential, commercial, industrial, and agricultural districts.¹²⁸ These distinctive zones regulate the use and development of the land accordingly and commonly serve to prohibit any mixing of land uses.¹²⁹ Within each zone, there can be primary, accessory, and conditional uses.¹³⁰ Urban agricultural activities can be incorporated into these uses in different ways.¹³¹ Zoning regulations can treat urban agriculture as a district, permitting a "wide range of agricultural activities, including raising crops and animals."¹³² Alternatively, urban agriculture can be incorporated as a "use or set of uses that are permitted, conditional, or forbidden, depending on the district."¹³³ Finally, some municipal

¹²⁷ See Wooten & Ackerman, supra note 24, at 6; The Practice of Local Government Planning, supra note 113, at 251.

¹²⁸ Intensity of land use refers to the degree of land cultivation and development. *See* The Practice of Local Government Planning, *supra* note 113, at 268.

¹²⁹ See Wooten & Ackerman, supra note 24, at 7.

¹³⁰ A principal or primary use is one that is automatically allowed in a certain zoning district, while an accessory use is dependent on or incidental to the main use. See WOOTEN & ACKERMAN, supra note 24, at 7 ("A 'conditional' use is a use that is suitable to a zoning district but not necessarily to every location Conditional uses require the landowner to seek approval before using a particular piece of property in that particular manner."); Nicole Stelle Garnett, On Castles and Commerce: Zoning Law and the Home-Business Dilemma, 42 Wm. & Mary L. Rev. 1191, 1205–07 (2001). For example, a community garden may be allowed as a primary permitted land use and then, subsequently, composting would likely be permissible as an accessory land use—even though independently it might have been considered an unlawful acceptance of waste not generated on-site. See Arroyo-Rodriguez & Germain, supra note 13, at 25 ("The purpose of an accessory use provision is to permit uses that are necessary, expected or convenient in conjunction with a primary use. In this case, composting is necessary for the community garden to manage on-site waste and make compost for use in the garden.").

¹³¹ See Mukherji & Morales, supra note 11, at 4; infra Part III.

Mukherji & Morales, supra note 11, at 4-6 ("This approach is being extended to urban agriculture in some cities, including Cleveland and Boston."). For examples of such zoning, see Recent Updates to Cleveland's City Code, CITY PLANNING COMM'N (2011), http:// planning.city.cleveland.oh.us/zoning/cpc.php (last visited Mar. 2, 2013); Urban Agriculture Rezoning, Bos. Redevelopment Auth., http://www.bostonredevelopmentauthority.org/ planning/PlanningInitsIndividual.asp?action=ViewInit&InitID=152 (last updated Feb. 11, 2013); see also Cleveland, Ohio, Zoning Code §§ 336.01, 347.02 (2009), available at http:/ /www.amlegal.com/library/oh/cleveland.shtml (creating an "urban garden district" and permitting residents to keep farm animals and bees). But see Wooten & Ackerman, supra note 24, at 14 (reviewing the impact of Right to Farm laws on the development of a community's urban agriculture zoning policy); Mogk et al., supra note 50, at 1523 n.1, 1557-62 (discussing state Right to Farm acts and cautioning cities to "exercise care in permitting the commercial production of farm products in order to avoid its zoning authority being preempted by the Act in favor of standards established under [the state's Generally Accepted Agricultural Management Practices]"); Patricia Norris et al., When Urban Agriculture Meets Michigan's Right to Farm Act: The Pig's in the Parlor, 2011 Mich. St. L. Rev. 365 (2011) (discussing the interplay of Right to Farm laws and urban agriculture).

¹³³ Mukherji & Morales, *supra* note 11, at 4. For example, agriculture could be a permitted use in an industrial district but not in a residential district.

codes either prohibit all agriculture¹³⁴ or "fail to mention whether agriculture or any agricultural activities are permitted or prohibited."¹³⁵

In addition to designating land uses, zoning also often prescribes design requirements for the intensity and density of each district, building height, minimum lot sizes, yard restrictions, and building setback. These types of design requirements impact the supporting structures needed for urban agriculture, such as greenhouses, hoop houses, composting bins, and storage sheds. Regulatory provisions limiting vegetation heights in yards and rights-of-way can also function to prohibitively impact farming and gardening, as can yard restrictions, which may obstruct the keeping of animals and livestock.

The detail, complexity, and variability of zoning codes often unintentionally make urban agriculture difficult.¹⁴⁰ Some municipalities may wish to promote widespread urban food production, while others may want to permit agriculture only in certain areas or restrict it entirely.¹⁴¹ What may be considered intensive farming in one community may not be thought so by another.¹⁴² Even as the many benefits achievable through urban agriculture are detailed, communities must still balance those benefits with associated costs. Zoning should be responsive to these differences and designed to allow communities to consider a range of agricultural activities.¹⁴³ In achiev-

¹³⁴ For example, under the current zoning code in Detroit agriculture is not a permitted use anywhere; it is completely absent from the zoning ordinances. See Detroit, Mich., Zoning Ordinances (2010), available at http://www.detroitmi.gov/CityCouncil/Council Divisions/CityPlanningCommission/ZoningandLandUse.aspx; Mindy Goldstein et al., Turner Envil. L. Clinic, Urban Agriculture 24 (2011), http://www.law.emory.edu/fileadmin/turner/Urban_Agriculture_Report_FINAL.pdf; Mogk et al., supra note 50, at 1550. The absence of such zoning is problematic because "[w]here a particular use of land . . . is not included within a community's zoning code, it [becomes] vulnerable to being closed down as 'illegal' or displaced by development that [might be] expressly permitted" Wooten & Ackerman, supra note 24, at 7.

¹³⁵ Voigt, supra note 36, at 547.

¹³⁶ See The Practice of Local Government Planning, supra note 113, at 274; Arroyo-Rodriguez & Germain, supra note 13, at 24 (noting that zoning codes may also regulate composting activities and impose requirements for "operating hours, maintenance and governance").

¹³⁷ See Arroyo-Rodriguez & Germain, supra note 13, at 24; Mukherji & Morales, supra note 11, at 6.

¹³⁸ The likely rationale behind such regulations is the community desire for a neat, landscaped aesthetic. To achieve this end whilst still promoting urban food production some cities, such as Sacramento, California, have employed front landscape regulations that include "edible annuals, perennials, and other design elements 'when integrated as part of the landscape.'" Mukherji & Morales, *supra* note 11, at 6 (quoting Sacramento, Cal., City Code, Zoning Ordinance No. 2007-025 (2007)).

¹³⁹ See Mogk et al., supra note 50, at 1547; Mukherji & Morales, supra note 11, at 6.

¹⁴⁰ See Mukherji & Morales, supra note 11, at 2.

¹⁴¹ See Wooten & Ackerman, supra note 24, at 6.

¹⁴² See Mukherji & Morales, supra note 11, at 6-7.

¹⁴³ With an estimated eighty percent of the American population living in metropolitan areas and the global urban population expected to double by 2038, the problem of supply-

ing these goals it is necessary for city planners to examine the existing zoning barriers in light of the benefits and forms of urban agriculture so that local governments may make informed policy decisions. While variations within zoning regimes make it difficult to generalize, there are several zoning ordinances that commonly function to either assist or impede urban agriculture: categorization of agriculture as a land use; regulation of the sale of produce; and limits on the keeping of animals.

B. Agriculture as a Land Use

As a practical matter, homeowners do not need municipal zoning allowances for small-scale gardening; planting vegetables, fruit, or flowers is generally a permissible land use.¹⁴⁶ However, when gardening is improperly located on a lot¹⁴⁷ or begins to consume the majority of the property,¹⁴⁸ the agricultural activity may become subject to land use regulations. A city that restricts agriculture as a primary use in certain districts inevitably prohibits numerous productive land uses, such as a restaurant owner buying a plot adjacent to his store for raising crops.¹⁴⁹ Cities looking to sanction urban agricultural activities have, most commonly, begun to list urban agriculture as a permitted use in existing zoning districts.¹⁵⁰ Alternatively, some municipalities have created new zoning districts meant to designate specific areas for community gardens or urban farms.¹⁵¹

ing quality food produced within reasonable distances is a question local governments must begin to consider and address. *See* Brown et al., *supra* note 10, at 5; Mougeot, *supra* note 27, at 2–5.

- 144 See Mougeot, supra note 27, at 7–8.
- 145 See Goldstein et al., supra note 134, at 4.
- 146 See LaCroix, supra note 96, at 237; Voigt, supra note 36, at 550.
- 147 See Reshma Kirpalani, Woman Faces Jail Time for Growing Vegetable Garden in Her Own Front Lawn, ABCNews (July 12, 2011), http://abcnews.go.com/US/vegetable-gardenbrings-criminal-charges-oak-park-michigan/story?id=14047214#.ULEqvYWs3cE; Kale Roberts, Fight for the Right to Grow Food: Orlando Man Cited for Illegal Gardening, MOTHER EARTH News (Nov. 12, 2012, 3:14 PM), http://www.motherearthnews.com/grow-it/right-to-grow-food-zb01211zrob.
- 148 See Where Growing Too Many Vegetables Is Illegal, Economist (Oct. 3, 2010, 2:48 PM), http://www.economist.com/blogs/democracyinamerica/2010/10/weird_zoning_laws.
- 149 See Nordahl, supra note 55, at 50–51; Gene Gleeson, Urban Farm Halted Over Zoning Laws, KABC-TV/DT (Aug. 3, 2009), http://abclocal.go.com/kabc/story?section=news/local/los_angeles&id=6946703.
 - 150 See Hodgson et al., supra note 11, at 48.
- 151 See Cleveland, Ohio, Zoning Code § 336 (2010), available at http://www.amlegal.com/nxt/gateway.dll/Ohio/cleveland_oh/cityofclevelandohiocodeofordinances?f=tem-plates\$fn=default.htm\$3.0\$vid=amlegal:cleveland_oh (permitting community gardens and market gardens and including specific allowances for accessory structures and on-site sales); Chattanooga, Tenn., Zoning Ordinance §§ 38-451 to 38-457 (2011), available at http://www.chattanooga.gov/city-council-files/CityCode/Chapter38-Zoning%20-%20 updated%202-5-13.pdf (permitting a wide range of agricultural activities, including the raising of crops and livestock).

