# Urban Agriculture: Growing Healthy, Sustainable Places



Kimberley Hodgson, Marcia Caton Campbell, and Martin Bailkey



American Planning Association

Planning Advisory Service Report Number 563



Urban Agriculture: Growing Healthy, Sustainable Places is the result of a collaborative partnership between the American Planning Association (APA) and MetroAg: Alliance for Urban Agriculture. re for Urban Agriculture Funding for this project was provided by the U.S. Environmental Protection Agency (U.S. EPA) Office of Brownfields and Land Revitalization.

This report was developed under the auspices of the Planning and Community Health Research Center, one of APA's National Centers for Planning. The Center engages in research, policy, outreach, and education to advance healthy communities through planning. For more information, visit www.planning.org/nationalcenters/health. APA's National Centers for Planning conduct policy-relevant research and education involving community health, natural and man-made hazards, and green communities. For more detail, visit www.planning .org/nationalcenters.

Kimberley Hodgson, AICP, is a registered dietitian and the manager of APA's Planning and Community Health Research Center. She served as the project manager and primary author. Marcia Caton Campbell is a coauthor and the Milwaukee director for the Center for Resilient Cities and a MetroAg associate. Martin Bailkey is a coauthor and the evaluation and outreach coordinator for Growing Power, as well as a MetroAg associate.

The lead author of the history section of Chapter 2 was Domenic Vitiello, assistant professor of city planning and urban studies at the University of Pennsylvania, with contributions from David Morley, AICP, research associate and PAS coordinator at APA. The lead author of the economic development section of Chapter 4 was Ken Meter, president of the Crossroads Resource Center. The case studies were written by Hodgson, Caton Campbell, Bailkey, Vitiello, and Morley. The tables and appendixes were created by Hodgson, Morley, and Tre Jerdon, research associate at APA.

The authors thank the many other individuals who contributed to or supported this project, particularly the local government staff, elected officials, and citizens in the case-study communities who participated in interviews, shared documents and images, and reviewed drafts of the case studies. Special thanks also go to the report reviewers: Nisha Botchwey, Nevin Cohen, Deanna Glosser, Jerry Kaufman, FAICP, Samina Raja, John Reinhardt, AICP, Wayne Roberts, Heather Stouder, AICP, Matthew Tucker, Domenic Vitiello, and Heather Wooten.

Thanks also to Ann Carroll, senior policy analyst at U.S. EPA, and Bill Klein, AICP, director of research at APA, who provided valuable input and leadership throughout the project; and to Ann F. Dillemuth, AICP, who took the lead on the copyediting.

The authors dedicate this report to Jerry Kaufman, FAICP, professor emeritus in the Department of Urban and Regional Planning at the University of Wisconsin-Madison, and the late Jac Smit, AICP, founder of the Urban Agriculture Network, for their vision, inspiration, and leadership in urban agriculture and community food-systems planning. Their pioneering work has made cities healthier, more sustainable, and more resilient.

Cover design by Lisa Barton

Cover photo: An urban garden thrives near the Cabrini-Green housing project in Chicago, 2008. Photo: Linda Nellett/Creative Commons Attribution 2.0 Generic.

Planning Advisory Service Reports are produced in the Research Department of APA. Timothy Mennel, Editor; Lisa Barton, Design Associate

© January 2011 by the American Planning Association. APA's publications office is at 205 N. Michigan Ave., Suite 1200, Chicago, IL 60601-5927. APA headquarters office is at 1030 15th St., NW, Suite 750 West, Washington, DC 20005–1503.

E-mail: pasreports@planning.org

The Planning Advisory Service is a subscription service offered by the Research Department of the American Planning Association. Four reports are produced each year. Subscribers also receive PAS Memo and PAS QuickNotes, and they have access to the Inquiry Answering Service and other valuable benefits. To learn more, visit www.planning.org/pas/index.htm.

W. Paul Farmer, FAICP, Chief Executive Officer; Sylvia Lewis, Director of Publications; William R. Klein, AICP, Director of Research.

