



Public Harvest

Expanding the Use of Public Land for Urban Agriculture in San Francisco

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Executive Summary

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Urban agriculture has captured the imagination of many San Franciscans in recent years. Two dozen gardens and farms have sprouted across the city since 2008, and in 2011 the city changed its zoning code to permit urban agriculture in all neighborhoods. Interest in urban agriculture stems from its numerous benefits. City farming and gardening provides San Franciscans with vibrant greenspaces and recreation, education about fresh food and the effort it takes to produce it, cost savings and ecological benefits for the city, sites that help build community, and a potential source of modest economic development. But the city will not fully capture these benefits unless it responds to the growing interest and energy behind the issue.

The demand for more space to grow food is strong. Surveys since 2005 have consistently demonstrated long waiting lists at many of the city's community gardens. In most cases, residents must wait more than two years to get access to a plot. The launch of more than 20 new urban agriculture projects in the past four years, some of which are communally managed and involve greater numbers of people than traditional plot-based gardens, is another indication that the current amount of land dedicated to urban agriculture is insufficient.

The challenge ahead is matching residents' interest with public resources. Private land and private funding alone are not sufficient to meet the demands for urban agriculture space in our dense city. Instead, the city must improve its existing programs and expand the availability of public land, funding and institutional support.

Currently, at least seven city agencies provide monetary support and 11 agencies provide land to city gardeners and farmers. Though well-intentioned, their support is largely uncoordinated, understaffed and, as a result, inefficient. While city funding for urban agriculture has increased during the past five years, it has decreased from a peak a decade earlier and is in the middle range when compared to other large American cities.

For San Francisco to reap the many benefits of urban agriculture, SPUR recommends that the city expand and coordinate its institutional support, increase funding and improve funding efficiency, and provide more access to public land.

SPUR's recommendations for better capturing the benefits of urban agriculture in San Francisco

Increase funding and institutional support

1. Within the next year, the mayor should determine whether a city agency or nonprofit partner best serves as the main institutional support for urban agriculture.
2. The Recreation and Parks Department should review its cost estimates for building and renovating community gardens with an emphasis on reducing initial capital costs.
3. The Public Utilities Commission, Department of the Environment and San Francisco Unified School District should continue supporting urban agriculture education with demonstration gardens, school gardens and educational outreach.
4. The Public Utilities Commission should include urban agriculture as a stormwater management strategy.
5. City agencies managing land should adapt the Street Parks Program model for activating urban agriculture sites.

Provide greater access to public land

6. The Recreation and Parks Department and other city agencies managing existing community gardens should ensure that these spaces are fully utilized.
7. City agencies, especially the Recreation and Parks Department and Public Utilities Commission, should provide more land to community gardeners and urban farmers, including existing public greenspaces that are underutilized.
8. The mayor should direct the Department of Public Works, in coordination with the Real Estate Division, to survey city-owned buildings to determine which rooftops are most suitable for urban agriculture projects and should direct the relevant agencies to begin pilot projects on some of those sites.
9. The Recreation and Parks Department should notify all residents currently on waiting lists about potential sites and available funding for new urban agriculture projects.
10. The San Francisco Unified School District should continue exploring the feasibility of using school campuses as locations for community gardens and urban agriculture sites.
11. The Planning Department and Planning Commission should encourage urban agriculture as a community benefit when evaluating and approving large development projects.

Expanding the Use of Public Land for Urban Agriculture in San Francisco

San Francisco is currently experiencing a wave of interest in urban agriculture. Individuals and organizations across the city have started two dozen community gardens and urban farms in the past four years. Reflecting this interest, in 2009 then-mayor Gavin Newsom issued an executive directive mandating an audit of city-owned land suitable for urban agriculture. In 2011, Mayor Ed Lee signed an urban agriculture ordinance, which updated the planning code to allow the growing and selling of food from gardens and farms throughout the city. Whether motivated by a do-it-yourself ethos, health concerns, interest in local food or a business plan, city residents are greening their thumbs. Their efforts are pushing the city to reconsider how agriculture fits within the urban landscape and what the city can do to support gardeners and farmers.

Urban agriculture provides multiple benefits to San Franciscans: It connects them to the broader food system, offers open space and recreation, provides hands-on education, presents new and untested business opportunities, and builds community.