For example, in August of 2012 Philadelphia implemented a new zoning code. The result of a four-year process, the zoning code, for the first time, recognizes urban agriculture as a potential land use category. Intended to encourage farming and gardening within the City by validating agricultural land usage, Is also works to limit urban agriculture in certain zones. Elements of the zoning code work to restrict urban farming by: first, making certain agricultural subcategories "not permitted," and second, designating other agricultural activities permissible as conditional primary uses. The Philadelphia zoning code defines urban agriculture as a "use category" that includes "gardens, farms, and orchards that involve the raising and harvesting of food and non-food crops and the raising of farm animals. The Within the urban agriculture use category, the zoning code recognizes four subcategories: animal husbandry, Community gardens, The market or community

¹⁵² See Alan Greenberger, Zoning Code Remaps Future, Philly.Com (August 22, 2012, 3:01 AM), http://www.philly.com/philly/opinion/inquirer/20120822_Zoning_code_remaps_future.html. This was done in combination with an evaluation of Philadelphia's food system, aimed at "increasing the security and economic, social, and environmental benefits of the regional food system" Del. Valley Reg'l Plan. Comm'n, Eating Here 1 (February 2011), available at http://www.dvrpc.org/asp/pubs/publicationabstract.asp? pub_id=10063.

¹⁵³ See Pub. Interest Law Ctr. of Phila., Growing and Selling Food in Philadelphia: Some Basics on Zoning, Licensing and Permitting 1 (2012), available at http://pilcop.org/wp-content/uploads/2012/04/An-intro-to-Zoning-and-Permitting.pdf [hereinafter Growing and Selling].

¹⁵⁴ See Phila., PA., Zoning Code § 14-101(2)(b) (2011), available at http://www.amlegal.com/library/pa/philadelphia.shtml (noting that one of the goals of the Zoning Code is to "[p]romote sustainable and environmentally responsible practices by . . . [s]upporting the City's sustainability goals to . . . allow urban food production"); see also Hodgson et al., supra note 11, at 63 (noting Philadelphia is "among [the] cities where local government is attempting to 'catch up' with the . . . gardening and farming activity in its neighborhoods"); Kaufman & Bailkey, supra note 1, at 34–45 (detailing Philadelphia's history with urban agriculture and providing examples of urban agricultural projects).

¹⁵⁵ Phila., PA., Zoning Code § 14-601(11) (2011), available at http://www.amlegal.com/library/pa/philadelphia.shtml.

¹⁵⁶ See id. § 14-601(11)(a) ("Uses that involve the feeding, housing, and care of farm animals for private or commercial purposes [are] subject to applicable Philadelphia Code regulations on farm animals." (citations omitted)). There are currently severe restrictions on the allowance of farm animals. Philadelphia "will only allow farm animals on parcels of real property of 3 or more acres." Growing and Selling, supra note 153, at 1.

¹⁵⁷ Phila, PA., Zoning Code § 14-601(11)(b). A community garden is defined as: An area managed and maintained by a group of individuals to grow and harvest food crops or non-food crops (e.g., flowers) for personal or group consumption, for donation, or for sale that is incidental in nature. A community garden area may be divided into separate garden plots or orchard areas for cultivation by one or more individuals or may be farmed collectively by members of the group. A community garden may include common areas (e.g., hand tool storage sheds) maintained and used by the group. Community gardens may be principal or accessory uses and may be located on a roof or within a building.

supported farms,¹⁵⁸ and horticulture nurseries or greenhouses.¹⁵⁹ In charting the permissible uses for each district, the zoning code differentiates amongst these subcategories¹⁶⁰ and imposes differing requirements on each. For example, all urban agricultural use properties must ensure that water and fertilizer do not drain onto adjacent lots.¹⁶¹ Market and community-supported farms are required to erect specific fences and are prohibited from conducting any work involving power equipment or generators from sunset until sunrise.¹⁶² Thus, in districts where these categories of urban agriculture are designated as a principal use, community members may develop and maintain urban farms and gardens—according to these operating standards—without having to obtain a permit, variance, or any other governmental land use approval.¹⁶³

Philadelphia's zoning code makes clear that each zoning district may have multiple principal uses. In zoning for each district, the City identifies uses that are "permitted as-of-right," ¹⁶⁴ uses for which "special exception approval" is required, ¹⁶⁵ and uses that are not allowed or "expressly prohibited." ¹⁶⁶ After creating the urban agricultural use category, Philadelphia

¹⁵⁸ *Id.* § 14-601(11)(c) ("An area managed and maintained by an individual or group of individuals to grow and harvest food crops or non-food crops (e.g., flowers) for sale or distribution that is not incidental in nature. Market farms may be *principal* or *accessory* uses and may be located on a roof or within a building." (emphasis added)).

¹⁵⁹ *Id.* § 14-601(11)(d) ("A principal use involving propagation and growth of plants in containers or in the ground for wholesale or retail sales and distribution.").

¹⁶⁰ These subcategories are meant to "classify principal land uses and activities based on common functional, product, or physical characteristics, such as the type and amount of activity, the type of customers or residents, how goods or services are sold or delivered and site conditions." $Id. \S 14-601(1)(b)$.

¹⁶¹ *Id.* § 14-603(15)(a)(2).

¹⁶² *Id.* § 14-603(15)(b). These use-specific standards can also hinder urban agriculture. The prohibition of generators and power equipment overnight may prove limiting to certain agricultural techniques. The installation of fencing in accordance with § 14-706 of the Zoning Code could become burdensome, costly, and serve to deter urban farms. Such requirements suggest a sense of the extent of the costs willing to be borne by the community. *See* WOOTEN & ACKERMAN, *supra* note 24, at 7 (explaining that operating standards provide "concrete regulations to guide land use" and "ensure that operations will be carried out in a way that preserves and enhances the urban environment and is compatible with neighbors").

¹⁶³ See Wooten & Ackerman, supra note 24, at 7.

¹⁶⁴ Phila, PA., Zoning Code § 14-602(2)(b) ("Uses identified with a 'Y' in the use tables are permitted as-of-right in the subject zoning district, subject to compliance with any use-specific standards identified in the final column of the use tables and all other applicable standards of this Zoning Code.").

¹⁶⁵ *Id.* § 14-602(2)(c) ("Uses identified with an 'S' in the use tables are allowed if reviewed and approved in accordance with the special exception procedures in § 14-303(7) (Special Exception Approval). Uses approved by special exception are subject to compliance with any use-specific standards identified in the final column of the use tables and all other applicable standards of this zoning code.").

¹⁶⁶ *Id.* § 14-602(2)(d) ("Uses identified with an 'N' are expressly prohibited. Where use categories and subcategories are not listed in a use table, they are also prohibited.").

then applies it selectively and in differing capacities to existing districts. Amongst the differing residential districts, whether agriculture is allowed as a use varies according to each zone. In residential single-family detached districts—zoned R1, R1A, and R2¹⁶⁷—community gardens are permitted, but market or community-sponsored farms require approval.¹⁶⁸ Animal husbandry and horticultural uses are prohibited as a use outright.¹⁶⁹ The commercial zoning is similarly structured, allowing community gardens in all districts but expressly prohibiting market or community-supported farms, animal husbandry, and horticulture uses in districts C4 and C5¹⁷⁰—Center City Commercial Mixed-Use Districts¹⁷¹ that are high-density commercial and retail districts in the center of downtown Philadelphia.¹⁷² Finally, no

¹⁶⁷ Id. § 14-401(1)(c)(1). The number after the district label is meant to indicate the relative density of the zone: one being the sparest and five being the densest—this labeling is uniform throughout the Code. In regards to the purpose of Residential Single-Family Detached Districts, the Code specifies these "districts are primarily intended to accommodate detached houses on individual lots . . . or where such a land use pattern is desired in the future." Id.

¹⁶⁸ *Id.* § 14-602(3) at Table 14-602-1: Uses Allowed in Residential Districts; *see also id.* § 14-303(7) (explaining the special exception approval process).

¹⁶⁹ *Id.* §§ 14-602(2)(a), 14-602(3) ("Where use categories and subcategories are not listed in a use table, they are also prohibited.").

Id. at Table 14-602-2: Uses Allowed in Commercial Districts. There have been recent attempts to make two additional mixed-use commercial districts more restrictive, prohibiting community gardens and market farms. See Jared Brey, O'Neill Bills Reclassify Uses in Commercial Mixed-Use Districts, Create New District to be Mapped In, Plan Philly (Nov. 15, 2012), http://planphilly.com/articles/2012/11/15/o-e2-80-99neill-bills-reclassify-usescommercial-mixed-use-districts-create-new-district-be-mapped. Two bills have been introduced to rezone all CMX-2 districts—CMX-2 being "primarily intended to accommodate neighborhood-serving retail and services uses" and CMX-2.5 being "primarily intended to accommodate active, pedestrian-friendly retail and service uses." PHILA., PA., ZONING CODE $\S\S 14-402(1)(c)(.2), 14-402(1)(c)(.3)$. These zones account for one-third of all commercial areas in Philadelphia and passage of the bills would pose a significant threat to urban agriculture. See Campaign for Healthier Foods and Greener Paces: Make Your Voice Heard Against Bill 120917, Pub. Interest Law Ctr. of Phila., http://pilcop.org/take-action-to-protecturban-agriculture-in-philadelphia/#more-3204 (last visited Mar. 2, 2013); see also Mukherji & Morales, supra note 11, at 5 ("To encourage more widespread food production opportunities and small-scale retail, planners will want to make sure that at least some agricultural uses are permitted in districts encompassing large areas of the city."). Such attempts seem to reflect the unfortunate assumption that urban agriculture is not understood to be the "highest and best use" for commercial properties. Indeed, "most local government policy officials . . . would like to attract 'better' tax paying uses on this land." Kaufman & Bailkey, supra note 1, at 84.

¹⁷¹ PHILA., PA., ZONING CODE § 14-402(1)(c)(.5)-(.6).

¹⁷² See Growing and Selling, supra note 153, at 2.

urban agricultural use is allowed in districts designated as industrial ports, 173 recreational parks, or open spaces. 174

In regulating whether urban agricultural uses are allowed and on what terms, Philadelphia restricts residents from many varieties of urban agricultural activities. Philadelphia restricts residents from many varieties of urban agricultural activities. Per when urban agriculture is listed as a conditional use requiring "special exception approval"—as in single-family detached districts R1, R1A, and R2¹⁷⁶—this can still prove prohibitive of urban farming and gardening. Property As special exception uses, urban agriculture is not automatically allowed out of concern for a possible detrimental impact on the neighborhood. Property However, a resident can file an application to have the use approved for his or her land. Property This course of action can be burdensome and costly, and the hurdles it imposes may deter urban farmers from even attempting the review process.

