

Evaluating Urban Agriculture Policy Implementation in California:

A Case Study of Bakersfield

by

Maria Ridoutt-Orozco

A Capstone Project Presented in Partial Fulfillment

of the Requirements for the Degree

Master of Science

ARIZONA STATE UNIVERSITY

August 2025

ABSTRACT

Urban agriculture (UA) is increasingly recognized as a pathway to address food insecurity, strengthen community resilience, and expand equitable access to fresh, nutritious food. In California—where some of the nation’s highest agricultural production coexists with some of its most food-insecure communities—both federal and state agencies have introduced programs to support UA, including the USDA Office of Urban Agriculture and Innovative Production (OUAIP) and CDFA’s emerging urban agriculture initiatives. Yet the practical implementation of these policies remains uneven, with mid-sized cities frequently falling outside the primary reach of institutional support.

This capstone investigates how UA policies function on the ground in a mid-sized urban context, using Bakersfield as a case study. Bakersfield illustrates the core paradox of California’s food system: a major agricultural county with persistently high food insecurity, limited municipal engagement in UA, and no dedicated USDA Urban Service Center. The research examines whether federal and state programs are operationally accessible in such settings and identifies the community-led strategies that emerge when institutional infrastructure is weak or absent.

The study draws on a review of federal and state UA policies, field observations at USDA Service Centers across California, and six in-depth interviews with USDA staff, urban growers, extension advisors, and policy experts. Interviews were thematically coded to identify patterns in implementation capacity, institutional outreach, administrative barriers, and community-led strategies. Particular attention was given to

the contrast between major metropolitan areas, where resources and networks tend to cluster, and mid-sized regions that lack dedicated UA infrastructure.

Findings reveal significant structural gaps: delayed federal hiring, unstaffed or unopened Urban Service Centers, reimbursement-based cost-share models unsuited to small-scale growers, and minimal outreach to communities not already connected to agricultural networks. As a result, growers in Bakersfield rely heavily on community organizations, mutual aid networks, and nonprofit intermediaries for support—structures that, while effective, are not substitutes for sustained institutional investment.

Key recommendations include fully staffing USDA Urban Service Centers, urban-specific program adaptations, streamlined land-use pathways, support for UA intermediary organizations, and the reinstatement of federal equity provisions.

Strengthening these mechanisms would help transform UA policy from symbolic recognition into functional infrastructure capable of advancing equitable and resilient food systems across California.

ACKNOWLEDGEMENTS

Joe Dobrow

Professor of Practice

School of Sustainability

Arizona State University

Dr. Kathleen A. Merrigan

Executive Director

Swette Center for Sustainable Food Systems

Arizona State University

I am deeply grateful to the many individuals and organizations who contributed their time, insight, and experience to this project. Thank you to the urban farmers, policy advocates, and agency staff who shared their stories and expertise so openly. Your perspectives were invaluable in shaping this research and grounding it in reality.

I extend my heartfelt thanks to the USDA staff who offered their time, answered difficult questions, and provided candid reflections on the challenges and possibilities of urban agriculture policy. Your honesty, and your commitment to serving growers despite institutional constraints, helped illuminate the complexities of implementing UA programs on the ground.

My sincere appreciation goes to the team at the Community Alliance with Family Farmers (CAFF), whose ongoing work to empower small-scale and historically underserved farmers shaped my understanding of the intersection between policy and practice. Thank you for modeling what farmer-centered advocacy looks like and for supporting my learning over the course of this degree.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	vi
INTRODUCTION.....	1
BACKGROUND.....	3
METHODOLOGY.....	4
LITERATURE AND POLICY REVIEW.....	6
Landscape of Urban Agriculture in California.....	6
Overview of Urban Agriculture policy.....	8
Urban Agriculture policy at the federal level.....	9
USDA’s Office of Urban Agriculture and Innovative Production (OUAIP).....	9
U.S. Department of Agriculture (USDA) Urban Service Centers.....	14
USDA Structural Changes in 2025.....	14
Impact of the Deferred Resignation Program in USDA.....	14
Office closures and partial reversals.....	15
USDA department-wide reorganization.....	16
Urban Agriculture policy in California.....	17
Urban Agriculture Incentive Zones Act (AB 551).....	17
Urban Agriculture policy at the local level.....	20
Case Study: Bakersfield.....	23
Data Analysis.....	25

Implementation of Federal and State UA Policies.....	25
Institutional Intent vs Institutional Capacity.....	26
Institutional Outreach.....	27
Attempting to Access USDA Support: A Field Observation.....	28
Experiences of Urban Growers.....	28
The Role of Intermediary Organizations.....	29
Community-Led and Alternative Models.....	30
Equity and Representation in Policy.....	30
DISCUSSION.....	31
Policy Momentum Without Operational Stability.....	31
Misalignment Between Program Design and Urban Reality.....	31
Implications for Bakersfield and other Mid-Sized Cities.....	32
RECOMMENDATIONS.....	34
Recommendation 1: Open and Staff Urban Service Centers.....	34
Recommendation 2: Adapt Federal and State Programs to Urban and Peri-Urban Realities..	34
Recommendation 3: Remove Structural Barriers to Urban Agriculture Adoption.....	35
Recommendation 4: Fund Intermediary and Community-Led Infrastructure.....	35
Recommendation 5: Reinstate and Protect Equity Measures for Underserved Growers.....	36
CONCLUSION.....	37
REFERENCES.....	39

LIST OF TABLES

Table	Page
1. Funding programs at USDA’s Office of Urban Agriculture and Innovative Production (OUAIP) as of July 2025.....	11
2. Urban Agriculture and Innovative Production Advisory Committee (UAIPAC) as of January 2025 (USDA, 2025b).....	13
3. California cities and counties that have implemented Urban Agriculture Incentive Zones (UAIZ) as of July 2025.....	19
4. Agricultural Statistics of California and Kern County, 2022 Census of Agriculture (USDA NASS, 2024a and 2024b).....	24

Introduction

Urban agriculture (UA) is growing in visibility across California (Gonzales and Fanous, 2024), yet meaningful research and policy implementation often overlook mid-sized cities. While regions like Los Angeles and San Francisco have received substantial attention and investment, cities like Bakersfield—home to over 400,000 residents and surrounded by some of the most productive farmland in the world—are too often left out of the conversation.

Urban agriculture holds immense promise in addressing food insecurity, strengthening community resilience, diversifying food production, and creating opportunities for economic empowerment (Hagey et al., 2012). In California, a state that simultaneously feeds the nation and houses some of its most food-insecure communities, the potential of UA as a tool for equity and sustainability is especially urgent.

Yet for many mid-sized cities, supportive policies exist more on paper than in practice. Federal and state initiatives such as the United States Department of Agriculture (USDA) Urban Agriculture programs and California’s Urban Agriculture Incentive Zones Act (AB 551) were created to expand UA access (USDA, 2025a; California Legislative Information, 2013), but their implementation has been uneven.

This study investigates how urban agriculture policies are actually functioning on the ground, using Bakersfield as a case study. Bakersfield is both deeply agricultural and deeply food insecure (Feeding America, 2023). It is emblematic of mid-sized cities where urban agriculture could play a transformative role if the infrastructure, policies, and support systems were better aligned with growers’ realities.

The report is grounded in conversations with urban farmers, policy advocates, and federal and state employees to better understand the operational challenges that arise in urban agriculture policy implementation. By evaluating the gaps between policy intent and practice, this report seeks to guide policymakers, advocates, and aspiring urban farmers working to build vibrant urban agriculture ecosystems in similarly underserved regions.

Background

California is often referred to as the agricultural heart of the nation, boasting more than \$59 billion in annual production and growing over 400 different commodities, including over 75% of the nation's supply of fruits and nuts (CDFA, 2024a). But hidden behind this bounty lies a troubling paradox: millions of Californians remain food insecure, especially in areas where industrial agriculture dominates the landscape (CalMatters, 2023 and UCLA Center for Health Policy Research, 2025).

The city of Bakersfield is one such place. Located in Kern County, one of the top agricultural counties in the United States (Kern County Ag Commissioner, 2024), Bakersfield is surrounded by billion-dollar agribusinesses. Yet nearly 17% of its residents face limited access to healthy food (Feeding America, 2023). While Kern County's large farms thrive on extensive acreage to produce export-bound crops, there is little infrastructure to support food production that feeds local residents.