San Francisco, however, is missing an opportunity to capture these benefits. Residents currently lack sufficient access to sites suitable for gardening and farming. Though private land offers some possibilities, few private landowners are willing to offer long-term land tenure for gardens when, in most cases, other uses of their site would be far more lucrative. In addition to the challenge of land access, the institutional support for urban agriculture in San Francisco — while offered by multiple well-intentioned agencies — is uncoordinated, understaffed and, as a result, inefficient.

Expanding the use of public land and reforming the city's institutional support for urban agriculture offer the greatest opportunity for increasing the amount of gardening and farming in the city; these ideas are therefore the focus of this SPUR report. We begin by reviewing the scope, forms and benefits of urban agriculture. We then examine the current availability of land, funding and institutional support across city agencies. Finally, we offer 11 recommendations for how San Francisco can support city gardeners and farmers and better capture the benefits of urban agriculture.

Urban agriculture defined

Urban agriculture is the growing of food through intensive plant cultivation and animal husbandry in and around cities. It can take many forms, including community gardens, city farms, greenhouses, rooftop beehives, school gardens and backyard chicken coops. In this paper, we focus most of our attention on community gardens and city farms.

Urban agriculture requires more than just space to thrive. To prosper, those growing and selling food in the city also need supportive infrastructure, such as access to water; distribution channels, such as produce stands and farmers' markets; and certified facilities for processing and preserving food. Also critical to the success of urban agriculture are educational opportunities for aspiring gardeners and municipal policies that support urban agriculture.

The Benefits of Urban Agriculture

San Franciscans have shown a notable interest in reducing their ecological footprint, increasing access to fresh food, building community and creating more greenspace. These priorities have forced the city to rethink how the growing of food fits alongside many other competing land uses. SPUR supports urban agriculture because it provides multiple benefits to San Franciscans and the city as a whole. Key benefits include:

Connecting city residents to the broader food system

Most food is grown outside of urban areas, which results in a disconnection between city residents and the broader food system that supports their communities. Urban gardening and farming can close this gap. Whether trying their hand as producers or buying food directly from growers, those who participate in urban agriculture gain a deeper understanding of the natural systems that provide our food. Community gardens, school gardens, market farms and even the local beehive provide opportunities for education. A fresh strawberry is a memorable lesson in seasonality. A meal made from garden-grown ingredients provides an example of nutritious eating. And those who succeed (or fail) at growing food develop an appreciation for the labor and skill required in agriculture. Much like the city's other sustainability initiatives (which raise awareness of our energy use, water and waste flows), promoting urban agriculture helps make San Franciscans conscious of the impact that our food system has on our environment, health and economy.



San Francisco Leads the Way in Urban Agriculture Zoning

On April 20, 2011, Mayor Ed Lee, Supervisor David Chiu and Supervisor Eric Mar led what may have been the first “salad toast.” Raising bowls of San Francisco–grown mixed greens, they were joined by dozens of urban agriculture supporters celebrating the mayor’s signing of urban agriculture zoning legislation.

The bill created two categories of urban agriculture based on size. “Neighborhood Agriculture” — an operation less than 1 acre in size — is allowed anywhere in the city. “Large-Scale Urban Agriculture” — an operation 1 acre or larger — is allowed automatically in the more industrial areas of the city and only by special permit everywhere else. Most importantly, gardeners and farmers can now grow food for sale in any zoning district. While the legislation did open the door to commercial urban agriculture in residential areas, it also imposed some limits on the use of mechanical equipment, hours of operation and what could be sold on-site.

This change, coming on the heels of legislative reforms in cities such as Kansas City and Seattle, placed San Francisco at the leading edge of urban agricultural reform. Later in the year, San Francisco’s policy was cited as a model by advocates and planners in Oakland, Chicago and British Columbia.