For example, say a resident in district R1 has an oversupply of vegetables from her garden. She originally had been delivering the surplus to her neighbors but now wishes to charge a small fee for the food baskets to recoup her expenses. ¹⁸⁰ It is possible such a garden would constitute a "community garden," ¹⁸¹ a permissible use in R1. However, should such an arrangement be deemed a "[m]arket farm," ¹⁸² a "special exception approval" use in R1, the resident would have to go through a lengthy review procedure. ¹⁸³ Such a process is fairly involved, requiring the submission of an application to the Licensing & Inspection Office, an appearance before the Zoning Board, noti-

¹⁷³ See Phila, PA., Zoning Code §§ 14-403, 14-602(3) (including a table prescribing "Uses Allowed in Industrial Districts"). Though all agricultural uses are prohibited in districts zoned "Port Industrial," animal husbandry, horticulture nurseries, and greenhouses are permitted as principal uses in many of the industrially zoned districts. *Id.*

¹⁷⁴ *Id.* § 14-602(4) (including a table prescribing "Uses Allowed in Special Purpose Districts"). These districts are zoned SP-PO-A (Active Parks and Open Spaces) and SP-PO-P (Passive Parks and Open Spaces). *Id.* § 14-407.

¹⁷⁵ Some cities, such as Milwaukee, Wisconsin have very liberal agricultural use categories, permitting urban farming and gardening in all residential and industrial districts. *See* Mukherji & Morales, *supra* note 11, at 5. There were many in the Philadelphia urban farming community who were calling for urban agriculture to be a permitted use in all City districts. *See Urban Agriculture in the Zoning Code*... *Get Serious Ya'll!*, Marathon Farms (Jan. 29, 2011, 12:41 AM), http://marathonfarm.wordpress.com/2011/01/29/urban-agriculture-in-the-zoning-code-get-serious-yall.

¹⁷⁶ PHILA., PA., ZONING CODE §14-401(1)(c)(.1).

¹⁷⁷ See Hodgson et al., supra note 11, at 65 (explaining that urban agriculture practitioners have argued the prohibition on farms and gardens in low-density residential (R-1) districts is "overly restrictive and burdensome").

¹⁷⁸ Phila., PA., Zoning Code. § 14-303(7)(e)(.3).

¹⁷⁹ Id. § 14-303(7).

¹⁸⁰ See Miner, supra note 100.

¹⁸¹ Phila., PA., Zoning Code § 14-601(11)(b). The subcategory of "community garden" permits incidental sales for a small amount of food. *Id*.

¹⁸² *Id.* § 14-601(11)(c).

¹⁸³ *Id.* § 14-303(7).

fication to surrounding property owners, and a public meeting or hearing. 184 While this review process may be justified to ensure compatibility of uses, its prohibitive nature should also be acknowledged. Seeking approval "can be a time-consuming and expensive process, and the costs . . . are generally borne by the use permit applicant." Designating urban agriculture an independent land use category certainly suggests Philadelphia's desire to encourage widespread urban agriculture and may well reflect a deliberative balancing of costs and benefits. Deciding amongst the many possible uses for land in a given community is necessarily a "question of local needs and values." However, by requiring special approval of urban agriculture in some zones, and expressly prohibiting it in others, the City's zoning code works to restrict urban agriculture as a planning priority.

C. Restrictions on Selling Products from Urban Farms

Zoning regulations can also discourage or prohibit the sale of urbangrown crops and animals.¹⁸⁸ Distribution of urban agricultural products takes a variety of forms, from CSAs to on-site farm stands to farmers' markets.¹⁸⁹ These direct-sale models serve to connect local producers with consumers and build social capital in neighborhoods. 190 The increasing interest in farmers' markets has exposed the dearth of zoning codes that acknowledge direct agricultural marketing and sales as a permitted use. 191 Regulations that deter this kind of entrepreneurial urban agriculture are often nonspecific and obsolete restrictions on retail and commercial activities in certain zones, particularly residential zoning districts. 192 For instance, "a municipality may restrict the types of home occupations that are allowed as an accessory use in residential zones."193 Consequently, an urban farmer would be allowed to plant for his or her own personal consumption but would have little economic incentive to invest money and time into largerscale agricultural activities given that any produce harvested could not be sold. 194

¹⁸⁴ Id.

¹⁸⁵ Wooten & Ackerman, supra note 24, at 7.

¹⁸⁶ See generally Mukherji & Morales, supra note 11, at 5 (recommending such agricultural zoning designations for cities interested in fostering urban agriculture).

¹⁸⁷ John M. Baker & Mehmet K. Konar-Steenberg, "Drawn from Local Knowledge . . . and Conformed to Local Wants": Zoning and Incremental Reform of Dormant Commerce Clause Doctrine, 38 Loy. U. Chi. L.J. 1, 39–40 (2006).

¹⁸⁸ See Kaufman & Bailkey, supra note 1, at 81.

¹⁸⁹ See McClintock, supra note 93, at 1.

¹⁹⁰ See Hodgson et al., supra note 11, at 58–59.

¹⁹¹ Id.

¹⁹² See id.; Voigt, supra note 36, at 553.

¹⁹³ Voigt, *supra* note 36, at 553; *see* Garnett, *supra* note 37, at 623–24 (reporting the resistance many city officials have to incremental zoning reforms, such as in the liberalization of home business regulations).

¹⁹⁴ See Voigt, supra note 36, at 553.

For example, up until August 2012 Berkeley, California's zoning code prohibited the conduction of commerce in residential neighborhoods, a regulation that covered the selling of fruits, vegetables, nuts, honey, or eggs. 195 The code allowed for small-, low-, or moderate-impact home businesses, such as tutoring or piano lessons, but any payment for services or activities performed outside the home was prohibited without a "Moderate Impact Home Occupation" permit. 196 One resident, in seeking to obtain a permit to sell her backyard produce to neighbors, discovered the permitting process entailed "a public hearing, six to eight months of waiting, and close to \$4,000 in fees."197 Finding the exemption process prohibitive, she decided instead to challenge the arcane regulation, founding the Berkeley Edible Garden Initiative¹⁹⁸ and pressuring the City council to update the zoning code.¹⁹⁹ After awareness and support for her cause grew, the City amended the zoning code to allow residents, without a permit, to sell or trade "non-processed edibles" grown or raised on residential properties.²⁰⁰ Yet, even as it removed the permitting process, the zoning code stipulated fairly restrictive standards, such as requiring sales to "take place between the hours of 8 am and 8 pm," be conducted "in an area generally shielded from view from the public rightof-way," and allowing no "more than ten customer visits to the premises in one day."201 While some caution about overregulation, 202 including sales of produce as a possible accessory use in residential districts serves to formally acknowledge and validate the presence of urban agriculture.

¹⁹⁵ See Tracey Taylor, Berkeleyans Closer to Being Able to Sell Backyard Produce, Berkeleyside (May 17, 2012, 3:12 PM), http://www.berkeleyside.com/2012/05/17/berkeleyans-closer-to-being-able-to-sell-backyard-produce.

¹⁹⁶ See Sarah Henry, Urban Homesteader Challenges City on Sale of Edibles, BERKELEYSIDE (April 15, 2011, 9:30 AM), http://www.berkeleyside.com/2011/04/15/urban-homesteader-challenges-city-on-sale-of-edibles ("The laws are designed to protect the quality of residential communities from traffic and parking problems, as well as offensive or objectionable noise, odors, heat, or dirt.").

¹⁹⁷ Miner, supra note 100; see Zusha Elinson, Urban Farming for Cash Gains a Toehold in San Francisco, N.Y. Times (Aug. 13, 2010), http://www.nytimes.com/2010/08/13/us/13bcfarm.html. The article quotes Sophie Hahn, a Berkeley community activist who was instrumental in transforming the zoning code: "It's actually easier in Berkeley to have a pot collective than to have a vegetable collective" Id.

¹⁹⁸ About Us, Berkeley Edible Garden Initiative, http://berkeleyediblegardens.org/gardens/about-us/ (last visited Mar. 2, 2013).

¹⁹⁹ See Henry, supra note 196.

²⁰⁰ Berkeley, Cal., Mun. Code § 23C.20.010 (2012) available at http://codepublishing.com/ca/berkeley. The City defines "non-processed edibles" as foods "including fruit, vegetables, nuts, honey, and shell eggs from fowl or poultry, grown or raised in accordance with the Berkeley Municipal Code, that are whole and intact and have not been processed Washing, trimming, bundling, and similar handling of otherwise whole and intact foods shall not be considered processing." *Id.* § 23F.04.010.

²⁰¹ Id. § 23C.20.010(B)(2),(4).

²⁰² See, e.g., Zusha Elinson, New Laws for Urban Farmers, Berkeleyside (Aug. 12, 2010, 9:00PM), http://www.baycitizen.org/urban-farming/story/new-laws-urban-farmers.

D. Restrictions on Raising Animals

Regulations on the keeping of animals are among the most common municipal zoning restrictions that impact urban farmers. Cities are naturally more resistant to permitting livestock due to nuisance concerns, including noise, odor, and disease. Municipal zoning regulations tend to vary depending on factors such as environmental density, climate, political will, and types of natural predators. Regulations range from an outright ban on the keeping of farm animals to restrictions on their kind and number, and almost always include standards for the amount of land needed per animal and setback ordinances for animal housing. Most com-

203 See Mukherji & Morales, supra note 11, at 6. In addition to zoning regulations, there are often state and federal laws pertaining to animal control and welfare, animal slaughtering, and sale of animals and animal products. See Wooten & Ackerman, supra note 24, at 34.

204 See Mougeot, supra note 27, at 9; Lynn Horsley, Urban Farmers Collide with City Rules, in Urban Agriculture, supra note 49, at 199, 204 (including personal testimony about allowing animals in urban areas, with residents concerned about neighborhood stability, character, and quality of life); Mogk et al., supra note 50, at 1542–47 ("[A]nimals may transmit disease affecting public health. . . . The runoff from animal waste products . . . pollutes surrounding areas and attracts 'disease causing vectors, such as mosquitoes.'" (footnotes omitted)); Mukherji & Morales, supra note 11, at 6. But see Brown & Jameton, supra note 10, at 34 ("Although raising animals poses more health hazards than vegetable production, and many cities severely restrict animal husbandry, a careful approach to clean and safe methods of raising animals could contribute to the variety and protein content of urban diets.").