Urban agriculture is emerging as a solution to this contradiction—a way to grow food closer to where it is consumed, empower residents, reclaim underused land, and foster healthier communities. But despite its promise, the policies and systems designed to support urban growers are often fragmented, underfunded, or inaccessible, especially outside of major metropolitan areas. Federal and state-level initiatives and grant programs have made efforts to support urban agriculture in metropolitan areas, yet their reach rarely extends to mid-sized cities like Bakersfield. The challenge is not one of will, but of infrastructure and implementation. This study was designed to explore these issues, from a policy perspective and through the lived experience of growers and stakeholders trying to make urban agriculture work in cities that lack the basic scaffolding to support it.

Methodology

This study employs a qualitative case study approach to explore the practical implementation of urban agriculture policy in mid-sized cities, with Bakersfield serving as a case study. The approach combined policy analysis, multi-site fieldwork, and stakeholder interviews to surface not only the intent of urban agriculture programs, but also the lived realities of the growers and agency staff navigating them.

The research began with an extensive review of federal, state and municipal policies shaping urban agriculture, including the structure and operations of the USDA Office of Urban Agriculture and Innovative Production (OUAIP) and the California Department of Food and Agriculture (CDFA) Urban Agriculture Grant Program; as well as state legislation and initiatives related to urban agriculture. This review established the baseline conditions that growers encounter when attempting to access institutional support.

To understand how these policies translate into on-the-ground support, I conducted field visits to the USDA Urban Service Centers in the Oakland area, which operates through existing NRCS facilities in Livermore; and the USDA Service Center in Bakersfield. These visits were critical for observing how urban agriculture is understood, prioritized, and serviced within the agency. I assessed the centers' visibility, staffing capacity, outreach practices, and familiarity with urban production systems. Informal conversations with staff illuminated internal bottlenecks, service inconsistencies, and the downstream effects of the federal hiring freeze and Deferred Resignation Program on program delivery—insights not captured in official documents.

The core of the analysis draws from semi-structured interviews with six stakeholders across the urban agriculture ecosystem: three USDA employees, one Bakersfield urban farmer and community leader, one urban agriculture policy expert and one urban agriculture extension advisor. Interviews lasted 45–60 minutes, were conducted via Zoom and in-person, and followed a flexible protocol that allowed participants to discuss operational challenges, institutional constraints, program accessibility, and their direct experiences interacting with federal or state agencies.

During the data analysis, recurring themes and policy bottlenecks were identified. The findings were triangulated across interviews, field notes, and policy documents to ensure accuracy and depth.

This study was reviewed and deemed exempt by the Arizona State University Institutional Review Board (IRB), pursuant to Federal Regulations 45CFR46 (2)(i) tests, surveys, or observation (low risk), on June 16th 2025. The IRB study number for this project is STUDY00022383.

Literature and Policy Review

This literature review aims to surface and contextualize the policies and initiatives that have shaped the development of urban agriculture in California. It also highlights the challenges and disparities in how those policies have been implemented across different types of cities—especially the gap between large urban centers and mid-sized cities like Bakersfield.

Much of the existing urban agriculture research has focused on large metropolitan areas, where advocacy and funding are more readily available. As a result, the successes and failures of urban ag policy in mid-sized cities remain underexplored. This section seeks to address that gap by examining federal, state, and local frameworks, with an emphasis on their application (or lack thereof) in underserved areas.

Landscape of Urban Agriculture in California

The California Department of Food and Agriculture (CDFA, 2024) defines the term “urban agriculture” as:

[...] the cultivation, processing, and distribution of agricultural products in urban settings, including things like inground small plot cultivation, raised beds, vertical production, warehouse farms, mushroom growing, urban forestry and tree care, community gardens, rooftop farms, hydroponic, aeroponic, and aquaponic facilities, and other innovations. Urban farmers and gardeners work among diverse populations to expand access to nutritious foods, foster community engagement, offer workforce development opportunities, educate communities about food and farming, and expand green spaces.

CDFA further defines "urban" as a continuously built-up zone with a population of 50,000 or more, comprising one or more central places and their surrounding densely settled fringes, including the smaller towns adjacent or within 25 miles of these geographic areas (CDFA, 2024b). Urban cores identified by CDFA (2023) include:

- Sacramento: Sacramento, Stockton
- Bay Area: East Bay, North Bay, and South Bay
- Fresno: Fresno, Bakersfield
- LA: Los Angeles, Long Beach
- San Diego: San Diego
- Inland Empire: San Bernardino, Riverside

Despite increasing policy attention and funding, California lacks a centralized mechanism to quantify its urban agriculture landscape. Neither the USDA Census of Agriculture nor the California Department of Food and Agriculture (CDFA) disaggregates data to track urban growers specifically, making it difficult to assess the true scale and distribution of UA across the state (USDA, 2024b; CDFA, 2024b).

While local-level indicators suggest robust activity—for example, over 125 community gardens in Los Angeles (UCLA Luskin Center, 2013) and 45 urban farms and gardens in the Bay Area (UCANR, 2021)—these figures are fragmented and inconsistently reported. Furthermore, most of the information available belongs to initiatives from only these two urban centers: Los Angeles and the Bay Area.

In 2024, CDFA allocated \$11.67 million in Urban Agriculture grants to fund 33 projects across California, signaling strong demand, yet no statewide registry or monitoring framework exists to track implementation or outcomes (CDFA, 2024b).

California's extension service, housed under the University of California Agriculture and Natural Resources (UCANR), provides regional expertise through urban agriculture advisors statewide. However, there is no public database of the urban farms or growers they support (UCANR, 2024).

This data vacuum presents a critical limitation for researchers and policymakers attempting to evaluate the impact of urban agriculture policies, especially in mid-sized cities like Bakersfield that often fall outside the scope of major urban ag investments.

The absence of reliable, statewide data not only obscures the contributions of urban growers, but also hinders the ability to measure equity, resource distribution, and long-term sustainability within California's food system.

Overview of Urban Agriculture policy

Urban agriculture has gained momentum in recent years due to its widely acknowledged potential to deliver social, environmental, health, and economic benefits. Advocates frame UA as a locally rooted response to global food system failures, with the capacity to improve urban resilience to climate change, resource insecurity and broader systemic crises (Halvey et al., 2021), as well as strengthening social cohesion, enhancing food security, and promoting public health (Yuan et al., 2022).

This rising interest in UA has coincided with a notable increase in municipal policy efforts to institutionalize and support urban farming—through zoning, funding, or regulatory frameworks—particularly over the past decade (Meenar et al., 2017).

Policy conversations at the local level have often served as catalysts for broader reforms, influencing both state and federal urban agriculture policy. For example, local

advocacy has contributed to state laws enabling property tax incentives for UA (Essex et al., 2015) and helped shape federal action, such as the creation of the Office of Urban Agriculture and Innovative Production under the 2018 Farm Bill (Agriculture Improvement Act of 2018).

Despite these developments, land use decisions remain largely a municipal responsibility, meaning that most legal and regulatory issues surrounding UA are addressed at the local level (Halvey et al., 2021). As a result, urban farmers struggle to keep up with UA policies, which are enforced by many different government agencies depending on the location of the farm.

Urban Agriculture policy at the federal level

USDA's Office of Urban Agriculture and Innovative Production (OUAIP)

The U.S. Department of Agriculture established the Office of Urban Agriculture and Innovative Production (OUAIP) as mandated by Section 12302 of the Agriculture Improvement Act of 2018 (also known as the 2018 Farm Bill), to support the development and implementation of urban agriculture practices across the nation (U.S. Congress, 2018).

Housed within the USDA's Natural Resources Conservation Service (NRCS) under the Farm Production and Conservation (FPAC) mission area, OUAIP plays a central role in coordinating federal support for urban and peri-urban agriculture, advancing equity, sustainability, and innovation in food systems (USDA, 2023).

The Office of Urban Agriculture and Innovative Production (OUAIP) administers three programs that support the development of sustainable and equitable food systems in urban areas: the Urban Agriculture and Innovative Production (UAIP) Competitive

Grants, the Composting and Food Waste Reduction (CFWR) Cooperative Agreements and the People’s Garden Initiative. Additionally, OUAIP convenes a federal advisory committee, which provides input to USDA leadership on ways to promote urban agriculture, increase access to nutritious food, and engage underserved communities (USDA, 2024a).