# **URBAN AGRICULTURE:** GROWING HEALTHY, SUSTAINABLE PLACES

Kimberley Hodgson, aicp, Marcia Caton Campbell, and Martin Bailkey

## TABLE OF CONTENTS

Chapter 1: Introduction1
Chapter 2: What Is Urban Agriculture?
History of Urban Agriculture10
Defining Urban Agriculture13
Benefits of Urban Agriculture
Risks of Urban Agriculture
Prerequisits for Urban Agriculture
Conclusion
Chapter 3: Facilitating Urban Agriculture Through Planning Practice
Developing Community Visions and Goals for Urban Agriculture
Plan Making
Implementation Mechanisms for Desired Plan Goals
Using Urban Agriculture to Influence the Outcomes of Private Development Projects
Agricultural Urbanism
Supporting Urban Agriculture Through Public-Sector Programs
Conclusion
Chapter 4: Linking Urban Agriculture with Planning Practice61
Fostering Resilient Communities
Reclaiming Vacant Land72
Reusing Brownfields for Urban Agriculture
Economic Development
Community Health and Wellness
Community Capacity Building and Empowerment93
Conclusion
Chapter 5: Planning for Urban Agriculture: Lessons Learned 105

Appendix 1: Urban Agriculture Components in Food Charters1	11
Appendix 2: Urban Agriculture Components in Local Comprehensive Plans 1	12
Appendix 3: Urban Agriculture Components in Local Sustainability Plans	16
Appendix 4: Urban Agriculture Components in Regional Plans 1	18
Appendix 5: Urban Agriculture–Related Zoning Regulations1	20
Appendix 6: Allowances for Poultry, Livestock, or Bees in Animal Control Ordinances 1	28
Appendix 7: Other Municipal Policies Supporting Urban Agriculture 1	30
Resources 1	33
References	36

CHAPTER 1

# Introduction



The American Planning Association initiated this report to introduce practicing planners and local government representatives to the concept of urban agriculture, its different forms of practice across North America, and its connections to other social, economic, and environmental goals. The creation of this report coincides with the steady rise in popularity of urban agriculture in the United States and Canada, as evidenced by coverage in the popular press, its increasingly central place within the growing local food movement, and the increase in interest in planning cities to foster both healthier residents and more sustainable communities. *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. From community and school gardens in small rural towns and commercial farms in first-ring suburbs to rooftop gardens and bee-keeping operations in built-out cities, urban agriculture exists in multiple forms and for multiple purposes.

While it is a small component of the larger community-based food system, urban agriculture is important to the overall health and resilience of communities and regions, and as a practice it is expected to increase over the next decade. Therefore, urban agriculture has implications for urban planning as regulated by local and regional governments and planning agencies. These implications need analysis and clarification, since urban agriculture falls somewhat outside the range of traditional land-use designations (e.g., is a commercial urban farm as a land use most similar to a rural farm, a commercial enterprise, or a public park?). There are also emerging connections between urban agriculture and the redevelopment of urban brownfields in residential and industrial areas (see, e.g., Kaufman and Bailkey 2004), as well as the more extensive and more productive use of lawns and green space. Urban agriculture has been found to influence the value of neighboring real estate and thus has implications for land use beyond the boundaries of a particular agricultural site (Voicu and Been 2008).

berley Hodgsc

Urban agriculture has implications for urban planning as regulated by local and regional governments and planning agencies. Along with its connections to land-use planning, urban agriculture can contribute significantly to the development of social connections, capacity building, and community empowerment in urban neighborhoods, most commonly through community gardening (Hynes 1996; Johnson 2010). In addition, it offers links to community development practice as a viable means of creating jobs, training youth, supplementing food budgets, and generating modest levels of revenue for urban farmers who sell their products. Urban agriculture also has much to offer community health planners as a healthpromoting activity but also as a mechanism to connect urban and suburban producers of fruits and vegetables with urban consumers. When combined with other efforts to improve access to healthy, affordable food (such as healthy-corner-store programs and supermarket-financing initiatives), urban agriculture can become a valuable tool in promoting community food security, particularly in low-income, urban neighborhoods.<sup>1</sup>