205 WOOTEN & ACKERMAN, *supra* note 24, at 34. Also significant is the scale and intensity of urban livestock, whether it is for personal or commercial usage; "[1] arge-scale commercial systems having livestock are potentially the most problematic because they produce large amounts of waste such as excrement and urine." Mogk et al., *supra* note 50, at 1543–44.

206 See Horsley, supra note 204, at 201–04; Dustin Gardiner, Some Cry Foul over Backyard Farming in Chandler, AZCENTRAL.COM (Nov. 24, 2012, 10:28 PM), http://www.azcentral.com/community/chandler/articles/20121124chandler-backyard-farming-chickens.html (explaining the divergence of city zoning laws in Arizona, noting the prohibition on raising chickens in Chandler, Arizona, and reporting that the City had "about 540 poultry-related violations last year—a more than 65 percent increase from the number five years ago").

207 Specifying a definition for what constitutes livestock is imperative to properly distinguishing farm animals from household pets; any ambiguity may cause difficulty in enforcing regulations. *See* Mogk et al., *supra* note 50, at 1542–43. For example, Boise, Idaho, adopted a definition that defines "livestock" by listing specific animals: "Livestock are animals kept outside the home in enclosures such as pens, barns, or corrals. The term includes cattle, llamas, mules, swine, sheep, goats, rabbits, poultry, domestic birds, and any other grazing or foraging animal except those defined as pets." Boise, IDAHO, CITY CODE § 11-09-09.2 (2012), *available at* http://cityclerk.cityofboise.org/city-code. Notably, Boise defines limited numbers of chickens, ducks, and rabbits as pets. *Id.*; Mogk et al., *supra* note 50, at 1543.

208 Santa Clara, California allows up to six hens, roosters, and other larger farm animals—up to twenty-five may be allowed with City Manager approval—as long as the owner complies with distancing and performance standards. Santa Clara, Cal., City Code

monly allowed by municipalities are limited numbers of chickens or bees.²¹⁰

§§ 6.15.010–.070 (2012), available at http://www.codepublishing.com/ca/santaclara/ frameless/index.pl?path=. ./html/SantaClara06/SantaClara0615.html. As part of compliance with the Code, hens must be kept at least fifty feet from neighboring dwellings, roosters must be kept one hundred feet away, and large farm animals must be kept at least one hundred feet from all dwelling units. Id. §§ 6.15.020, 6.15.030. Special exceptions are possible with a permit. Id. §§ 6.15.020, 6.15.070. The San Diego City Code was recently amended to allow residents to raise chickens and goats in districts zoned for residential, single-family dwellings with the only distance restrictions being proportionally dependent upon the number of animals. See Adrian Florido, Meet San Diego's Hideaway Hens, SAN Diego Magazine (June 2011), available at http://www.sandiegomagazine.com/San-Diego-Magazine/June-2011/Meet-San-Diego-rsquos-Hideaway-Hens. For example, a resident may keep up to five chickens anywhere on his or her property, as long as the animals are five feet from the property line, raising fifteen chickens requires the animals to be at least fifteen feet from the property line, and having up to twenty-five chickens requires the outdoor enclosure to be at least fifty feet from the any residential structure. SAN DIEGO, CAL., Mun. Code § 42.0709 (2012), available at http://www.sandiego.gov/city-clerk/official docs/legisdocs/muni.shtml. The previous Code allowed for poultry but required any chickens to be kept at least fifty feet from the nearest residential property. See Florido, supra (noting City health rules that allowed chickens but only if kept at least fifty feet from the nearest house; acknowledging many are openly flouting the flaw and that the code is only enforced if someone complains).

See Goldstein et al., supra note 134, at 5; Salkin & Lavine, supra note 11, at 620–26. See Wooten & Ackerman, supra note 24, at 34 ("[B]eekeeping and chickens [are] two of the most common forms of urban livestock."); Mukherji & Morales, supra note 11, at 6 ("[A] limited number of chickens or bees rarely causes a nuisance."). Many cities, including Austin, New York City, Seattle, Portland, and San Francisco permit backyard chickens. See Austin, Tex., Code of Ordinances § 25-2-863(G) (2011), available at http:// www.amlegal.com/austin_tx/; N.Y.C., N.Y., Rules of the City of N.Y. tit. 24, § 161.19 (2011), available at http://72-0-151-116.tvc-ip.com/nyc/rcny/Title24_161_19.asp; Port-LAND, OR., MUN. CODE § 13.05.015(E) (2011), available at http://www.portlandonline. com/auditor/index.cfm?c=28228; Seattle, Wash., Mun. Code § 23.42.052(C) (2012), available at http://clerk.seattle.gov/~public/codel.htm; S.F., CAL., HEALTH CODE, art. 1, § 37(a) (2011), available at http://www.archive.org/stream/gov.ca.sf.health/ca_sf_health_ djvu.txt. With regard to beekeeping, Denver recently rezoned to permit beekeeping in residential and business districts. See Denver, Colo., Mun. Code § 59-87(a)-(b) (2008); see also id. § 59-2 (2010) available at http://library.municode.com/index.aspx?clientId= 10257&stateId=6&stateName=Colorado (preserving "Former Chapter 59" unless rezoned). Apiculture has also been legalized in New York City and Chicago; bees have even found a home at the White House. See Paul Bedrad, Michelle Obama Goes Organic and Brings in the Bees, U.S. News (March 28, 2009), http://www.usnews.com/news/blogs/washington-whispers/2009/03/28/michelle-obama-goes-organic-and-brings-in-the-bees (describing First Lady Obama's efforts to beekeep at the White House); Mireya Navarro, Bring on the Bees, N.Y. Times (March 16, 2010 12:16PM), available at http://cityroom.blogs.nytimes.com/ 2010/03/16/bring-on-the-bees (chronicling the vote by the New York City Board of Health to legalize beekeeping); Kristina Shevory, The Beekeeper Next Door, N.Y. TIMES (Dec. 8, 2010), available at http://www.nytimes.com/2010/12/09/garden/09Bees.html (explaining the rise of urban beekeeping as people become more aware of the recent decline of honeybees and seek to help); Rob Walton, Urban Beekeepers, TimeOut Chicago (Apr. 27, 2011), available at http://timeoutchicago.com/arts-culture/1204035/urban-beekeepers?page=0,0 (same for Chicago). But see Mogk et al., supra note 50, at 1545-46 (describing the

For example, Madison, Wisconsin adopted a zoning code in October 2012 that permits up to four chickens as an accessory use on residential lots with up to four dwelling units.²¹¹ The ordinance requires chickens to be kept in a covered or fenced enclosure at all times and located at least twenty-five feet away from any adjacent residential structures.²¹² It also forbids rooster and chicken slaughtering.²¹³ Similarly, Milwaukee has a detailed animal code for the regulation of chickens and bees,²¹⁴ permitting it by right in residential districts,²¹⁵ but specifying "standards for coop construction, feeding, setbacks, and flyway barriers."²¹⁶

problems with keeping honeybees in cities, such as injury to neighbors and harm to the honeybee population through mismanagement of the hive).

- 211 See Madison, Wis., Zoning Code § 28.151 Keeping of Chickens (a) (2012), available at http://www.cityofmadison.com/neighborhoods/zoningrewrite/; see also id. § 28.002(1)(o) (adopting the zoning code for the purpose of providing "opportunities for local food production").
- 212 See id. § 28.151 Keeping of Chickens (c)-(f). Madison also allows beekeeping and animal husbandry as conditional uses in most districts zoned mixed-use, commercial, employment, and urban agriculture. See id. §§ 28.061, .082, .091, .093.
- 213 See id. § 28.151 Keeping of Chickens (d). But see Mogk et al., supra note 50, at 1544–45 ("[M]any engaged in agriculture acknowledge other benefits of keeping roosters, such as their fertilization of eggs, which increases lecithin, an agent that counteracts cholesterol. . . . A zoning ordinance should allow roosters in residential areas as long as the zoning ordinance restricts the number of roosters to an appropriate hen/rooster ratio").
- 214 Though Milwaukee permits chicken and beekeeping, its code is somewhat inconsistent. Milwaukee's Zoning Code treats agriculture as a use category, defining the raising of livestock as "the use of land or buildings for the keeping of cows, cattle, horses, sheep, swine, goats, chickens, ducks, turkeys, geese or any other domesticated livestock if permitted by the health department under the provisions of ch. 78." MILWAUKEE, WIS., ZONING Code § 295-203-14(b) (2011), available at http://city.milwaukee.gov/tableofcontents. However, while § 295-203-14(b) seems to make it acceptable to keep a variety of farm animals, chapter 78 of the Milwaukee Code of Ordinances permits only bees and chickens even though beekeeping is not specifically mentioned in § 295-203-14(b)'s definition of raising livestock. Milwaukee, Wis., Code of Ordinances § 78-6-6.5 (2011), available at http://city.milwaukee.gov/ordinances. Thus, as the Code is written, beekeeping is not listed as an agricultural use, but is clearly supported as a use by chapter 78 of the City Code of Ordinances. Id. The regulations on keeping chickens are also inconsistent, for though it is included in the definition of agricultural use—which is permitted by right in residential and industrial districts and by special use permit in a number of other zones—chapter 78 limits chicken keeping to residential properties. See U.S. ENVIL. PROTECTION AGENCY, Urban Agriculture Code Audit: Milwaukee, Wis. 11-12, 20 (2012), available at http:// city.milwaukee.gov/ImageLibrary/Groups/cityDCD/Urban-Agriculture/pdfs/Milwaukee CodeAudit_acknowledge.pdf. These inconsistencies require clarification so the Milwaukee Code does not function as a barrier to urban agriculture. *Id.* Beekeeping should be added to the zoning code's definition of agricultural use and the discrepancy between the zoning code and chapter 78 should be reworked to align "the types of properties where chicken keeping and beekeeping are allowable." Id. at 31.
- 215 Milwaukee, Wis., Zoning Code § 295-203-14(b).
- 216 Wooten & Ackerman, *supra* note 24, at 15; *see* Milwaukee, Wis., Code of Ordinances §§ 78-6-2, 78-6-3.