More detail: San Francisco Planning Code Sections 102.35 and 204.1(h)

Providing greenspace and recreation

Urban agriculture offers greenspace and recreational opportunities. The city has nearly 100 gardens and farms on both public and private land (not including school gardens) that are enjoyed by thousands of residents. These spaces provide a chance to cultivate a plot of earth for many people who otherwise would not have access to land — and a splash of green amid the concrete for many more. In the past few years, multiple urban agriculture projects, such as Alemany Farm, Hayes Valley Farm and the Quesada Gardens Initiative, have transformed vacant or neglected lots into vibrant spaces, continuing a tradition of city agriculture in America that stretches back more than a century to the 1890s.¹

Saving public agencies money

When these gardens and farms take root on public land, they can reduce the city’s landscaping, weeding and maintenance expenses for that site. Community groups that begin managing previously vacant lots can also help prevent these sites from becoming informal dump sites, saving the Department of Public Works an estimated \$4,100 per year at each site.²

Providing ecological benefits and green infrastructure

Gardens and farms, like many other greenspaces, absorb rainwater, cool down hot urban environments and provide habitat for birds and insects. These ecological benefits reduce stress on the city’s sewage system, lower energy demand on hot days and support biodiversity. Such benefits are especially pronounced when a garden is installed on a previously paved area or on a rooftop. Studies indicate that a roof planted with vegetation can reduce stormwater runoff from the site by 40 to 80 percent, helping decrease the likelihood of sewage discharges into the ocean and bay. The insulating effect of soil atop a roof can reduce building energy costs by 6 percent annually. Early estimates in New York City suggest that the stormwater management and cooling effects of urban agriculture “green infrastructure” have the potential to be significant.³

1 Laura Lawson, *City Bountiful: A Century of Community Gardening in America* (Berkeley: University of California Press, 2005), 23–31.

2 Correspondence with Greg Crump, Department of Public Works, January 2012.

3 S. Wise et al, “Integrating Valuation Methods to Recognize Green Infrastructure’s Multiple Benefits,” Center for Neighborhood Technology, 2010, <http://www.cnt.org/repository/CNT-LID-paper.pdf>

Though the studies cited are not specific to the Bay Area climate, the benefits of green roofs, especially in regard to stormwater runoff, are likely similar here as well. Data on the impact of food-producing green roofs is especially sparse. Existing estimates are cited in: K. Ackerman, “The Potential for Urban Agriculture in New York City: Growing Capacity, Food Security, & Green Infrastructure” (Urban Design Lab of the Earth Institute, Columbia University): 61–70, http://www.urbandesignlab.columbia.edu/sitefiles/file/urban_agriculture_nyc.pdf

A research team in New York City, led by Tyler Caruso and Erik Facticeau, is currently running a study on existing rooftop farms and hopes to publish its results by the end of 2012 at www.seeingreen.com.



Treasure Island Job Corps Farm



flickr user eblbenfice

City farming and gardening provides San Franciscans with vibrant greenspaces and recreation, education about fresh food and the effort it takes to produce it, cost savings and ecological benefits for the city, sites that help build community and a potential source of modest economic development.



Richard Key



Colleen McHugh



photo courtesy of the Free Farm Stand



photo courtesy of the Garden for the Environment

Building community

In creating these spaces, community gardeners and urban farmers are often building community. Almost any garden or farm coordinator can tell a story of how their project has helped knit together a group of people in a way that few other urban spaces do. Additionally, multiple researchers have documented the increase in social cohesion, sense of neighborhood empowerment and safety that urban agriculture projects often provide.⁴

Offering food access, public health and economic development potential

Urban agriculture in San Francisco has the potential to contribute to the city's efforts to address food access, improve public health and create jobs. Food access is the availability of fresh, healthy food within a neighborhood. Studies in New York City, Philadelphia, Camden and Trenton show that, compared to a grocery store, urban agriculture can provide only a small amount of the nutritional needs of neighborhoods that don't have good access to fresh produce.⁵ But urban agriculture can be an important supplemental tactic within a comprehensive food-access strategy. For individual gardeners, the harvested produce can provide substantial access to fresh, nutritious food at low cost. For a neighborhood, gardens and farms can provide education on nutrition and healthy eating.⁶

From an economic development perspective, the potential of commercial urban farming remains unclear. In the Bay Area, numerous businesses including Little City Gardens, Planting Justice and Dig Deep Farms are testing various models for achieving profitability. A study in Vancouver found that urban farm owners were earning an average of \$8.64 per hour in their first year of operation and expected earnings to increase as the businesses matured.⁷