In American cities that have been especially hard hit by economic decline or that suffer from degraded environments, urban agriculture is increasingly being viewed by communities as a useful indicator of resilience.<sup>2</sup> Older, industrial cities—such as Cleveland, Detroit, and Buffalo—with their drastic losses of population and acres of vacant land resulting from depopulation and disinvestment, are emerging as centers for urban agriculture initiatives. In essence, they are becoming laboratories for the future role of urban food production in the postindustrial city. Yet urban agriculture is also an Urban agriculture is increasingly seen as an indicator of community resilience.



increasingly important land use in dense, built-out cities such as Seattle and New York. Problems of food access disparities, childhood obesity, and food illiteracy have prompted urban agriculture activity on a variety of traditional and nontraditional spaces on public and private property.<sup>3</sup>

Finally, urban agriculture is part of a larger community-based foodsystem continuum that spans rural, periurban (peripheral areas where urban or suburban meets rural), suburban, and urban areas. As such, it is a key component of the emerging practice area of community and regional food systems planning that appears to be garnering increased acceptance among planning practitioners, educators, and students. As described in PAS Report No. 554 (Raja et al. 2008), community food planning seeks to foster greater levels of health and nutrition, particularly in low-income communities, by creating productive "food environments" through programmatic efforts (including community gardens and urban farms, farmers markets, and direct farm-to-school meal programs), policy initiatives (food charters and food policy councils), and comprehensive plans and zoning measures that accommodate community food activities.

A community-based food-systems approach has the potential to simultaneously address issues of food security, public health, social justice, and ecological health in local communities and regions, as well as the economic vitality of agriculture and rural communities. Such an approach emphasizes, strengthens, and makes visible the relationships among producers, processors, distributors, and consumers of food at the local and regional levels (Raja et al. 2008), while aiming to be:

**Place-based**, promoting networks of stakeholders, linking urban and rural issues, engaging residents, and creating senses of place;

**Ecologically sound**, using environmentally sustainable methods for producing, processing, distributing, transporting, and disposing of food and agricultural by-products;

**Economically productive**, bolstering development capacity and providing job opportunities for farmers and community residents;

**Socially cohesive**, facilitating trust, sharing, and community building across a diverse range of cultures and addressing the concerns and needs of marginalized groups, including minority and immigrant farmers and farm laborers, financially struggling small farmers, and underserved inner-city and rural residents; and

**Food secure and literate**, providing equitable physical and economic access to safe, nutritious, culturally appropriate, and sustainably grown food at all times across communities and fostering an understanding and appreciation of food, from production to disposal.

While programs, projects, and entrepreneurial activity are important components of a healthy, sustainable food system, their replication and effectiveness are often hindered by the absence of public policies that provide governmental, legal, and institutional support for community-based food systems (Raja et al. 2008). Historically, planners and local governments have had limited interests in food-systems issues and food policy (Pothukuchi and Kaufman 1999, 2000; Caton Campbell 2004). However, a number of formal and informal coalitions of food-system stakeholders, including local and regional governments and planners, are developing and implementing successful plans and policies to address issues—from food production to waste disposal—in hopes of creating healthier, more sustainable food systems, communities, and people.

### FRAMEWORK

This PAS Report is the latest in a series of APA education, outreach, research, and policy actions and publications related to community and regional food systems planning. In his opening keynote address at the 2003 National Planning Conference, Jerry Kaufman, FAICP, asked, Why are planners not engaged in the food system, since they are actively engaged in air, water, and shelter issues, all of which are basic necessities vital to not just the quality of life but life itself?

Planners' interests and engagements in food-systems issues began to grow not long thereafter. In 2004, special issues of the *Journal of Planning Education and Research* and *Progressive Planning* emphasized the breadth and depth of linkages between the food system and other areas of planning practice. APA's National Planning Conference also included special tracks on food planning in 2005 (San Francisco) and 2006 (San Antonio). While a few academic planning departments had made community food-systems planning part of their course offerings as early as 1997, planning programs at other schools—including the University of California at Los Angeles, the University of Wisconsin–Madison, Wayne State University, and the University of Virginia—followed suit as student interest burgeoned.