Some municipal zoning codes require owners to undergo a site inspection, obtain a special permit, and pay a fee for keeping animals on their property. The City of Minneapolis requires prospective bee or chicken keepers to obtain "the written consent of at least eighty (80) percent of the occupants . . . of real estate situated within 100 feet" of the premises before a permit will be issued. Other cities have recently loosened restrictions on keeping a variety of livestock in limited numbers or in areas where it would not be a nuisance. For example, Seattle allows residents to keep miniature goats, regulating the animals in ways similar to the regulation of dogs and cats by requiring owners to obtain a goat license and abide by certain use standards restrictions.

III. BEST PRACTICES

Attracted by the benefits of urban agriculture and motivated by the advocacy of individuals and organizations, local governments are increasingly interested in facilitating the existence of farming and gardening through land use laws. Municipalities are starting to take advantage of zoning policies to assist urban farmers in securing access to land and easing the regulatory burdens placed on urban farms. Some are merely clarifying inconsistencies that have hindered the growing and selling of produce. Others are rewriting their zoning codes to incorporate agriculture as a land use category. While "there is no one-size-fits-all urban agricultural land use policy," the best practices of other cities can function as a framework, which can be developed and tailored to meet the needs and context of particular communities.²²¹

A. Boston, Massachusetts

For cities interested in creating an urban gardening district to legitimatize city agriculture, Boston's zoning code represents one of the oldest and

²¹⁷ See Mukherji & Morales, supra note 11, at 6.

²¹⁸ Minneapolis, Minn., Code of Ordinances tit. 4, § 70.10 (2011), available at http://www.ci.minneapolis.mn.us/government/ord/index.htm.

²¹⁹ See Seattle, Wash., Mun. Code § 23.42.052 (2010), available at http://clerk.ci.seattle.wa.us/public/codel.htm. City Council approval for this amendment to the zoning code came after a resident, who had been keeping two goats, was reported to the Seattle Department of Planning and Development for zoning violations. See Angela Calloway, Seattle Homeowners May Keep Miniature Goats as Pets, SeattlePI (Sept. 25, 3007, 10:00 PM), http://www.seattlepi.com/local/article/Seattle-homeowners-may-keep-miniature-goats-as-1250723.php. The resident started an informal lobbying organization, the Goat Justice League, conducted a petition, and eventually changed the law. Id.; About the League, Goat Justice League, http://goatjusticeleague.org/?page_id=70 (last visited Mar. 2, 2013).

²²⁰ See Seattle, Wash., Mun. Code § 23.42.052; Calloway, supra note 219.

²²¹ WOOTEN & ACKERMAN, *supra* note 24, at 5, 20 ("[C]ities vary considerably by size, density, availability of land, and demand for urban agricultural activities. There is no one-size-fits-all approach when it comes to zoning for urban agriculture, so we present a number of options in an à la carte fashion for communities to select as appropriate."). *See generally* Goldstein et al., *supra* note 134 (surveying the urban agricultural practices of sixteen cities and addressing the positive developments and areas for improvement).

most successful templates.²²² A combination of limited vacant land and high real estate prices has motivated Boston to be proactive about developing urban lands into community gardens and urban agricultural projects.²²³ In the late 1980s the City created an "open space" district, with nine subdistricts²²⁴—such as "urban wild[s]"²²⁵ and "community garden[s]"²²⁶—intended to preserve a diversity of open land uses.²²⁷ Although the zoning code does not include a definition of "urban agriculture," the hybrid designations are permissive and flexible.²²⁸ Land can be labeled an "open space" district without a defined subdistrict,²²⁹ and gardening, as an open space use category,²³⁰ is allowed in all residential and business districts, and almost all industrial zones.²³¹ The community garden subdistrict, in particular, has

224 Bos., Mass., Zoning Code §§ 33-1, 33-5 (2011). The zoning code explains the "Open Space" District:

The open space district and nine open space subdistricts, taken together, present a comprehensive means for protecting and conserving open spaces through land use regulations. The open space (OS) designation and an open space subdistrict designation can be used in conjunction with each other, thus establishing for the land so designated the particular restrictions of one of the subdistricts: community garden, parkland, recreation, shoreland, urban wild, waterfront access area, cemetery, urban plaza, or air-right.

Id. § 33-1.

225 Id. § 33-12.

226 *Id.* § 33-8 ("Community Garden open space (OS-G) subdistricts shall consist of land appropriate for and limited to the cultivation of herbs, fruits, flowers, or vegetables, including the cultivation and tillage of soil and the production, cultivation, growing, and harvesting of any agricultural, floricultural, or horticultural commodity; such land may include Vacant Public Land.").

- 227 See Mukherji, supra note 24, at 76.
- 228 See id.; Mukherji & Morales, supra note 11, at 6.
- 229 Notably, however, labeling land as a subdistrict protects it from being converted into other uses. *See* Mukherji, *supra* note 24, at 77 ("About [forty] gardens currently have a *Community Garden* subdistrict designation, which means that if someone wants to develop the land or use it for a different purpose, a rezone would be required.").
- 230 Gardening is specially mentioned in three "open space" subdistricts, the Community Garden Open Space Subdistrict, the Parkland Open Space Subdistrict, and the Air-Right Open Space Subdistrict. *See* Bos., Mass., Zoning Code §§ 33-8, 33-9, 33-16.
- 231 See Mukherji, supra note 24, at 78. Accordingly, gardens and permanent structures, such as greenhouses, are also permitted uses in most districts. *Id.*

²²² See Mukherji, supra note 24, at 77.

²²³ With a City population of over 650,000 people and over 4.5 million residents in the greater municipal area, Boston is the country's second most densely populated major city after New York. See Goldstein et al., supra note 134, at 13; Mukherji, supra note 24, at 72; see also Bos., Mass., Zoning Code § 33-2 (2011) available at http://www.bostonredevelopmentauthority.org/zoning/zoning.asp#1 ("The purpose[] of [the open space] article [is] to encourage the preservation of open space for community gardens . . .; to prevent the loss of open space to commercial development; . . . and to ensure the provision of adequate natural light and air quality by protecting the supply of vegetation and open space throughout Boston."); Mukherji & Morales, supra note 11, at 4 (explaining Boston's efforts to use City resources to address barriers to urban farming, such as allowing residents to use City parks for gardening and providing free shipments of compost).

been widely used. Boston is home to nearly two hundred school and community gardens and hosts eighteen registered farmers' markets. 232

In 2010 Boston's zoning code was amended to create a Green Smart Growth Overlay District,²³³ which included a use category for "[f]ood production uses, including a farm, garden, food production center and/or incubator and food-oriented retail."²³⁴ The amendment allowed two vacant City properties zoned for mixed-use to be farmed, providing "fresh and healthy food for sale to local neighborhood residents and businesses."²³⁵ Support for these initiatives has been a combined effort of the City and non-profit community groups. Several non-profits and citizen advocacy groups—such as the Boston Natural Areas Network (BNAN)²³⁶ and The Food Project²³⁷—

Boston is at the forefront of the urban agriculture movement and with this zoning amendment we are taking a proactive approach that will allow us to further explore the benefits of urban farming This project is an opportunity to take underutilized city land and put it to a productive use. Community gardening brings neighbors together and it creates a new way to get healthy, fresh fruits and vegetables into neighborhood stores.

Id. The City, through the Metropolitan Area Planning Council, is also working to promote urban agriculture by relaxing permitting requirements, such as removing any limits on agricultural product sales. See The Comprehensive Land Use Reform and Partnership Act § 40A:5(C) (2011), available at http://www.mapc.org/sites/default/files/CLURPA_with_annotations_5.18.10_1.pdf. However, the keeping of livestock in the City, even chickens, is prohibited. See David Abel, Boston's Would-Be Chicken Farmers Lay Out Case, Bos. Globe (Feb. 27, 2012), available at http://www.bostonglobe.com/metro/2012/02/27/boston-call-allow-chicken-coops/jnOrSLTJcs2QJKfnc8SPEO/story.html. These restrictions on livestock are possibly due to the inadequacy of yard space in Boston, as houses with yards tend to be multi-family houses not easily conducive to raising farm animals. See Mukherji, supra note 24, at 75.

236 Bos. Nat. Areas Network, http://www.bostonnatural.org/index.htm (last visited Feb. 22, 2013) (explaining its mission as a citizen advocacy group that works to preserve, expand, and improve urban open spaces and including the over forty-four community gardens it protects); see also Goldstein et al., supra note 134, at 14 ("BNAN is steadily purchasing land for protection, improving access to gardening resources, and educating residents about gardening and farming through its Master Urban Gardening Program."). 237 What We Do, The Food Project, http://thefoodproject.org/what-we-do (last visited Mar. 2, 2013) (promoting the organization's commitment to urban agriculture and describing the numerous farms it operates); see also Goldstein et al., supra note 134, at 14–15 ("The Food Project similarly empowers youth in the Boston area by teaching them

²³² GOLDSTEIN ET AL., *supra* note 134, at 14; *Finding a Community Garden*, Boston Natural Areas Network (Feb. 1, 2007), http://bostonnatural.org/cgFind.htm (last visited Mar. 2, 2013).

²³³ Bos., Mass., Zoning Code § 87A. Chicago and Milwaukee are following suit and are currently in the process of creating overlay districts "to encourage urban agriculture . . . as a tool for urban revitalization." Mukherji & Morales, *supra* note 11, at 6.

²³⁴ Bos., Mass., Zoning Code § 87A-5.

²³⁵ Mayor Menino Announces Zoning Changes to Allow Urban Farming Pilot in Dorchester, Bos. Redevelopment Auth., Nov. 16, 2011, available at http://www.bostonredevelopment authoritynews.org/2011/11/16/mayor-menino-announces-zoning-changes-to-allow-urban-farming-pilot-in-dorchester (describing Boston Mayor Thomas M. Menino's substantial involvement and support for the project). Mayor Menino said:

along with municipal departments—such as the Department of Neighborhood Development, the Department of Parks and Recreation, and the Boston Redevelopment Authority—have been substantially involved in supporting farming and gardening in the City.²³⁸ The impact and success of these organizations exemplifies the impact grassroots community efforts can have in promoting municipal acceptance of urban agriculture.