USDA Office of Urban Agriculture and Innovative Production is currently undergoing a leadership transition, as inaugural Director Brian Guse’s last day in this role was April 21, 2025 (personal communication, July 22, 2025) and his position hasn’t been replaced as of August 2025.

Urban Agriculture and Innovative Production (UAIP) Competitive Grants.

Established under the 2018 Farm Bill, the UAIP Competitive Grants Program is designed to support two types of urban agriculture projects: (1) Planning Projects, which initiate or expand efforts of urban and suburban farmers, gardeners, citizens, government officials, schools and other stakeholders to target areas of food access, education, business and start-up costs for new farmers, urban forestry, and policies related to zoning and other needs of urban production; and (2) Implementation Projects, which accelerate urban, indoor, and other agricultural practices that serve multiple farmers and improve local food access, by supporting infrastructure needs, emerging technologies, education, and urban farming policy implementation. The grants are awarded to eligible entities such as nonprofits, municipalities, tribal organizations, and academic institutions.

Composting and Food Waste Reduction (CFWR) Cooperative Agreements.

The CFWR Cooperative Agreements program supports U.S. municipalities, counties, local governments, tribal governments, or city planners to reduce food waste and divert

organic material from landfills through composting. The goals of this program include to increase access of agricultural producers to composted material, reduce reliance on and limit the use of fertilizer, improve soil quality, encourage waste management and permaculture business development, and divert food waste from landfills, among others. This program is part of a joint initiative by USDA and the U.S. Environmental Protection Agency (EPA) to promote circular food systems and mitigate climate change. Awardees implement community-scale composting infrastructure, train residents and businesses in composting practices, and integrate food waste reduction strategies into local planning.

Table 1

Funding programs at USDA’s Office of Urban Agriculture and Innovative Production (OUAIP) as of July 2025 ([Grants.gov](https://www.grants.gov), 2025).

Program name	Type of program	Status	Investment
Urban Agriculture and Innovative Production (UAIP)	Competitive Grants	Annual solicitations opened from 2020 to 2024. Since then, the program hasn’t opened and a future solicitation hasn’t been announced.	2020: \$3 million 2021: \$4 million 2022: \$14.2 million 2023: \$7.5 million 2024: \$6.1 million
Composting and Food Waste Reduction (CFWR)	Cooperative Agreements	Annual solicitations opened from 2020 to 2024. Since then, the program hasn’t opened and a future solicitation hasn’t been announced.	2020: \$900,000 2021: \$2 million 2022: \$10.2 million 2023: \$9.5 million 2024: \$7.8 million

The People’s Garden Initiative. Originally launched in 2009 and revitalized under OUAIP, the People’s Garden Initiative promotes collaborative gardening projects on public land, school campuses, and USDA facilities. The initiative serves as both a symbolic and practical model for community-based agriculture that supports biodiversity, conservation, and food access. People’s Gardens must meet three core criteria: they must

benefit the community, be a collaborative effort, and incorporate sustainable practices. While not a direct grant program, the initiative provides technical assistance, toolkits, and recognition to participating gardens.

Urban Agriculture and Innovative Production Advisory Committee (UAIPAC). The 2018 Farm Bill directed USDA to create this committee to advise the Secretary of Agriculture on the development of policies and outreach relating to urban, indoor, and other emerging agricultural production practices as well as to identify any barriers to urban agriculture. Twelve members are appointed to the Committee for one to three-year terms by the Secretary of Agriculture. The members represent a diverse set of expertise including urban production, innovative production, higher education, non-profit, finance, business and economic development, supply chain, and other areas related to urban, indoor, and other emerging agriculture production practices (USDA, 2025b). UAIPAC held quarterly meetings from March 2022 until October 2024. (USDA, 2025b). As of July 2025, there is not another meeting scheduled in the Federal Register.

Table 2:*Urban Agriculture and Innovative Production Advisory Committee (UAIPAC) as of**January 2025 (USDA, 2025b).*

Name	Affiliation	Role at UAIPAC	Expertise	Location
Kaben Smallwood	President/CEO, Symbiotic Aquaponic	Chairperson	Innovative Agriculture Representative	Oklahoma
Qiana Mickie	Executive Director, NYC Mayor’s Office of Urban Agriculture	Co-Chairperson	Related Experience Representative	New York
Tony Minnick	Agriculture Park Director, Columbia Center for Urban Agriculture	Member	Related Experience Representative	Missouri
Jerry Ann Hebron	Executive Director, Oakland Avenue Urban Farm	Member	Urban Agriculture Representative	Michigan
Viraj Puri	CEO/Co-Founder, Gotham Greens	Member	Innovative Agriculture Representative	New York
Jeff Young	Director for Urban Extension, University of Kentucky – Cooperative Extension	Member	Higher Education & Extension Representative	Kentucky
Dr. Catherine Campbell	Assistant Professor and Extension Specialist, University of Florida	Member	Higher Education & Extension Representative	Florida
Allison Paap	Vice-President-Lending Manager, American AgCredit	Member	Agriculture Finance Representative	California
Rev. Dr. Carl P. Wallace	Chief Operating Officer, Abundant Life Farm	Member	Non-profit Organization Representative	Ohio
Dion Dawson	Founder, Dion’s Chicago Dream	Member	Food Supply Chain Representative	Illinois
Kate Greenberg	Commissioner of Agriculture, Colorado Department of Agriculture	Member	Business and Economic Development Representative	Colorado

U.S. Department of Agriculture (USDA) Urban Service Centers

Urban Service Centers were developed to provide place-based technical assistance, outreach, and program enrollment support for urban growers. Launched in pilot form beginning in 2020, these service centers are an extension of USDA's long-standing county-level Service Center model, reimagined for urban and peri-urban contexts where traditional farming programs and technical assistance may not be effective or accessible (USDA, 2025c).

These centers are intended as urban-specific access points to USDA agencies, particularly the Farm Service Agency (FSA) and Natural Resources Conservation Service (NRCS), enabling face-to-face assistance and program enrollment.

USDA operates 17 Urban Service Centers across the nation in major metropolitan areas. California is home to two USDA Urban Service Centers, one in Los Angeles (LA) with a temporary office in Lancaster, and one in Oakland, which relies on the physical offices of the Farm Service Agency (FSA) in Petaluma, and the Natural Resource Conservation Service (NRCS) in Livermore (USDA, 2025c).

Urban growers outside Los Angeles and San Francisco must rely on rural USDA Service Centers, which do not specialize in urban operations.

USDA Structural Changes in 2025

Impact of the Deferred Resignation Program in USDA

As it seeks to dramatically downsize the federal workforce, the Trump Administration has leaned heavily on the Deferred Resignation Program (DRP), a voluntary program offered to some federal employees, allowing them to resign or retire with full pay and benefits for a set period before their actual departure date (New York

Times, 2025). This policy, framed by leadership as a method to accelerate workforce restructuring, has been criticized by some for creating uncertainty, lowering morale, and prompting an exodus of experienced staff (NPR, 2025a).

USDA is among the agencies that twice invited employees to participate in the Deferred Resignation Program — once in late January when the deal was presented to nearly the entire federal workforce, and again in April. By May 2025, over 15,000 employees had resigned from their positions at USDA through the Deferred Resignation Program (NPR, 2025b and Politico, 2025).

Such mass turnover could weaken USDA's operational capacity and diminish institutional knowledge critical for program delivery, including technical assistance for urban agriculture initiatives. For communities relying on USDA programs, this turnover could result in delayed grant administration, reduced outreach, and slower responses to producer needs.

On top of the Deferred Resignation Program, President Trump initiated a federal hiring freeze (90 FR 8247) in January 2025, which prevents federal agencies from filling vacant positions and creating new ones. As of August 2025, this freeze has been extended, with the latest extension lasting for three months, pushing the initiative to at least mid-October 2025 (Federal News Network, 2025).

Office closures and partial reversals

In March 2025, USDA announced plans to close 110 offices across the country, as part of a cost-cutting plan by the newly formed Department of Government Efficiency (DOGE) under the Trump Administration. Initially, nine California offices were targeted (LA Times, 2025 and The Fresno Bee, 2025), including the Bakersfield Service Center

which houses the Farm Service Agency (FSA), National Resource Conservation Service (NRCS), and Rural Development (RD).