Urban agriculture projects clearly do, however, provide job-training opportunities. One example is the Treasure Island Job Corps Farm, which offers culinary students training in utilizing farm-fresh food. Another is the Schoolyard to Market initiative, co-sponsored by the San Francisco Green Schoolyard Alliance and Center for Urban Education about Sustainable Agriculture, which helps high school students sell produce they have grown at the Ferry Building Farmers' Market. The longest-running job-training program connected with

4 Anne Bellows, Katherine Brown and Jac Smit, "Health Benefits of Urban Agriculture" (Community Food Security Coalition, 2004): 8, <http://www.foodsecurity.org/UAHealthArticle.pdf>

See also: Kimberley Hodgson, Marcia Canton Campbell and Martin Bailley, "Urban Agriculture: Growing Health, Sustainable Places" (American Planning Association, Planning Advisory Service, Report Number 563): 20–21.

5 Ackerman, "The Potential for Urban Agriculture in New York City," 50–58; and Domenic Vitiello and Michael Nairn, "Urban Agriculture Research and Practice in Greater Philadelphia: Harvest Reports," accessed November 2011, <https://sites.google.com/site/urbanagriculturephiladelphia/home>

agriculture on city-owned land is the Garden Project at the San Francisco County Jail in San Bruno, begun in 1992, which teaches farming and landscaping skills to 200 at-risk youth and ex-offenders each year.

Existing urban farming businesses have not operated long enough to determine whether they offer long-term jobs. Until a commercial model of urban farming in a dense city proves to be viable and scalable, the economic development impact of urban agriculture in cities such as San Francisco will remain small.

SPUR does not support expanding urban agriculture with the goal of producing a substantial portion of the food that San Franciscans eat. In a city as densely populated as San Francisco, we cannot feasibly feed ourselves from what we grow within city limits.⁸ While 40 percent of the vegetables consumed nationally during the peak of the World War II Victory Garden efforts were produced in small home and community garden plots,⁹ trying to reach anywhere near that proportion today within San Francisco would be a poor use of land and effort, especially considering the productivity of farmland so close to the city.¹⁰ However, an increase in the visibility and practice of urban agriculture will encourage San Francisco residents to consider the benefits and needs of a regional agricultural economy that can provide a substantial portion of the food the city eats.

In short, the benefit of urban agriculture in San Francisco lies not in its potential to feed the city but rather in its ability to: educate consumers about fresh, healthy food and the effort it takes to produce it; offer vibrant greenspaces and recreation; provide savings and ecological benefits to the city; help build community; and, potentially, serve as a new source of modest economic development.

6 A 2004 survey of community gardeners in Seattle revealed that, at some of the larger sites, more than 50 percent of participants met the majority of their produce needs from their harvest during half the year. "About the P-Patch Program," Department of Neighborhood Services, Seattle, accessed February 2012, <http://www.seattle.gov/neighborhoods/ppatch/aboutPpatch.htm>

In 2008, City Slicker Farms in Oakland found that 62 percent of respondents to its survey of backyard garden program participants grew at least half of the produce they ate. City Slicker Farms, Annual Report 2008: 5, <http://www.cityslickerfarms.org/sites/default/files/csfannualreport2008.pdf>

See also: "Urban Agriculture and Community Gardens: Why Use It?" Policy Link, accessed February 2012, http://www.policylink.org/site/c.1klXLBMNJrE/b.7634235/k.2A62/Why_Use_It.htm

7 Marc Shutzbank, "Vegetable Vancouver 2010: An Urban Farming Census," 2011, <http://www.cityfarmer.org/UF2010.pdf>; accessed via "Census and Economics of Vancouver Urban Farms," City Farmer News, November 28, 2011, <http://www.cityfarmer.info/2011/11/28/census-and-economics-of-vancouver%E2%80%99s-urban-farms/>. Figures are in Canadian dollars, which, at the time of the study, were roughly equivalent to U.S. dollars.

8 Kevin Bayuk, "Garden City Part I – Calculations," October 2010, <http://www.permaculture-sf.org/blog-sandbox/86-main-blog/238-arden-city-part-i-calculations.html>

Urban Agriculture on Public Land

SPUR's research focuses on the use of public land for urban agriculture because that land is relatively plentiful and because policymakers control it. Privately owned land suitable for agriculture is scarce in dense San Francisco. Yards adjacent to homes or apartments are usually small and, for the renters who constitute the majority of city residents, often inaccessible. With the addition of an urban agriculture land-use designation to the planning code in 2011, private land, limited though it may be, is now accessible to urban farmers and community gardeners who can successfully negotiate a lease. But even with a lease, land tenure for gardeners and farmers is often tenuous. Privately owned vacant land has a very high value because of its development potential. Urban agriculture projects, which can rarely pay much rent, have difficulty securing the long-term leases that are often essential to their success. The high value of land makes San Francisco's private land market quite different from other cities experiencing a surge of interest in urban agriculture, such as Detroit, Milwaukee and Chicago.