B. Cleveland, Ohio

Faced with problems of "social inequity, chronic disease, obesity, and food deserts, along with an overabundance of abandoned property and vacant land,"²³⁹ Cleveland, Ohio has embraced urban agriculture in an innovative and prolific manner.²⁴⁰ Over the past five years—with the collaboration of "policy makers, local government agencies, nonprofit organizations, and the public"²⁴¹—the City has reformed its zoning code to facilitate community gardens and commercial agricultural projects, with the aim of creating a "cleaner, healthier, more beautiful, and economically sound city."²⁴² An important contributor to Cleveland's success has been the Cleveland-Cuyahoga Food Policy Coalition ("Coalition").²⁴³ Comprised of representatives from over one hundred organizations, the Coalition's five working

how to cultivate organic food, and helps urban communities by selling its produce through Community Supported Agriculture and farmers' markets in areas that were previously food deserts.").

- 238 See Goldstein et al., supra note 134, at 13; Mukherji, supra note 24, at 76.
- 239 Hodgson et al., *supra* note 11, at 74, 77 ("Between 1950 and 2009, Cleveland's population declined by 52.8 percent. As a result, Cleveland has about 3,300 acres of vacant land (of about 50,000 acres total)"); *see* Goldstein et al., *supra* note 134, at 19 (noting that Cleveland has been designated a "shrinking city"); *see also* Cleveland Urb. Design Collaborative & Neighborhood Progress, Inc., Re-Imagining Cleveland T (Lilah Zautner ed., 2011), *available at* http://reimaginingcleveland.org/files/2011/03/ideas-to-action-white-layout-for-printing.pdf ("There are nearly 20,000 vacant lots in the City of Cleveland."); Cleveland Land Lab, Re-Imagining A More Sustainable Cleveland 26 (2008), *available at* https://docs.google.com/a/nd.edu/file/d/0B9gEzUmYrccJMTZ kMGMwNDAtZDVjOS00NGVILWJjMDgtZDFiNWZiNTIkOWRh/edit?hl=en_US ("Access to fresh produce is limited in some parts of the city . . . where fast food restaurants are prevalent and grocery stores are few.").
- 240 CLEVELAND LAND LAB, *supra* note 239, at 26 (setting a standard of establishing a community garden within a half mile radius of every City resident).
- 241 Hodgson et al.., *supra* note 11, at 74 ("Cleveland's success in achieving these tasks is a result of multiple concurrent, dovetailing processes, including the formation of the Cleveland-Cuyahoga Food Policy Coalition and the development and implementation of a Citywide sustainability plan, as well as strong agricultural roots, philanthropic foundation support, champions within local government, and the long-term commitment of several key organizations and individuals."); *see* Goldstein et al.., *supra* note 134, at 19.
- 242 CLEVELAND LAND LAB, supra note 239, at 1.
- 243 About Us, Cleveland-Cuyahoga Food Policy Coalition, http://cccfoodpolicy.org/about (last visited Mar. 2, 2013).

groups²⁴⁴ inform and advise the City on the implementation of zoning reforms and new policies meant to cultivate a healthy, sustainable, and community-based food system.²⁴⁵

For example, in 2005 the Coalition's Land Use Working Group (LUWG) conducted a review of the Cleveland Zoning Code's "Open-Space Recreation District." Though the district permitted community gardens, it did so as an interim use, establishing neither exclusive use nor permanent protection for urban gardening. As such, urban gardens were subject to insecure land tenure and vulnerable to displacement by redevelopment. The Coalition, along with local government groups and officials, developed and implemented an "Urban Garden District," 249 zoned solely for urban agriculture use. The urban garden designation sanctions community and market

²⁴⁴ The five working groups consist of: Community Food Assessment, Food Waste Recovery, Health & Nutrition, Land Use & Planning, and Local Purchasing. *See Working Groups*, CLEVELAND-CUYAHOGA FOOD POLICY COALITION, http://cccfoodpolicy.org/workinggroups (last visited Mar. 2, 2013).

²⁴⁵ See Hodgson et al., supra note 11, at 75.

²⁴⁶ CLEVELAND, OHIO, ZONING CODE § 342.03 (2007), available at http://planning.city.cleveland.oh.us/zoning/cpc.php; see also Goldstein et al., supra note 134, at 19. 247 See Hodgson et al., supra note 11, at 76.

²⁴⁸ The LUWG worked closely with the Cleveland Department of Public Health in drafting the legislation, easing "public and political concern about potential nuisance issues." *Id.*

²⁴⁹ City of Cleveland, Cleveland's Zoning for Urban Agriculture & Green Space (2010), available at http://planning.city.cleveland.oh.us/zoning/pdf/AgricultureOpen SpaceSummary.pdf (explaining that chapter 336 of the zoning code "gives the City the ability to reserve land for garden use through zoning," "permits urban gardens and prohibits all other use of a property," "requires public notice and a public hearing to change the zoning to permit building on an urban garden site," and "permits 'market gardens,' including the sale of produce from farmers' markets"); see also Hodgson et al., supra note 11, at 76 (discussing the political concerns and process involved in the creation of the Urban Garden District). Morgan Taggart, program specialist in agriculture and natural resources at the Ohio State University Extension Cuyahoga County, noted that "political support and leadership by planning staff were key elements in the development of the new policy Both [Councilman Joe] Cimperman and [City Planning Director Bob] Brown quickly embraced urban agriculture as an important emerging local land use and acknowledge that in some cases urban agriculture is the highest and best use of land." Id. 250 Cleveland, Ohio, Zoning Code § 336.01.

gardens 251 and includes specific allowances for accessory structures, onsite sales, identifying signs, and off-street parking. 252

Most importantly, any rezoning of urban garden districts requires public notice and public hearings. Following the success of the urban garden district, Cleveland introduced subsequent zoning reforms, such as permitting agriculture as a principal use on all vacant residentially zoned lots and allowing for chickens, bees, and farm animals throughout the City. Currently pending is legislation for an Urban Agriculture Overlay District that would allow the City to designate areas for larger-scale farming operations, including intensive animal husbandry and the raising of larger animals, such as horses and cows. 257

Cleveland has embraced urban agriculture as a foundational element of its strategy to combat unemployment, a growing vacant property inventory, and limited access to local food. In doing so, it has centered reform on the involvement and empowerment of institutional stakeholders and, most

- 251 The zoning code defines community garden as:
 - an area of land managed and maintained by a group of individuals to grow and harvest food crops and/or non-food, ornamental crops, such as flowers, for personal or group use, consumption or donation. Community gardens may be divided into separate plots for cultivation by one (1) or more individuals or may be farmed collectively by members of the group and may include common areas maintained and used by group members.
- $Id. \S 336.02(a)$. The code defines market garden as "an area of land managed and maintained by an individual or group of individuals to grow and harvest food crops and/or non-food, ornamental crops, such as flowers, to be sold for profit." $Id. \S 336.02(b)$.
- 252 See id. §§ 336.03, 336.04. But see Goldstein et al., supra note 134, at 20 ("The ordinance does not address the issues of where market gardens may be located . . . [and] is also unclear as to enforcement, restrictions on pesticides and runoff from the farm").
- 253 Hodgson et al., *supra* note 11, at 76.
- 254 GOLDSTEIN ET AL., *supra* note 134, at 20 ("Since its passage, the Urban Garden District ordinance has successfully fostered urban farm and community garden growth in Cleveland. More than 200 community gardens have sprouted in the city . . . [and] [o]ver 120 land bank lots have been converted to gardens, nurseries, pocket parks, and orchards.").
- 255 CLEVELAND, OHIO, ZONING CODE §§ 337.02(e), 337.23, 337.25(i)(1) (permitting agriculture and the keeping of farm animals as a principal use in residentially zoned lots, and permitting the sale of produce from farm stands in Residential Districts as a conditional use—defining farm stand as "a temporary structure used for display or sale of produce").
- 256 *Id.* §§ 205.04, 347.02 (allowing most residents to keep up to six chickens, ducks, or rabbits (one per 800 square feet) and two beehives in a backyard or on a small vacant yard, requiring greater setbacks and larger land areas for the keeping of larger animals, such as pigs, goats, or sheep, allowing coops and cages in residential backyards to be set within five feet of side lots lines and one and a half feet of rear yard lines, and requiring licensing by the City's Public Health Department). *But see* Stockmann, *supra* note 42, at 129–32 (documenting the conversations and debates of Cleveland residents on the allowance of chickens and bees).
- 257 CLEVELAND, OHIO, ZONING CODE § 336A (imposing a minimum lot size of one acre for Urban Agriculture Overlay (UAO) Districts).

importantly, the people of the community.²⁵⁸ In large part, the success of urban agriculture requires local community investment and the "re-imagining" of the potential uses for urban land.²⁵⁹ The work of Cleveland's Food Policy Coalition proves that community support and participation can influence policy and restructure the municipal zoning framework.

C. Seattle, Washington

Seattle has been at the forefront of encouraging urban agricultural practice. The City's 2010 "Year of Urban Agriculture" campaign²⁶¹ included the approval of legislation intended to reflect its commitment to urban farms and community gardens. In order to provide easier access to locally grown food, Seattle clarified and revised its zoning code, "addressing urban farms, animals, community gardens, and other issues relating to urban agriculture such as greenhouses and parking requirements." Seattle added detailed but clear definitions and standards for urban farms²⁶⁴ and community gardens.

Urban farms are permitted uses in all residential districts, but the farm must be "located on the same lot as the principal use . . . or on a lot where

²⁵⁸ See Hodgson et al., supra note 11, at 79.

²⁵⁹ See Cleveland Land Lab, supra note 239.

²⁶⁰ See Goldstein et al., supra note 134, at 53; Hanson & Marty, supra note 1, at 21; Mukherji & Morales, supra note 11, at 4 ("In Seattle, the 2005 comprehensive plan requires at least one community garden for every 2,500 households"); Schukoske, supra note 61, at 388–90; see also Seattle, Wash., Resolution 31019, Local Food Action Initiative (2008), available at http://clerk.seattle.gov/~archives/Resolutions/Resn_31019.pdf (assigning specific departments to help assess and promote local food production and access); Hodgson et al., supra note 11, at 88 (pointing out that "[n]ational interest in Seattle's urban agriculture leadership has focused on the City-run P-Patch community gardening program" and explaining the program has served as a national model for other cities for almost forty years); About the P-Patch Program, Seattle Dep't of Neighborhoods, http://www.seattle.gov/neighborhoods/ppatch/aboutPpatch.htm (last visited Apr. 13, 2013) (detailing the history and success of the Seattle community gardening program).