This initiative sparked immediate concern among farmers, community-based organizations, and local governments about access to USDA programs and services.

Congressional pushback and local advocacy led to significant reversals; 61 USDA offices initially slated for closure will remain open, including eight of the nine offices in California initially listed, which saved Bakersfield’s Service Center from closure (Farm Policy News, 2025; ABC Bakersfield, 2025 and LA Times, 2025).

While the reversal preserved vital ag service centers in California, the episode highlighted the fragility of local USDA infrastructure. For urban agriculture stakeholders—particularly in mid-sized cities like Bakersfield—such closures could disproportionately impact access to urban agriculture technical assistance and funding opportunities.

USDA department-wide reorganization

In July 2025, USDA formally announced a sweeping departmental reorganization (USDA, 2025d). The plan calls for relocating thousands of Washington, D.C.–based positions to five regional hubs, consolidating certain agency functions, and vacating or reducing office space in several locations.

The reorganization also merges or realigns multiple agencies, including the Agricultural Research Service (ARS) and the Forest Service, which has raised concerns about reduced research capacity and diminished region-specific expertise (NSAC, 2025).

Additionally, several senators and farm-serving organizations expressed concerns about how many skilled and experienced employees would leave USDA rather than

move, criticized the limited stakeholder input, and argued this initiative could reduce on-the-ground capacity through office closures and staff reductions (Civil Eats, 2025 and NSAC, 2025).

Urban Agriculture policy in California

California is one of the 11 states that have enacted laws supporting community gardens and small-scale urban farms (National Conference of State Legislatures, 2019). The most significant state-level policy in California is the Urban Agriculture Incentive Zones Act (AB 551).

Urban Agriculture Incentive Zones Act (AB 551)

The Urban Agriculture Incentive Zones Act (AB 551), passed in 2013, aims to increase the use of privately owned, vacant land for urban agriculture, as well as improving land security for urban agriculture projects, by providing tax incentives for property owners of vacant parcels (Zigas, 2014).

This legislation allows city and county governments to designate areas within their boundaries as “urban agriculture incentive zones” (UAIZ). This designation allows properties to be reassessed yearly based on the annual average per acre value of irrigated cropland in California when the land is entered into a 5-year minimum UAIZ contract (California Legislative Information, 2013).

This policy encourages local landowners to lease land to individuals and groups who will use it for farming, to potentially reduce their property tax assessment (Zigas, 2014). Landowners can enter into UAIZ contracts until January 1, 2029 (California State Board of Equalization, 2018). The legislation also defines agricultural use for UAIZ purposes as:

[F]arming in all its branches including, but not limited to, the cultivation and tillage of the soil, the production, cultivation, growing, and harvesting of any agricultural or horticultural products, the raising of livestock, bees, fur-bearing animals, dairy-producing animals, and poultry, agricultural education, the sale of produce through field retail stands or farms stands as defined 8 by Article 5 (commencing with Section 47030) of Chapter 10.5 of Division 17 of the Food and Agricultural Code, and any practices performed by a farmer or on a farm as an incident to or in conjunction with farming operations. For purposes of this chapter, the term “agricultural use” does not include timber production.

While the act was designed to promote urban farming in underutilized spaces, its implementation has been highly uneven across jurisdictions and often limited by landowner reluctance, burdensome administrative requirements, and local government inertia (Sánchez-Tello, 2023).

Table 3:*California cities and counties that have implemented Urban Agriculture Incentive Zones**(UAIZ) as of July 2025.*

Jurisdiction	Policy mechanism for UAIZ establishment	Implementation date
City and County of San Francisco	Addition of Chapter 53A in San Francisco Administrative Code, through Ordinance No. 184-14 (City and County of San Francisco, 2014).	August 29, 2014
City of Sacramento	Addition of Chapter 17.722 to the Sacramento City Code through Ordinance No. 2015-0024 (City of Sacramento, 2015).	September 5, 2015
Santa Clara County (unincorporated areas)	Addition of Division 21 to Title C of the Ordinance Code of the County of Santa Clara through Ordinance No. NS-1203.123 (County of Santa Clara, 2015)	November 28, 2015
Los Angeles County (unincorporated areas)	Amends Title 22 - Planning and Zoning of the Los Angeles County Code through Ordinance No. 2016-0023 (Los Angeles County Department of Regional Planning, 2016).	May 12, 2016
City of San Jose	Ordinance No. 29820 amends Title 4 of the San José Municipal Code to Add a New Chapter 4.88 to Create an Urban Agriculture Tax Incentive Zone (City of San Jose, 2016)	November 15, 2016
City of Los Angeles	Addition of Chapter 17 to Division 19 of the Los Angeles Administrative Code through Ordinance No. 185022 (City of Los Angeles, 2017).	August 6, 2017
San Diego County	Ordinance No. 10662 enacts Article IV-A Section 88.20 of the San Diego County Code of Administrative Ordinance pertaining to Urban Agriculture Incentive Zones (San Diego County, 2020).	March 11, 2020
City of San Diego	Ordinance No. O-20959 establishes an Urban Agriculture Incentive Zone, and supersedes and replaces Ordinance No. O-20902 (City of San Diego, 2018).	July 20, 2018

Urban Agriculture policy at the local level

Urban agriculture initiatives are deeply shaped by the regulatory environment of the cities they operate in, especially land use and zoning policies. These local ordinances can either facilitate or obstruct the development of UA projects, depending on how permissive or restrictive they are regarding food production in residential, commercial, or industrial zones.

Historically, the field of urban planning has paid scant attention to the food system, treating it as a peripheral issue despite its fundamental role in urban life. Pothukuchi and Kaufman (2000) famously described the food system as “a stranger to the planning field,” noting that urban planners have traditionally focused on housing, transportation, and infrastructure while overlooking the importance of food access, food security, and local food production. This institutional blind spot has had significant implications: zoning codes developed without considering food systems often default to restricting agricultural activities to rural or agricultural zones, effectively excluding them from the urban fabric.

This separation of food from the city was not always the norm. As Jenkins (2021) pointed out in a study of Los Angeles, many urban neighborhoods had rich traditions of community gardening and backyard food production, particularly in communities of color. However, the rise of modern zoning laws in the early 20th century codified a separation of land uses, and by mid-century, most cities had zoned food production out of residential and commercial areas entirely.

In a study of 80 municipalities, Meenar, Morales, and Bonarek (2017) explored how cities are responding to the rise of UA through zoning codes, production-related ordinances, and fiscal policies. Their findings reveal a wide variation in how municipalities regulate and support urban farming, with many jurisdictions struggling to move beyond permissive or ad-hoc approaches toward fully integrated planning frameworks.

The authors group regulatory practices into three main categories:

(1) enabling regulations, such as zoning code amendments and overlay districts that permit UA activities;

(2) production regulations, which govern practices like composting, animal husbandry, and use of structures like greenhouses; and

(3) fiscal and market tools, such as permit fees, sales restrictions, or tax incentives.

These tools are often used inconsistently, and many cities lack clear guidance on how to implement them in a way that aligns with broader planning goals. The study notes that smaller cities may have a "regulatory vacuum" where UA is neither clearly allowed nor supported, creating uncertainty for practitioners and limiting the policy's transformative potential (Meenar et al., 2017).

While the study is national in scope, its findings are especially relevant to California, where major urban centers have led in developing UA zoning ordinances, but mid-sized cities like Bakersfield often lag behind.

Cities like San Francisco and Los Angeles have developed progressive UA zoning ordinances that permit gardens in residential zones, streamline composting permits, and support limited animal husbandry (Santo, R. et al, 2024). In contrast, cities like Bakersfield lack clear, formalized support for UA in their zoning codes or permitting processes. This reflects a broader state trend: a 2018 UC ANR workshop on UA permitting found that the patchwork of regulations across jurisdictions creates barriers to land tenure, water access, insurance, composting, and signage (Van Soelen Kim, 2018).

Even in cities with active UA networks, growers often avoid engaging with local authorities due to bureaucratic complexity. Jenkins (2021) found that in Los Angeles, urban growers frequently cited regulatory burdens—particularly for water access, fencing, signage, and compost—as major obstacles to scaling operations. Furthermore, informal or backyard growers often avoid registration altogether due to the complexity of permits or fear of enforcement.