Public land, in contrast, abounds throughout the city and can be made available through policy. City agencies control 19 percent of San Francisco's land.¹¹ The city began moving in the direction of promoting urban agriculture in the 2011 draft of the Recreation and Open Space Element of the General Plan. The city's task ahead is to direct agencies to make land, resources and institutional support available to urban agriculture projects.

Urban Agriculture in San Francisco Today

Before discussing next steps for the city, it is important to understand the city's current method for providing land, resources and institutional support for urban agriculture.

Current supply of land

Edible gardens and farms big and small exist throughout San Francisco. More than 70 projects of many different types, excluding school gardens, currently operate on public land, ranging from the 120-square-foot container garden at Mission Branch Library to the nearly 3-acre Alemany Farm. At least 11 city agencies, two state agencies and three federal agencies host urban agriculture projects on their properties within the city. The Recreation and Parks Department (RPD), which runs the Community Gardens Program, and the San Francisco Unified School District, which oversees dozens of edible gardens in schoolyards, are the two agencies with the greatest number of sites. Many other agencies



Samantha Roxas

The Bridgeview Garden is on land owned by the Department of Public Works.

are involved as well. San Francisco General Hospital has a rooftop garden; the Police Department recently helped start a community garden with 39 plots; and the Public Utilities Commission (PUC) has one demonstration garden, two community gardens and a site dedicated to beehives among its properties. Figures 1 and 2 (see pages 10 and 11) provide a summary of sites on public land in San Francisco. A complete list of gardens is in Appendix I, and an interactive map of all site locations is available at <http://g.co/maps/skzhk>

San Francisco has close to 90 schoolyards with edible plantings. Used as outdoor classrooms by many teachers, they provide an invaluable educational opportunity to teach students about food, biology and nutrition. The number of edible gardens at public schools within the city has grown tremendously due to the bond funding approved by voters with Proposition A in 2003, 2006 and 2011 and to the work of both the San Francisco Unified School District and the San Francisco Green Schoolyard Alliance. The gardens on school campuses, however, are less accessible to the general public than many other gardens on public land. Concerns over student safety often restrict who is allowed onto a school campus. Two notable exceptions are the gardens at Aptos Middle School and June Jordan School for Equity, both of which are managed by the nonprofit Urban Sprouts and allow community members with connections to students to access plots on school property.

9 Lawson, *City Bountiful*, 171.

10 Edward Thompson, Alethea Marie Harper and Sibella Kraus, "Think Globally, Eat Locally: San Francisco Foodshed Assessment," American Farmland Trust, 2008, [http://www.farmland.org/programs/states/ca/Feature Stories/documents/ThinkGloballyEatLocally-FinalReport8-23-08.pdf](http://www.farmland.org/programs/states/ca/Feature%20Stories/documents/ThinkGloballyEatLocally-FinalReport8-23-08.pdf)

11 Calculation excludes rights-of-way, such as streets and sidewalks, and is based on data from the Real Estate Division, Department of Administrative Services, City and County of San Francisco, accessed November 2011, <http://gispubweb.sfgov.org/website/realestate/realestateq5.asp>

Figure 1: How Many Publicly Owned Sites Are There in San Francisco?

Within San Francisco, 11 city agencies, two state agencies and three federal agencies own land with urban agriculture projects. Some sites are managed by agencies or organizations other than the owner of the site. This list does not represent the great number of sites owned by the San Francisco Unified School District, as it only includes those few that are accessible to the general public.