²⁶¹ See Tyler Falk, Seattle's New Urban-Ag Models are Sprouting in Friendly Soil, Grist (Aug. 17, 2010 11:18 PM), http://grist.org/article/food-seattles-new-urban-ag-models-are-sprouting-in-friendly-soil/full.

²⁶² GOLDSTEIN ET AL., supra note 134, at 53; HODGSON ET AL., supra note 11, at 89.

²⁶³ GOLDSTEIN ET AL., supra note 134, at 54.

²⁶⁴ Seattle, Wash., Mun. Code § 23.84A.002 (2010), available at http://clerk.ci.seattle.wa.us/~public/toc/t23.htm (defining urban farm as "a use in which plants are grown for sale of the plants or their products, and in which the plants or their products are sold at the lot where they are grown or off site, or both, and in which no other items are sold."); id. §§ 23.84A.022(A)(5), 23.42.051(A)(1), 23.42.051(A)(4) (specifying certain restrictions on permissible farm equipment, sales, location, size, and signage—such as allowing "[o]nly mechanical equipment designed for household use" and mandating that "[n]o more than two motor vehicles . . . may be used for farm operations").

²⁶⁵ *Id.* § 23.84A.002 (defining a community garden as "a use in which land managed by a public or nonprofit organization, or a group of individuals, is used to grow plants and harvest food or ornamental crops from them for donation or for use by those cultivating the land and their households.").

the planting area is within 800 feet of the lot where the principle use is located."²⁶⁶ Additionally, in multi-family zones, urban farms can have no more than 4000 square feet of planting area.²⁶⁷ Accessory structures are permissible, but the Seattle Code stipulates standards for any construction.²⁶⁸ Urban farms are also expressly permitted in all commercial and industrial zoned districts, "[e]xcept within designated manufacturing and industrial centers, where they are permitted only on rooftops and/or as vertical farming."²⁶⁹ For larger-scale urban farms—those with more than 4000 square feet of planting—there is a required administrative conditional use permit.²⁷⁰

Seattle also expanded its zoning allowances for animals, ²⁷¹ providing that "[t]he keeping of small animals, farm animals, domestic fowl and bees is permitted outright in all zones as an accessory use to any principled use permitted outright or to a permitted conditional use."²⁷² Lastly, its revisions addressed greenhouses and parking. The Seattle code was revised to allow for greenhouses²⁷³—with standards for size and setback requirements²⁷⁴—and specifically provides that no parking is required for urban farms and gardens in residential areas.²⁷⁵

Overall, Seattle's urban agricultural zoning code is relatively comprehensive. As such, it has served to remove regulatory barriers, clarify City policy, and expand organizational and individual participation in the urban agricultural movement.²⁷⁶ This significant restructuring of the zoning system is per-

²⁶⁶ Id § 23.42.051(A)(5).

²⁶⁷ Id § 23.45.504(C)(8).

²⁶⁸ $Id \S 23.42.051(A)(7)$ (specifying accessory structures can be built provided that the total floor area does not exceed 1000 square feet and the height does not exceed twelve feet, including any pitched roof).

²⁶⁹ Id. § 23.50.012; see id. § 23.47A.004.

²⁷⁰ $\it Id. \S 23.43.040(E)$ (detailing the conditional use permitting process for larger-scale urban agricultural activities).

²⁷¹ *Id.* § 23.42.052 (permitting the keeping of poultry, livestock, and bees in all districts, subject to specific operational standards differentiated based on lot size and zoning district). The code expressly allows miniature potbelly pigs and miniature goats to be kept as "small animals." *Id.* § 23.42.052(F).

²⁷² *Id.* § 23.42.052 (defining farm animals to include "[c]ows, horses, sheep and other similar farm animals" and allowing these animals on lots of at least 20,000 square feet). Notably, the code addresses animal husbandry separately, defining it as a "use in which animals are reared or kept in order to sell the animals or their products, such as meat, fur or eggs." *Id.* § 23.84A.002(A). Animal husbandry is allowed in more limited areas, permitted as an accessory use in most commercial zones but expressly prohibited in all industrial zones. *Id.* §§ 23.47A.004, 23.50.012.

²⁷³ *Id.* § 23.84A.014 (defining a greenhouse as "a structure or portion of a structure, made primarily of glass or other translucent material, for which the primary purpose is the cultivation or protection of plants").

²⁷⁴ *Id.* §§ 23.45.514(J)(10), 23.45.545(B)(3).

²⁷⁵ Id. § 23.54.015(B)(5).

²⁷⁶ See Hanson & Marty, supra note 1, at 21-23.

haps best understood as a "reflection of [the] broader community waking up" 277 to the possibilities of farming and gardening in the City. 278

IV. RECOMMENDATIONS TO PROMOTE URBAN AGRICULTURE

The cities discussed offer a framework for municipalities attempting to legislate for the advancement of urban agricultural practices. Boston, Cleveland, and Seattle have each worked to promote urban farming and gardening through the use of zoning regulations. Though that support has manifested itself in different zoning regimes, there do appear to be certain commonalities, both in terms of procedure and result. Notably, the efforts of each city seem to have been driven by a collaborative and participatory assessment process that brought together government officials and citizens.²⁷⁹ This coordination facilitated change by fostering community investment in the success of urban agriculture and its potential benefits. This coordination allowed the community to evaluate the existing zoning code and licensing regulations, recognize areas for improvement, and devise a plan that fit the particular needs and goals of each city. Ultimately, each city's zoning reform explicitly addressed urban agriculture, naming and defining it as an acceptable land use, even while maintaining unique and particular operations standards and limitations on the practice of farming and gardening. This Part contends that local community participation is vital to addressing urban agriculture as a component of land use policies. It makes the case for creating city- or county-level collaborative efforts to assess the balancing of urban agricultural benefits and burdens and closes by suggesting basic zoning initiatives friendly to urban agriculture.

A. Context and Characteristics

For local governments developing zoning regulations, it is necessary to consider not only the example of other cities but "to think holistically about the institutional, political, cultural, historical and geographical context of the city." These characteristics shape the unique agricultural activities of each city and should necessarily inform the zoning policies of particular communities. In planning and instituting zoning reforms, it is the local community that is best situated to construct zoning and permitting processes that are

²⁷⁷ See id. at 22.

²⁷⁸ See Hodgson et al., supra note 11, at 90 (quoting Andrea Petzel, a land use planner with the Seattle Department of Planning and Development: "[S]o much of the interest in urban agriculture is driven by community residents and organizations . . . be it the zoning changes or opening up municipal land for people to actually be able to grow and sell food. The challenge is coordinating the nuisances as a city").

²⁷⁹ See Hamilton, supra note 7, at 118 (explaining this collaborative process in the context of "food democracy," and noting "[o]ur desire for better food, more information and choices, and preference for local action and personal involvement all reflect strong democratic tendencies and a growing awareness that as citizens, our actions can help shape a more sustainable food future.").

²⁸⁰ Mukherji, supra note 24, at 88.

both friendly to urban agriculture and understanding of the particular benefits and burdens it imposes. To this end, the creation of food policy councils (FPCs)²⁸¹ has proven successful in mobilizing community members and developing effective urban agricultural policy.²⁸² FPCs are a fairly recent organizational model. Usually operating as a local government advisory board, FPCs are comprised of diverse stakeholders,²⁸³ from local government officials to community members to experts in "health, farming, planning, education, and food access."²⁸⁴ The involvement of a wide range of interests and broad base of participants creates a greater likelihood that zoning policies will meet the needs of the city and its citizens, particularly the disadvantaged and the poor.²⁸⁵ Individually weak stakeholders, such as backyard gardeners or low-income residents, can work with city councilmen, civic organizations, and health agencies to address common food issues, enabling all those who are impacted to contribute to policy initiatives.²⁸⁶

These councils are formed to officially sanction and empower public officials and private citizens to evaluate "the economic and political land-scape relating to the community's or region's food system, and provid[e]

²⁸¹ See Hamilton, supra note 63, at 7 (noting the creation of food policy councils in California, Massachusetts, and many other states); Neil D. Hamilton, Putting a Face on Our Food: How State and Local Food Policies Can Promote the New Agriculture, 7 DRAKE J. AGRIC. L. 407, 440–42, 446–47 (2002) [hereinafter Hamilton, Putting a Face on Our Food] (discussing states and cities that have created local food policy councils, such as Connecticut, Iowa, Utah, and North Carolina); RAJA ET AL., supra note 19, at 17 (acknowledging that in the last decade, more than thirty-five food policy councils have been created).

²⁸² See Hodgson et al., supra note 11, at 38; Hamilton, supra note 12, at 546–53 (listing ten ways local food policy councils can support new farmers); Hamilton, supra note 63, at 7 ("Today many of the communities that are implementing comprehensive plans to increase urban agriculture are doing so by creating or acting on recommendations of local food policy councils."). But see Hamilton, Putting a Face on Our Food, supra note 281, at 445–46 (listing the reasons why comprehensive food system studies have not been more commonly utilized).

²⁸³ See Campbell, supra note 83, at 341 ("Americans feel the effects of 'food politics,' whether they are among the majority of consumers with access to the seemingly endless supply and variety of conventional foodstuffs or they belong to the increasing number of families and individuals who suffer from food insecurity"); Hamilton, Putting a Face on Our Food, supra note 281, at 442 ("A council initiative tries to engage representatives from all components of the food system—consumers, farmers, grocers, chefs, food processors, distributors, hunger advocates, educators, [and] government").

²⁸⁴ Mukherji & Morales, *supra* note 11, at 3; *see also* Campbell, *supra* note 83, at 350 (listing groups typically represented on food policy councils).

²⁸⁵ See Mougeot, supra note 27, at 66 ("Furthermore, more equitable decision-making promotes citizen engagement and buy-in at all levels."); Campbell, supra note 83, at 349; Stockmann, supra note 42, at 10.