Permits related to irrigation, water metering, land tenure, and even public nuisance ordinances often intersect with urban farming activities, creating multiple regulatory chokepoints. In some jurisdictions, lack of coordination between departments (e.g., planning, health, sanitation) can lead to project delays or denials, even for community-oriented food production sites (Hagey et al., 2012).

To date, there is no standardized permitting or licensing model for UA across California municipalities, and the absence of state-level guidance on urban zoning has allowed inequities in enforcement and access to persist. These inconsistencies reveal a critical policy implementation gap—one in which progressive policy intent is undermined by fragmented or outdated local governance structures.

Case Study: Bakersfield

Bakersfield is a mid-sized city in Kern County, California, and is home to more than 400,000 residents (CDFA, 2023). Kern County sits at the heart of California's agricultural economy, and consistently ranks among the top five agricultural counties in the country, with over \$8.2 billion in gross farm revenue in 2023—led by grapes, citrus, pistachios, almonds and carrots (Kern County Ag Commissioner, 2024).

According to the 2022 USDA Census of Agriculture, California has over 60,000 farms managing more than 24 million acres. Although more than 60% of farms operate in less than 50 acres, the largest agricultural operations control the majority of land and revenue (USDA NASS, 2024a).

Kern County is home to 1,691 farms comprising more than 2 million acres (USDA NASS 2024b). Large-scale agribusiness dominates Kern county, with an average farm size of more than 1,400 acres and water access secured through long-term infrastructure investments (USDA NASS, 2024b, U.S. Bureau of Reclamation, 2022).

Paradoxically, this agricultural wealth coexists with deep food insecurity. More than 153,000 residents in Kern County were food insecure as of 2023, and 16.9% of residents reported limited access to affordable, nutritious food (Feeding America, 2023).

Table 4:

Agricultural Statistics of California and Kern County, 2022 Census of Agriculture (USDA NASS, 2024a and 2024b).

Farms by size	# of farms in Kern County	% of farms in Kern County	# of farms in California	% of farms in California
1 to 9 acres	252	14.90%	19,449	30.80%
10 to 49 acres	299	17.68%	19,470	30.84%
50 to 499 acres	628	37.14%	16,581	26.26%
500 or more	512	30.28%	7,634	12.10%
Total	1,691	100%	63,134	100%

The closest Urban Service Center is located in Los Angeles, more than 100 miles in distance from Bakersfield. Additionally, municipal zoning and land-use plans have historically deprioritized small-scale food production.

Yet, grassroots interest in UA is growing. Churches, mutual aid groups, and urban farm schools have initiated gardens in neighborhoods with limited access to grocery stores. However, these efforts often are undersupported by policy and planning, which prioritizes support for conventional large-scale agribusiness and housing development.

Data Analysis

This section presents findings from policy documents, field observations, six in-depth interviews, and personal communications with USDA staff, urban growers, and intermediary organizations.

The interviewees for this research project include three USDA staff members (two from California Urban Service Centers and one from the national OUAIP office), one Bakersfield urban farmer and community leader, one urban agriculture policy expert based in Southern California, and one urban agriculture extension advisor based in the Bay Area.

Interviews were thematically coded around four main domains: (1) policy implementation capacity; (2) institutional outreach; (3) growers' experiences with federal and state programs; and (4) alternative or community-led mechanisms that emerge when institutional support is weak.

Analysis was guided by the research questions:

- To what extent are federal and state UA policies functionally implemented in California cities, especially mid-sized regions like Bakersfield?
- What alternative or community-led models emerge in the absence of robust institutional support?

Implementation of Federal and State UA Policies

Interviewees consistently identified the 2018 Farm Bill as the turning point in federal recognition of urban agriculture. The creation of the Office of Urban Agriculture and Innovative Production (OUAIP) and the expansion of NRCS and FSA program eligibility, like the Environmental Quality Incentive Program (EQIP) and the

Conservation Stewardship Program (CSP), to include urban farmers marked an important symbolic and operational shift.

At the state level, CDFA's Urban Agriculture Block Grant program seeks to address gaps in regions not typically prioritized by federal programs—explicitly naming the Fresno metro area, which includes Bakersfield, as an area of focus. However, stakeholders noted that state funding cycles remain inconsistent and insufficient to counterbalance federal instability.

Despite these structural advances, implementation remains partial. Interviewees emphasized that while urban agriculture is recognized in statute, the systems designed to serve growers are far from fully operational.

Institutional Intent vs Institutional Capacity

Across USDA interviewees, there was strong support for the vision of serving urban growers, but a shared acknowledgment that capacity lags significantly behind policy intent. Staff at one of the California Urban Service Centers reported being “the first person hired” and “creating the office from scratch (in early 2024)”. Yet, as of late 2025, neither the Los Angeles nor Oakland Urban Service Centers have opened a physical office to the public, despite years of planning and federal announcements. Both of them currently have temporary spaces in already existing USDA Service Centers in rural areas.

Federal staff described hiring freezes, DRP buyouts, staff turnover, and leadership vacancies as persistent disruptors. These conditions have destabilized program continuity

and created a pattern in which urban agriculture initiatives are announced but not meaningfully implemented.

The result is a system where federal recognition of urban agriculture exists at the rhetorical level, but the infrastructure to deliver on that recognition remains thin, inconsistent, or absent.

Institutional Outreach

Interviewees agreed that implementation varies sharply by geography, with outreach disproportionately concentrated in major metropolitan areas. Interviewed staff from USDA Service Centers reported focusing almost exclusively on their defined service regions. One NRCS interviewee reported that their “first year of work consisted almost entirely of outreach because we didn’t have any [urban farmers] applying to programs.” Another noted that “most FSA programs don’t fit urban ag,” describing efforts to advocate internally for program modifications.

Across interviews, a clear pattern emerged: the burden of finding programs falls on growers, especially those outside major metros. As Bakersfield grower Evelyn Young Spath explained, “It’s visible to people who are actively looking... If you don’t know to go to the website or call the office, you won’t know it exists.” Keely Cervantes, Policy Manager at Community Alliance with Family Farmers (CAFF), highlighted a similar challenge. Despite millions distributed through microgrants and cooperative agreements, federal outreach channels (websites, conferences, national networks) often miss historically underserved communities that rely on local radio, churches, cultural centers, and neighborhood-based information networks .

This aligns with the literature documenting that outreach channels often do not reach culturally specific or informal networks through which many urban growers operate.

Attempting to Access USDA Support: A Field Observation

To understand how federal urban agriculture policy functions locally, I visited the Kern County USDA Service Center seeking information on urban agriculture programs. The experience illustrated the structural gaps described by interviewees:

Staff were unaware of the Office of Urban Agriculture and Innovative Production (OUAIP), urban microgrants, or the Urban Service Center initiative. No outreach or tailored guidance was available for small-plot or backyard-scale growers, despite Bakersfield’s expanding community garden movement.

After this interaction, I contacted the USDA Urban Service Center in Los Angeles. However, when I asked to schedule an in-person visit, staff informed me they did not yet have a physical location open to the public.

This firsthand observation confirmed patterns raised in interviews: where USDA has not invested in staff knowledge, dedicated offices, or localized outreach, urban growers encounter confusion rather than support.

Experiences of Urban Growers

Interviewees underscored land access, funding, and technical assistance as the most persistent barriers. One of the interviewees, University of California Cooperative Extension (UCCE) Advisor Dr. Lucy Diekmann, emphasized that urban growers encounter “the same types of challenges” regardless of city size—difficulty finding land,

infrastructure costs, permitting complexity, and fragmented local governments that often lack internal champions for urban agriculture .

Urban grower Evelyn Young Spath illustrated how urban farmers must be extraordinarily persistent. Her own success in securing EQIP funding required an entire year of navigating paperwork, staff turnover, and reimbursement-based cost sharing that demanded upfront money she did not always have. She also noted that the timing of EQIP funding cycles can cause small farmers to “miss a harvest” if funds arrive too late.

Policy expert Keely Cervantes highlighted that midsized cities such as Bakersfield “are often overlooked”. Federal resources are disproportionately concentrated in major metros, and state initiatives designed to fill this gap, such as the CDFR Urban Agriculture Block Grant program, have unreliable and inconsistent funding cycles. She further noted that existing permitting, zoning, and market access structures pose additional structural burdens that urban growers must navigate largely on their own.