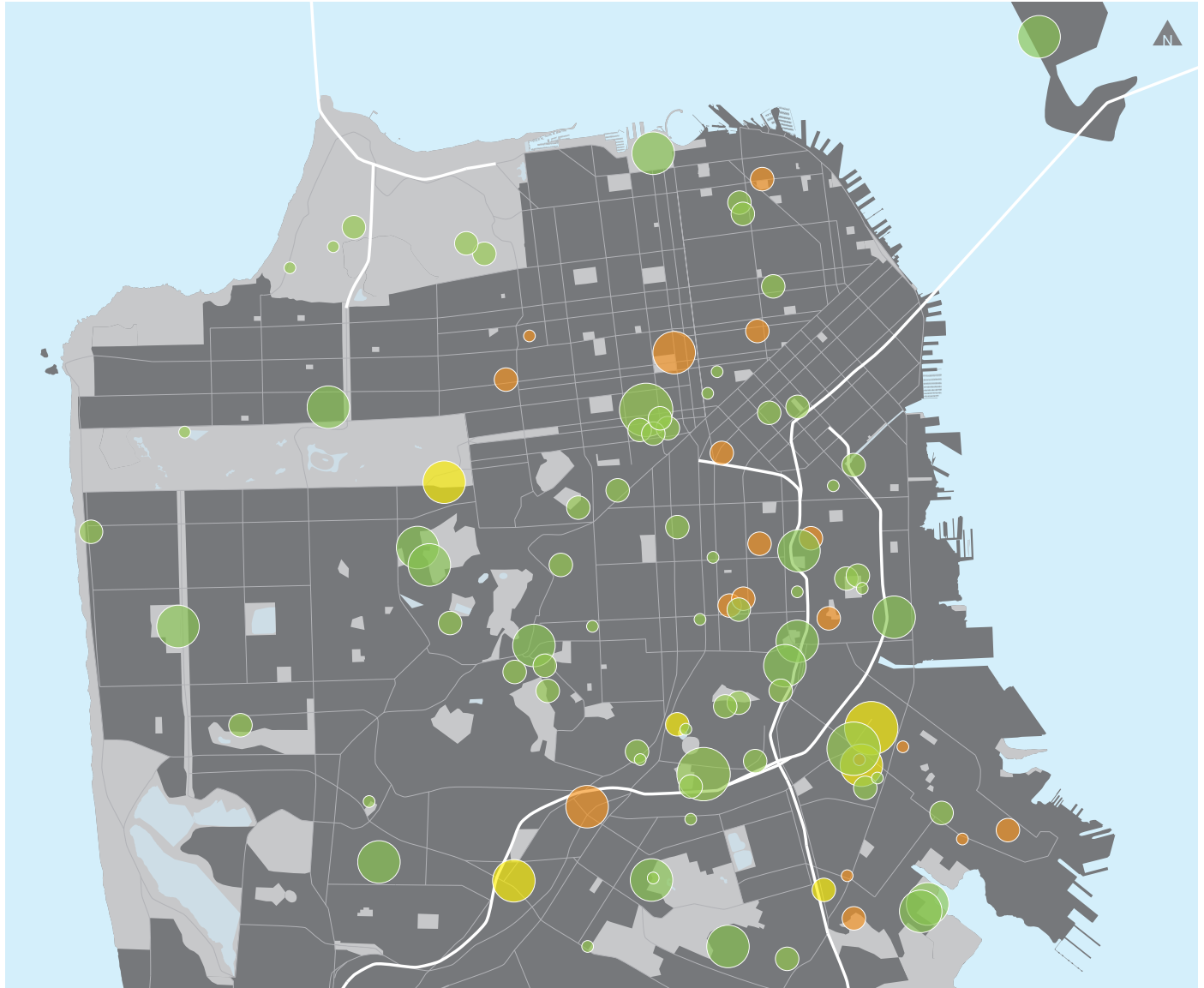
Land-owning Agency	Number of Sites	Acres
SF Recreation and Park Department	25	7.20
SF Department of Public Works	18	1.53
Golden Gate National Recreation Area	6	1.43
SF Public Utilities Commission	5	4.05
SF Unified School District	5	1.20
SF Housing Authority	3	1.24
SF Mayor's Office of Housing	2	1.08
SF Real Estate Division	2	0.82
SF Department of Public Health	2	0.14
SF Public Library	2	0.01
California Department of Parks and Recreation	1	0.32
California Department of Transportation	1	0.62
SF Port Department	1	0.22
SF Police Department	1	0.10
US Department of Labor	1	0.85
US Department of Veterans Affairs	1	0.01
Total	76	20.82

Source: Inventory of urban agriculture sites based on data from: Recreation and Parks Department, Community Gardens Program, <http://sfrecpark.org/CommunityGardensMap.aspx>; "San Francisco Community Gardens," San Francisco Garden Resource Organization, accessed November 2011, <http://www.sfgro.org/sfgardens.php>; Correspondence with Marvin Yee, Recreation and Parks Department; Jean Koch, Presidio Trust; and Julia Brashares, San Francisco Parks Alliance; and additional SPUR research.