In 2005, Kaufman—along with Deanna Glosser, president and CEO of Environmental Planning Solutions and former APA Divisions Council vice chair, and Kami Pothukuchi, associate professor of urban planning and director of SEED Wayne (Sustainable Food Systems Education and Engagement in Detroit and Wayne State University)—initiated and launched the Food Interest Group (FIG), a coalition of APA members interested in or actively engaged in food-system planning at the local, regional, state, or national levels. In 2006, FIG prepared and presented a white paper on food planning to the Delegates Assembly at the National Planning Conference. Approved subsequently by the APA Legislative and Policy Committee, the white paper became the impetus for the preparation of the *Policy Guide on Community and Regional Food Planning* (APA 2007). APA has subsequently authored and published several reports and resources, which are included in the references at the end of this report.

In 2008, APA launched the National Centers for Planning, which are dedicated to helping planners create communities of lasting value: safe, healthy, and sustainable places that respect the values of their citizens. One of these, the Planning and Community Health Research Center (PCHRC), focuses on integrating community health issues into local and regional planning practices by advancing a program of policy, relevant research, and education. The PCHRC provides practicing planners and allied professionals with guidance on how to improve community and regional food systems. (See www.planning.org/ nationalcenters/health/food.htm for further information.)

The events, publications, and activities outlined above are the foundation of this report. In addition, the authors and APA researchers developed case study research and conducted in-depth interviews with planners, local government officials, and urban agriculture practitioners in 11 cities across the United States and Canada. This research was designed to identify the opportunities and challenges faced by cities and counties of varying sizes, economies, and locations in supporting and expanding urban agriculture, illustrating the range of municipal efforts and variety of policies and programs both emerging and in place. The case studies also reveal differences among cities in their approaches and emphases as they respond to the needs of the urban agriculture community. The cities and regions studied were Chicago; Cleveland; Detroit; Kansas City, Kansas and Missouri; Milwaukee; Minneapolis; New Orleans; Philadelphia; Seattle and King County, Washington; Toronto, Ontario; and Vancouver, British Columbia.

#### **AUDIENCE**

In most cases, practicing planners in the private or public sectors and other local and regional government staff are not currently leading the urban agriculture movement in North America. Instead, the urban agriculture movement is being led primarily by dedicated individuals and community-based nonprofit organizations—some of which were created expressly to engage in urban agriculture, others of which added it to their menu of activities. This report is intended to encourage planners to expand their involvement in and support of urban agriculture–related policies, programs, and projects and to integrate urban agriculture into food-system planning processes.

Most planners already possess sets of skills that are relevant and applicable to the urban agriculture movement. Even without knowledge of or experience in urban agriculture, planners can apply their abilities to envision alternative urban futures, their professional knowledge of urban systems, their grasps of land-use change and regulation mechanisms (such as comprehensive plans and zoning ordinances), their abilities to facilitate collaboration within government and with nongovernmental organizations and other professionals, and their expertise in community engagement and consensus building.

This report provides a conceptual and practical guide for planners working in the public sector. Private and nonprofit-sector planners—as well as staff of other local and regional government agencies, including but not limited to public health, environment, economic development, and community development—may also find this report relevant to their work. In addition, this report should be of use in the growing number of universitylevel courses in food-systems planning.



The urban agriculture movement is being led primarily by dedicated individuals and community-based nonprofit organizations. Finally, through its collection of case studies, this report serves as a snapshot of the state of urban agriculture practice in the United States and Canada. As such, it should be of interest to readers beyond the planning community. Chief among these are urban agriculture practitioners, who may interact with a variety of grassroots community food-system stake-holders outside of traditional local planning frameworks. They have long recognized the importance of planners in facilitating access to public land or other underutilized space and of policy makers who can influence the regulatory contexts in which urban agriculture operates. Thus, this report seeks to inform practitioners of public policies and planning approaches that might be applied to their communities and to help them gain clearer senses of what they can ask of their planning departments at the neighborhood, municipal, county, and regional levels.

#### **ENDNOTES**

- Food security is defined as "a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice" (Community Food Security Coalition 2010).
- 2. Resilience describes the capacity of a city or town to thrive in the face of social, economic, or environmental challenges. A resilient city reduces its dependence on natural resources (land, water, materials, and energy) while simultaneously improving its quality of life (ecological environment, public health, housing, employment, and community) so that it can better fit within the capacities of local, regional, and global ecosystems.
- Food literacy is the understanding of how food is produced, transformed, distributed, marketed, consumed, and disposed of.