These findings align with prior research documenting that urban growers face compounded administrative burdens when navigating policies that were not designed with small-scale or community-based operations in mind (Horst et al., 2017).

The Role of Intermediary Organizations

One of the clearest patterns in the data is the central role of intermediary organizations in bridging policy and practice. Organizations like UCCE, CAFF, local nonprofits, and farmer networks often act as translators and advocates, connecting growers to resources. These organizations also play an important role in shaping policy discourse to better reflect the needs of urban farmers.

Without these intermediaries, several interviewees noted, most small-scale urban growers would not pursue or even discover federal or state opportunities.

Community-Led and Alternative Models

In the absence of strong institutional infrastructure, community-led initiatives in Bakersfield have emerged as significant drivers of UA development. Examples include the creation of new farmer markets in low-income communities (e.g. Kern County Black Farmers Association), community gardens (e.g. Grace Street Community Garden), backyard farms, and organizational partnerships.

Several interviewees mentioned that more support is needed in Bakersfield to scale those efforts, as well as championing new initiatives like food policy councils, cooperatives, incubator farms and hands-on training spaces.

Equity and Representation in Policy

Equity surfaced repeatedly as both a policy goal and a source of tension. While state-level initiatives have begun to integrate equity considerations—such as targeting priority regions and underserved grower populations—stakeholders expressed concern about recent federal rollbacks in programs supporting socially disadvantaged farmers. Stakeholders noted that removing targeted equity provisions risks reversing gains made over the past decade, disproportionately affecting farmers of color and low-income urban residents.

Interviewees stressed that meaningful equity work requires sustained funding streams beyond short-term grants, inclusion of historically marginalized voices in program design and legislative advocacy that reframes agriculture to include urban contexts in its definition and priorities.

Discussion

The findings of this study reveal a persistent gap between the intent of federal and state urban agriculture policies and their actual implementation on the ground, particularly in mid-sized cities like Bakersfield. While urban agriculture has gained visibility within agencies such as USDA and CDFA over the past decade, unconsolidated policy structures, staffing instability, and fragmented outreach channels prevent these programs from functioning as designed for small-scale urban growers.

The following two themes have been identified to affect the effectiveness of UA policy implementation: Policy Momentum Without Operational Stability and Misalignment Between Program Design and Urban Reality.

Policy Momentum Without Operational Stability

Interviews with federal staff underscored the volatility shaping urban agriculture policy at the national level. Local and national offices are contending with hiring freezes, staff turnover and inconsistent program funding. Urban-focused hiring remains incomplete statewide; neither the Los Angeles nor the Oakland Urban Service Centers have physical locations opened to the public, despite years of planning.

This disconnect creates a pattern in which UA programs and resources appear accessible but are, in reality, difficult to find or navigate, particularly for growers without existing networks.

Misalignment Between Program Design and Urban Reality

Legacy programs such as EQIP and CSP, were not built with urban agriculture in mind. Eligibility rules, cost-share structures, and reimbursement models that assume

upfront capital, multiple-acre production systems, and conventional rural timelines have proven difficult for urban farmers to navigate.

For example, cost-share programs such as EQIP require farmers to front significant capital, often 50% of project costs, before reimbursement can be processed. For small-scale urban growers with limited liquidity, this structure delays or prevents project adoption. Urban growers underscored that these requirements can be prohibitive, especially when paired with long approval timelines that risk missing seasonal windows.

These structural mismatches disproportionately disadvantage beginning and low-income growers, the groups that urban agriculture programs were designed to uplift.

Implications for Bakersfield and other Mid-Sized Cities

A central theme across interviews is that mid-sized cities like Bakersfield occupy a structural blind spot: they are often overlooked in federal and state programs. This absence of institutional presence creates a ripple effect. Without localized technical assistance, growers in Bakersfield must navigate land-use regulations, business permitting, water access, and farm planning with no dedicated support. This places mid-sized cities at a disadvantage compared to regions with established urban agriculture ecosystems, like Los Angeles and the Bay Area.

For Bakersfield, the current policy landscape results in limited access to federal UA resources, increased administrative burden placed on growers, dependence on community-led systems to meet basic agricultural needs, and risk of deepening inequity as federal rollbacks disproportionately affect historically underserved growers.

For agencies, the findings suggest that simply extending rural programs to urban areas is insufficient. Dedicated staff, local offices, flexible funding, and tailored outreach strategies are critical for closing the implementation gap.

For future policy, mid-sized cities must be treated as a distinct category worthy of targeted support.

Recommendations

The findings reveal a clear implementation gap between federal and state urban agriculture (UA) policies and the lived realities of growers in mid-sized cities like Bakersfield. The following recommendations propose federal, state, local, and community-level actions to strengthen institutional capacity, reduce structural barriers, and support equitable UA development.

Recommendation 1: Open and Staff Urban Service Centers

USDA should fully open the Urban Service Centers in Los Angeles and Oakland and staff them with dedicated UA personnel. These offices should operate under a regional “hub-and-spoke” model, with staff conducting regular outreach visits to mid-sized cities such as Bakersfield, Stockton, and Fresno.

To ensure consistent service delivery, USDA should require UA-specific staff training, including guidance on small-plot production, reimbursement barriers, urban zoning realities, and culturally relevant outreach. This step is crucial because growers in regions like Bakersfield currently lack any accessible federal point of contact.

Recommendation 2: Adapt Federal and State Programs to Urban and Peri-Urban Realities

Federal and state programs must revise eligibility, scale, and metric requirements that were designed for large-acreage rural farms. Agencies should create urban-specific practice standards for programs such as EQIP and CSP, modify acreage thresholds, and offer advance payments or direct procurement options for growers lacking upfront capital.

To expand awareness beyond existing agricultural networks, agencies should partner with trusted community organizations that can disseminate information through culturally relevant channels, particularly in immigrant, low-income, or historically underserved communities.

Recommendation 3: Remove Structural Barriers to Urban Agriculture Adoption

Urban growers face systemic obstacles related to land access, skills development, infrastructure, and administrative burden. Cities and counties should support the development of incubator farms, shared infrastructure hubs, and training centers that help new growers enter the sector.

Local governments should also streamline permitting and zoning by coordinating across planning, public health, and economic development departments. At the federal level, revising reimbursement-based programs to allow upfront disbursements or agency procurement would significantly reduce exclusion of growers with limited liquidity.

Recommendation 4: Fund Intermediary and Community-Led Infrastructure

Intermediary organizations, including UCCE, nonprofits, and grower associations, currently serve as the de facto support system for urban agriculture. State and federal agencies should establish multi-year, renewable funding streams for these organizations to lead outreach, technical assistance, grant navigation, zoning support, and business development. Strengthening intermediaries is essential in cities like Bakersfield, where institutional infrastructure remains thin.

Recommendation 5: Reinstate and Protect Equity Measures for Underserved Growers

Stakeholders expressed deep concerns about federal rollbacks targeting equity provisions. Agencies should reinstate targeted funding for historically underserved growers and integrate equity criteria into program scoring processes.

Together, these recommendations address gaps identified in this study and provide a pathway for transforming UA policy from symbolic recognition into functional, equitable infrastructure, particularly in mid-sized cities like Bakersfield, where community interest is strong but institutional support remains limited.

Conclusion

This project set out to evaluate how federal and state urban agriculture policies are implemented in California, and what this means for mid-sized cities such as Bakersfield. The findings reveal a consistent pattern: while UA has gained unprecedented recognition in federal and state policy frameworks, the systems intended to support growers remain incomplete, uneven, and deeply influenced by geography.

Across interviews, policy analysis, and field observations, a clear message emerged: cities like Bakersfield sit at the intersection of policy visibility and implementation invisibility. Urban agriculture is acknowledged by federal and state agencies, yet mid-sized cities lack the staffing, physical offices, outreach structures, and technical assistance required to translate policy into practice. The result is a fragmented ecosystem in which urban growers must navigate reimbursement-based programs not designed for their scale, decipher complex regulatory requirements with little guidance, and rely heavily on intermediaries and community networks to fill institutional gaps.