²⁸⁶ See Brown et al., supra note 14, at 18. Broad participation can also work to combat negative perceptions toward or disinterest in cultivating food in cities. See Kaufman & Bailkey, supra note 1, at 62.

reports and policy recommendations."²⁸⁷ Although they usually exist outside formal government structures, FPCs, such as the aforementioned Cleveland-Cuyahoga County Food Policy Coalition or Oregon's Portland/Multnomah County Food Policy Council,²⁸⁸ create an inclusive forum for focused examination of policies relating to urban agriculture and local food,²⁸⁹ fostering "intense discussions with communities about what's wanted locally, about what's [the] broader good for neighborhoods and for the city as a whole."²⁹⁰

Urban farms and gardens are simultaneously embedded in the community and part of the larger food system.²⁹¹ These local advisory councils can serve to analyze the relationship between local food and other facets of community life,²⁹² recognizing the necessary interrelation and integration of distinct questions, concerns, and policy goals as related to urban farming.²⁹³ Citizen participation in policymaking functions to inform and lend legitimacy to the complex and value-laden issues that surround urban agriculture,²⁹⁴ promoting land uses that embody the confluence of public will and government interest.²⁹⁵ FPCs provide a means for citizen participation in

²⁸⁷ Hamilton, *supra* note 12, at 547; *see also* RAJA ET AL., *supra* note 19, at 16 (detailing examples of the work done by food policy councils); Hamilton, *supra* note 63, at 6; Salkin & Lavine, *supra* note 11, at 609–10.

²⁸⁸ Portland/Multnomah County Food Policy Council is a citizen-advocacy group that works with the Bureau of Planning and Sustainability to report findings, recommendations, and implementation strategies for guiding food policy in the City and County. See Raja et al., supra note 11, at 68–69 (discussing how the council was created and how it functions); Portland/Multnomah County Food Policy Council, Portland Planning and Sustainability, http://www.portlandoregon.gov/bps/42290 (last visited Apr. 13, 2013).

²⁸⁹ See Hamilton, Putting a Face on Our Food, supra note 281, at 443–44; Mukherji & Morales, supra note 11, at 3.

²⁹⁰ Overstudied and Underserved, supra note 58, at 444; Hamilton, Putting a Face on Our Food, supra note 281, at 444 ("[A] . . . food policy council can bring to the table a broader array of interests and voices, including those not typically asked to be involved when agricultural policy is discussed. . . . As a result, a food policy council can examine issues which often go unexamined, such as the . . . causes of hunger in a society.").

²⁹¹ HODGSON ET AL., supra note 11, at 14.

²⁹² See Brown ET AL., supra note 14, at 18 (suggesting as a first step the completion of a City-wide food assessment that "builds on other kinds of assessments from the fields of community planning (asset mapping), social work (needs assessment), public health (nutrition assessment), environmental studies (environmental assessment), and international development (participatory rural assessment)"); Hamilton, Putting a Face on Our Food, supra note 281, at 445.

²⁹³ Brown Et Al., *supra* note 14, at 20 (suggesting the publication of research that integrates "health, nutrition, food production, access, and economics together to solve whole city issues").

²⁹⁴ See Policy Guide on Community and Regional Food Planning, Am. Plan. Ass'n (2007), available at http://www.planning.org/policy/guides/pdf/foodplanning.pdf; Stockmann, supra note 42, at 43. But see id. (acknowledging that many argue the involvement of "citizens in planning or other policy decisions is ineffective, if not trite, patronizing or counterproductive").

²⁹⁵ See Hodgson et al., supra note 11, at 107; Overstudied and Underserved, supra note 58, at 443.

urban planning, creating a space for citizens to voice their preferences on appropriate ways to site urban farms and gardens in their neighborhoods.²⁹⁶

In the end, "[n]ew policy is often motivated by citizen clamor or problems that come up,"²⁹⁷ and there is a growing demand for local food on the part of producers and consumers. Public pressure and engagement is instrumental in helping to support and expand urban agriculture through planning and regulatory policy.²⁹⁸ FPCs can serve to develop regulations that support healthy food systems and healthy neighborhoods,²⁹⁹ and "it may be that by exploring different visions, cities can hit upon an array of feasible approaches."³⁰⁰ FPCs can play a significant role in matching urban agricultural activities with compatible districts and community contexts,³⁰¹ identifying zoning barriers to urban agriculture and suggesting policy changes.

B. General Zoning Recommendations

As demonstrated, in reviewing and assessing zoning policies that impede urban agriculture, municipalities may discover unintentional barriers to farming and gardening in the city. Urban agriculture is diverse in type, size, intensity, and form. As such, there is a range of possible zoning reforms that may be adopted. This Section is intended to offer a general iteration of what zoning options should be considered as planners and FPCs seek to incorporate farming and gardening into the urban environment.

Perhaps most significantly, a municipality may actively support urban agriculture by the explicit inclusion of urban farms and community gardens as either a defined zoning district or a permitted or conditional land use

²⁹⁶ See Hamilton, Putting a Face on Our Food, supra note 281, at 442-43.

²⁹⁷ Mukherji, *supra* note 24, at 97.

²⁹⁸ Hodgson et al.., *supra* note 11, at 106 ("[A] robust public-engagement process facilitated by local government . . . or by food policy or urban agriculture coalitions . . . brought urban agriculture to the forefront of public policy discussions.").

²⁹⁹ See Hamilton, supra note 63, at 2.

³⁰⁰ Mukherji, supra note 24, at 97.

³⁰¹ Salkin & Lavine, *supra* note 11, at 611 (pointing out that food policy councils also often recommend that food policies be incorporated into the municipality's comprehensive plan). *But see supra* note 124 and accompanying text (describing the relatively weak authority of the comprehensive plan).

³⁰² However, many of the obstacles to urban farming may be intentional, directed at concerns about the safety of produce grown on industrial lots, protection of neighborhood character, and the perception of farming as an inappropriate land use. The inclusion of urban agriculture in zoning regimes represents a paradigm shift from the traditional understanding of zoning regulations as restrictive mechanisms oriented towards single-use districts. A lack of interest in urban farming and gardening—or even aversion on the part of the local governments—may make comprehensive reform or an overhaul of municipal zoning impractical. Incremental reform that is responsive to the immediate needs and values of the local community may prove more effective and lasting in the long term. It is here too that food policy councils can play an important role in educating and informing the community on the advantages of local food production. See Kaufman & Bailkey, supra note 1, at 62.

category.³⁰³ This designation helps to clarify city policy, "enhances the viability of gardens and garden groups,"304 and identifies areas where urban agriculture may be a permanent, exclusive use.³⁰⁵ It also functions to indicate areas where urban agriculture is a more interim or temporary use. When properly sited, the utilization of urban agriculture can be promoted without creating nuisance or safety concerns.³⁰⁶ Municipalities should also consider adopting regulations that allow farmers' markets, on-site produce sales, 307 animal keeping and husbandry, and compositing in appropriate zoning districts.³⁰⁸ Restrictions on these activities create significant barriers to urban farming and unnecessarily impede the realization of many of the benefits of city agriculture. Seattle's zoning code offers an example of regulations that are simultaneously detailed—meant to curb the negative externalities of city farming-and permissive-intended to promote gardens and farms as permissible land uses. Finally, planners should examine permit and licensing regulations to determine if these processes create prohibitive barriers in terms of time, cost, and human resources. Even slight modifications to these practices—such as a reduction in the cost of animal licensing—may greatly facilitate urban agriculture.

Intentional and purposeful zoning can work to successfully integrate city farming and gardening into the urban environment. There is no uniform urban agricultural land use policy. Urban areas "vary in availability of land for agriculture, population density, [and] soil suitability. They vary in terms of resident interest, neighborhood willingness to accept intensive agricultural farming, and consumer demand for local produce. It is this local variation that zoning is uniquely situated to address, for it "draw[s] from local knowledge and . . . conform[s] to local wants and can be tailored to meet the particular context and needs of local neighborhoods and communities.

Conclusion

As municipalities begin to appreciate the health, environmental, social, and economic benefits of urban agriculture they are faced with the reality of arcane and often unintentionally restrictive zoning regulations. The rise of

³⁰³ See id. at 77; MOUGEOT, supra note 27, at 65.

³⁰⁴ Campbell, *supra* note 83, at 349 (internal quotation marks omitted); *see Policy Guide on Community and Regional Food Planning, supra* note 294.

³⁰⁵ MOUGEOT, supra note 27, at 65.

³⁰⁶ Mukherji & Morales, supra note 11, at 2.

³⁰⁷ This is of particular importance in residential districts and may be accomplished by allowing small-scale retail, such as produce stands, as accessory uses when agriculture is an allowed or conditional use. It may also be accompanied by operational standards to address and limit possible negative impacts.

³⁰⁸ See Hodgson et al., supra note 11, at 108; Kaufman & Bailkey, supra note 1, at 77; Mougeot, supra note 27, at 65.

³⁰⁹ See Wooten & Ackerman, supra note 24, at 5; John E. Mogk et al., Urban Agriculture Poses Health and Safety Issues, in Urban Agriculture, supra note 49, at 182–83.

³¹⁰ WOOTEN & ACKERMAN, supra note 24, at 5.

³¹¹ Cooley v. Board of Wardens, 53 U.S. 299, 320 (1852).

farming and gardening in the city has exposed the inadequacy of certain municipal zoning regulations to keep pace with the growing demand for local food production. Revision of these codes raises important and necessary underlying questions of community priorities and consideration of land's "highest and best use." A community's answers and actions in the face of these questions will shape the urban integration of farms and gardens and will determine how well a zoning regime serves the needs of the city and its citizens. 312

In detailing the benefits and costs of urban agriculture and the zoning practices of leading cities, this Note suggests municipal zoning codes can function to site urban farms and gardens in a manner that both encourages local food production and respects the particular context and characteristics of communities. In charting this course, broad citizen participation, as modeled in food policy councils, presents an opportunity for communities to "reexamine existing policy barriers in light of opportunities, public goals, and relevant stakeholders." This cooperative effort can help to maximize the benefits of urban agriculture while minimizing the burdens. 314

Early this century urban residents across the United States began to "radically shift[] the battle lines of urban development and urban decay." Armed with seeds, ingenuity, and dedication, these city farmers have been transformative in combating many of the perceived ills of city life. Municipalities should begin to cooperate. With an awareness of the multitude of benefits conferred by urban agriculture, local cities and engaged citizens can begin to develop zoning regulations in favor of returning a green paradise to even the most unlikely urban locations, for "[a]s long as cracks keep appearing in the concrete, anything is possible." 316

³¹² Hamilton, supra note 7, at 145.

³¹³ Mukherji & Morales, supra note 11, at 7; see Hamilton, supra note 7, at 145.

³¹⁴ MOUGEOT, supra note 27, at 9-10.

³¹⁵ Hanson & Marty, supra note 1, at 4.

³¹⁶ Id. at 11.