At the same time, Bakersfield's emerging urban agriculture movement—community gardens, neighborhood growers, farmers' markets, mutual-aid networks—demonstrates that significant potential exists even in the absence of formal support. These community-led efforts are not peripheral; they are the functional backbone of UA development in the region. They highlight what is possible when local leadership, cultural knowledge, and grassroots energy come together, while also underscoring the limitations of relying solely on community capacity to shoulder the tasks of outreach, technical assistance, and resource navigation.

The contrast between policy intent and lived experience underscores a broader structural tension that will shape the future of urban agriculture in California: policy momentum is increasing, but implementation capacity is shrinking, at a time when community need is rapidly growing. Climate pressures, land costs, and food insecurity are intensifying in cities across the state, making the expansion of urban agriculture not only desirable but necessary. Without targeted investment in mid-sized regions and more adaptive policy design, the benefits of these programs will continue to concentrate in areas with high organizational capacity and institutional presence.

Ultimately, the experience of Bakersfield serves as a case study for many similar communities across the United States—cities that are too large to qualify as rural, yet not prioritized as major metro hubs. By identifying the structural shortcomings and proposing targeted recommendations, this research contributes to a more nuanced understanding of what equitable UA development requires: dedicated staffing, urban-specific program adaptations, accessible technical assistance, community partnerships, and the protection of equity measures.

Urban agriculture will continue to grow in importance as cities confront climate, economic, and social challenges. Realizing its potential will depend on whether institutions can evolve to match the speed, ingenuity, and resilience already present in communities like Bakersfield. This project demonstrates that with strategic reform and sustained commitment, urban agriculture can move from symbolic recognition to functional infrastructure, supporting not only healthier food systems, but more resilient, equitable, and thriving urban communities.

References

- 23 ABC News (2025, July 30). *DOGE approves multiple USDA offices across California to remain open*.
<https://www.turnto23.com/news/in-your-neighborhood/bakersfield/doge-approves-multiple-usda-offices-across-california-to-remain-open>
- California Department of Food and Agriculture. (2024a). *California Agricultural Statistics Review 2023–2024*. <https://www.cdfa.ca.gov/statistics>
- California Department of Food and Agriculture. (2024b). *Urban Agriculture Grant Program: 2023 Awarded Projects*. Retrieved June 8, 2025, from
https://cafarmtofork.cdfa.ca.gov/docs/urbanag/2023_ca_urban_agriculture_grant_program_award_recipients_recommended.pdf
- California Department of Food and Agriculture. (2023). *2023 California Urban Agriculture Grant Program. FAQ Sheet*. Retrieved June 14, 2025, from
https://cafarmtofork.cdfa.ca.gov/docs/urban_ag_grant_program_faq.pdf
- California Legislative Information. (2013). *AB-551 Urban agriculture incentive zones*.
https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB551
- California State Board of Equalization. (2018). *Urban agriculture incentive zone changes (No. 2018/005)*. <https://www.boe.ca.gov/proptaxes/pdf/lta18005.pdf>
- CalMatters (2017). *AB 465: Urban Agricultural Incentive Zones*. CalMatters Digital Democracy. Retrieved July 6, 2025, from
https://calmatters.digitaldemocracy.org/bills/ca_201720180ab465
- CalMatters (August 8, 2023). *How hungry is California? Millions struggle to eat well in an abundant state*. Retrieved August 6, 2025, from
<https://calmatters.org/explainers/california-hunger-crisis/>
- City and County of San Francisco. (2014). *Ordinance No. 184-14*.
<https://bap-home.net/gfc/wp-content/uploads/sites/3/1970/01/14-SanFranciscoCA-UrbanAgIncentiveZoneOrdinance184-14-2014.pdf>
- City of Los Angeles. (2017). *Ordinance No. 185022*.
https://cityclerk.lacity.org/onlinedocs/2014/14-1378_ORD_185022_8-6-17.pdf
- City of Sacramento. (2015). *Ordinance No. 2015-0024*.
<https://www.cityofsacramento.gov/content/dam/portal/cdd/Planning/Long-Range/Urban-Ag/OR20150024-Adding-Chapter-17722-to-the-Sacramento-City-Code-Relating-to-an-Urban-Agriculture-Incentive-Zone.pdf>

- City of San Diego. (2020). *Ordinance No. O-20959*.
https://www.sandiego.gov/sites/default/files/final_-_uaiz_o-20959_07-20-2018.pdf
- City of San Jose. (2016). *Minutes of the City Council* (Tuesday, November 8, 2016)
https://sanjose.granicus.com/Viewer.php?view_id=2&clip_id=9422&meta_id=605629
- County of Santa Clara (2015). *Ordinance No. NS-1203.123*.
<https://files.santaclaracounty.gov/migrated/Urban%20Agriculture%20Incentive%20Zones%20Ordinance.pdf>
- Civil Eats (2025, July 31). *USDA deputy secretary defends reorganization plan*.
<https://civileats.com/2025/07/31/usda-deputy-secretary-defends-reorganization-plan/>
- Essex, A., Shinkle, D., & Bridges, M. (2015). *Harvesting healthier options: State legislative trends in local foods, 2012–2014*. National Conference of State Legislatures, Johns Hopkins Center for a Livable Future.
- Farm Policy News. (2025, June 9). *DOGE cuts USDA office closure list in half*.
University of Illinois.
<https://farmpolicynews.illinois.edu/2025/06/doge-cuts-usda-office-closure-list-in-half/>
- Federal News Network (2025, July 8). *Trump administration extends governmentwide hiring freeze*.
<https://federalnewsnetwork.com/federal-newscast/2025/07/trump-administration-extends-governmentwide-hiring-freeze/>
- Federal Register. (2025, January 28). *Hiring freeze*.
<https://www.federalregister.gov/documents/2025/01/28/2025-01905/hiring-freeze>
- Feeding America. (2025). *Food Insecurity among the Overall Population in California*. Retrieved June 22nd, 2025, from
<https://map.feedingamerica.org/county/2023/overall/california>
- Fresno Bee (2025, June 22). *California lawmakers urge USDA to rescind plan to close nine agency offices*.
<https://www.fresnobee.com/news/local/article306481621.html>
- Gonzales, J. & Fanous, J. (2024). *California Urban Agriculture: Challenge, Pathways, and Equity for a Resilient Landscape*. Community Alliance with Family Farmers (CAFF).
https://caff.org/wp-content/uploads/2024/09/24502_01-CAFF-RoadMap-Report-Final.pdf

- Grants.gov. (2025). *Search results for "urban agriculture"*. U.S. General Services Administration. Retrieved July 22nd, 2025, from https://simpler.grants.gov/search?utm_source=Grants.gov&query=urban+agriculture&status=none&sortby=postedDateDesc
- Hagey, A., Rice, S., & Flournoy, R. (2012). *Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities*. PolicyLink. <https://www.policylink.org/resources-tools/growing-urban-agriculture>
- Halvey, M. R. et al. (2021). *Beyond backyard chickens: A framework for understanding municipal urban agriculture policies in the United States*. Food Policy, 103, 102013. <https://doi.org/10.1016/j.foodpol.2020.102013>
- Horst, M., McClintock, N., & Hoey, L. (2017). *The intersection of planning, urban agriculture, and food justice: A review of the literature*. Journal of the American Planning Association, 83(3), 277–295. <https://doi.org/10.1080/01944363.2017.1322914>
- Jenkins, K. (2021). *"We grow food and community": How urban farmers contend with land access and urban agriculture policy in Los Angeles* (Senior thesis). Occidental College. https://www.oxy.edu/sites/default/files/assets/UEP/Comps/2021/jenkins_kaye_we_grow_food_and_community_uepseniorcomps2021.pdf
- Kaufman, J. & Pothukuchi, Kami. (2000). *The food system: A stranger to the planning field*. Journal of the American Planning Association, 66.
- Kern County Agricultural Commissioner. (2024). *2023 Crop Report*. http://www.kernag.com/caap/crop-reports/crop20_29/crop2023.pdf
- Los Angeles County Department of Regional Planning. (2016). *Ordinance No. 2016-0023*. https://planning.lacounty.gov/wp-content/uploads/2024/12/Certified_Urban_Agriculture_Incentive_Zone_Program_Ordinance.pdf
- Los Angeles Times (2025, June 2). *Trump administration reverses some USDA office closures in California*. <https://www.latimes.com/environment/story/2025-06-02/trump-administration-reverses-some-usda-office-closures-in-california>
- Meenar, M., Morales, A., & Bonarek, L. (2017). *Regulatory practices of urban agriculture: A connection to planning and policy*. Journal of the American Planning Association, 83(4), 389–403. <https://doi.org/10.1080/01944363.2017.1369359>

- Mees, C. and Stone, E. (2012) "*Zoned Out: The Potential of Urban Agriculture Planning to Turn Against its Roots*". *Cities and the Environment (CATE)*: Vol. 5: Iss. 1, Article 7. Available at: <https://digitalcommons.lmu.edu/cate/vol5/iss1/7>
- National Conference of State Legislatures. (2019). *Urban agriculture: State legislation*. Retrieved July 15, 2025, from <https://www.ncsl.org/agriculture-and-rural-development/urban-agriculture-state-legislation>
- National Sustainable Agriculture Coalition (NSAC). (2025, July 24). *Comment: Without input from farmers and experts, USDA reorganization would close offices and lead to staff reductions*. <https://sustainableagriculture.net/blog/comment-without-input-from-farmers-and-experts-usda-reorganization-would-close-offices-and-lead-to-staff-reductions/?emci=1c74beb4-6266-f011-8dc9-6045bdfe8e9c&emdi=dfd96670-7069-f011-8dc9-6045bda9d96b&ceid=29297232>
- New York Times (2025, July 31). *More Than 150,000 Federal Workers Accepted Trump's Resignation Incentives*. <https://www.nytimes.com/2025/07/31/us/politics/firings-federal-workers-trump-administration.html>
- Ng, Melody (2024). *Reframing urban agriculture: Open land for the public good*. *Critical Planning*, 27(1). <https://escholarship.org/uc/item/4sb7n1x5>
- NPR (2025, May 7). *USDA chief says agency is trying to fill key jobs after paying 15,000 to leave*. <https://www.npr.org/2025/05/07/nx-s1-5389922/usda-deferred-resignation-federal-workers-brooke-rollins>
- Politico (2025, May 3). *More than 15,000 USDA employees take Trump's offer to resign*. <https://www.politico.com/news/2025/05/03/more-than-15000-employees-resign-agriculture-department-trump-00324834>
- San Diego County. (2020). *Ordinance No. 10662*. <https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/UAIZ/03112020%20ag01%20Ord%2010662%20Signed.pdf>
- San Francisco Recreation and Parks Department. (n.d.). *Community Gardens*. Retrieved June 8, 2025, from <https://sfrecpark.org/1403/Community-Gardens>
- Sánchez-Tello, G. B. (2023, May 18). *The Orchard amid concrete: Ten years on, a law meant to help urban farmers feed hungry Californians continues to underperform*. *Capital & Main*. Retrieved July 6, 2025, from <https://capitalandmain.com/the-orchard-amid-concrete>

- Santo, Raychel et al. (2024). *From access toward sovereignty: A scoping review of municipal land access policies for urban agriculture in the United States*. *Elem Sci Anth*. 12. 10.1525/elementa.2023.00089
- Starrs, P. and Goin, P. (2010). *Field guide to California agriculture* (California Natural History Guides No. 98). University of California Press.
- UCLA Center for Health Policy Research. (2025). *California Health Interview Survey (CHIS)*. Retrieved June 22, 2025, from <https://healthpolicy.ucla.edu/our-work/california-health-interview-survey-chis>
- UCLA Luskin Center for Innovation. (2013). *Cultivate LA: An assessment of urban agriculture in Los Angeles County*. Retrieved June 8, 2025, from <https://cultivatelosangeles.org/wp-content/uploads/2013/07/cultivate-l-a-an-assessment-of-urban-agriculture-in-los-angeles-county-june-11-2013.pdf>
- University of California Agriculture and Natural Resources (UCANR) (2021). *Central Coast Farms. Bay Area Urban Ag Map*. Retrieved July 14, 2025, from <https://www.centralcoastfarms.org/projects/bay-area-urban-ag-map>
- University of California Agriculture and Natural Resources (UCANR) (2024). *Urban Agriculture Resources*. <https://ucanr.edu/sites/UrbanAg/>
- U.S. Bureau of Reclamation. (2022). *About the Central Valley Project*. Retrieved June 22, 2025, from <https://www.usbr.gov/mp/cvp/about-cvp.html>
- U.S. Congress. (2018). *Agriculture Improvement Act of 2018* (Farm Bill). Public Law No: 115-334.
- U.S. Department of Agriculture. (2023). *Charter - Urban Agriculture and Innovative Production Federal Advisory Committee*. Retrieved July 22, 2025, from <https://gsa-geo.my.salesforce.com/sfc/p/#t00000000Gyj0/a/t0000003pPck/5sm6SOd5gj4hrYovWIP3A6esOkKxp13zx5zPJosfe.8>
- U.S. Department of Agriculture (2024a). *Office of Urban Agriculture and Innovative Production*. United States Department of Agriculture. Retrieved June 8, 2025, from <https://www.usda.gov/farming-and-ranching/agricultural-education-and-outreach/urban-agriculture-and-innovative-production>
- U.S. Department of Agriculture. (2024b). *2022 Census of Agriculture – California State Profile. Table 1: County Summary Highlights*. Retrieved on June 22nd, 2025, from: https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_2_County_Level/California/st06_2_001_001.pdf

- U.S. Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) (2024). *2022 Census of Agriculture. California: State and County Data*. Retrieved June 8, 2025, from https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_1_State_Level/California/cav1.pdf
- U.S. Department of Agriculture. (2025a). *Urban Growers*. Retrieved June 14, 2025, from <https://www.farmers.gov/your-business/urban-growers/>
- U.S. Department of Agriculture. (2025b). *Urban Agriculture and Innovative Production Advisory Committee members*. Retrieved July 22, 2025, from <https://www.usda.gov/farming-and-ranching/agricultural-education-and-outreach/urban-agriculture-and-innovative-production/federal-advisory-committee-urban-agriculture-and-innovative-production/urban-agriculture-and-innovative-production-advisory-committee-members>
- U.S. Department of Agriculture. (2025c). *Urban Service Center locations*. Retrieved June 8, 2025, from <https://www.farmers.gov/your-business/urban-growers/urban-service-centers/locations>
- U.S. Department of Agriculture. (2025d). *Secretary Memorandum: SM 1078-015*. <https://www.usda.gov/sites/default/files/documents/sm-1078-015.pdf>
- Van Soelen Kim, J. (2018, April 6). *Permits, licenses, & regulations for urban agriculture* [Workshop handout]. University of California Agriculture and Natural Resources. <https://ucanr.edu/sites/default/files/2018-05/283538.pdf>
- Yuan, G. N., Marquez, G. P. B., Deng, H., Iu, A., Fabella, M., Salonga, R. B., Ashardiono, F., & Cartagena, J. A. (2022). *A review on urban agriculture: Technology, socio-economy, and policy*. *Heliyon*, 8(11), e11583. <https://doi.org/10.1016/j.heliyon.2022.e11583>
- Zigas, E. (2014). *Guide to implementing the Urban Agricultural Incentive Zones Act* [Implementation guide]. University of California Agriculture and Natural Resources. <https://ucanr.edu/sites/default/files/2014-05/19076>

ABOUT THE AUTHOR

Maria Ridoutt-Orozco is a committed food systems professional whose career bridges environmental engineering, international research, community advocacy, and policy. Originally from Lima, Peru, she brings a global lens to agricultural resilience—shaped by formative experiences working with farmers, researchers, and community partners around the world.

Maria earned her B.S. in Environmental Engineering from the National Agrarian University in Peru, where she deepened her understanding of how cultural context and technological design intersect in smallholder agriculture.

Driven by a passion for innovation and sustainability, Maria pursued additional training in Innovation and Technology at Utah State University, Digital Transformation at the Massachusetts Institute of Technology (MIT) and the master program in Sustainable Food Systems at Arizona State University.

Today, Maria serves as a Policy Farmer Advocate at the Community Alliance with Family Farmers (CAFF), a statewide organization advancing policy and technical support for small-scale and historically underserved farmers in California. In this role, she collaborates with growers across the San Joaquin Valley and beyond, working to bridge the gap between policy intent and on-the-ground realities. Her work spans legislative advocacy, urban agriculture system design, technical assistance, and community-led capacity building.