Figure 2: Where Are Public Urban Agriculture Projects Located?

Nearly 100 urban agriculture projects, not including school gardens, exist in neighborhoods throughout San Francisco today. The majority of those projects are on city-owned land, with the remainder distributed among private, federal and state land. The sites range in size from nearly 3 acres to a few containers, with nearly two-thirds of sites occupying less than 10,000 square feet.

To view sites on an interactive map, visit <http://g.co/maps/skzkh>



- Public Land (non-school) *existing* locations
- Public Land (non-school) *pending* locations
- Private Land *existing* locations

- <1,500 square feet (<0.03 acres)
- 1,500–10,000 square feet (0.03–0.25 acres)
- 10,000–50,000 square feet (0.25–1.15 acres)
- >50,000 square feet (>1.15 acres)

Source: Inventory of urban agriculture sites based on data from: Recreation and Parks Department, Community Gardens Program, <http://sfrecpark.org/CommunityGardensMap.aspx>; "San Francisco Community Gardens," San Francisco Garden Resource Organization, accessed November 2011, <http://www.sfgro.org/sfgardens.php>; Correspondence with Marvin Yee, Recreation and Parks Department; Jean Koch, Presidio Trust; and Julia Brashares, San Francisco Parks Alliance; and additional SPUR research.

Urban Agriculture in Large Development Projects: Treasure Island, Park Merced and Sunnydale

While many of the recently created urban agriculture projects in San Francisco have been relatively small in size, some larger projects are scheduled to begin construction in the next five years.

Largest of them all is a 20- to 25-acre organic farm and open space “agriculture park” on Treasure Island, which received approval in 2011. Envisioned as an economically self-sustaining farm with an educational component, it would be, by far, the largest piece of agricultural land in San Francisco. In addition to the farm, plans for Treasure Island include community gardens managed by residents, though the square footage and details of these features have not been set. If construction moves according to schedule, these new sites should begin operation by 2015. Both the farm and the gardens will be on public land administered by the Treasure Island Development Authority.



Image courtesy of Treasure Island Community Development, LLC

The plans for the redevelopment of Treasure Island include a 20+ acre urban agriculture park in the center of the island.

The redevelopment of Park Merced also includes prominent urban agriculture spaces. The plans, which the Board of Supervisors also approved in 2011, include a 2-acre commercial organic farm and a little more than an acre of community gardens. The sustainability plan for the site mentions the potential for rooftop greenhouses, but they were not included in the final development agreement. Unlike Treasure Island, the farm and gardens on Park Merced will be on private land managed by a private property manager. According to current construction estimates, the farm at Park Merced may not be operational until 2020.



Designed by Van Meter Williams Pollack LLP. Rendering by Jeffrey Michael George Illustration

A half-acre site dedicated to urban agriculture is part of the proposal for the redevelopment of the Sunnydale neighborhood.

The development teams behind Treasure Island and Park Merced wanted to include a type of open space that provided something more than just a nice view or a space for recreation, that met project sustainability goals and that afforded residents a connection with food production. A challenge for the Treasure Island Development Authority and for Stellar Management at Park Merced will be finding operators that can maintain the economic self-sufficiency of the farm sites while also ensuring that the farms remain an open-space amenity for residents.

Urban agriculture will also be included in the redevelopment of the Sunnydale neighborhood in Visitacion Valley. Part of the HOPE SF initiative to rebuild and improve public housing in San Francisco, the master plan includes a half-acre community garden and orchards covering another half-acre. In contrast to Treasure Island and Park Merced, urban agriculture features were included in the design at Sunnydale based on the community's desire for greenspace, access to fresh, healthy food and job training or employment opportunities. The project is still in the planning phases and is years from completion.

Sources: Treasure Island Sustainability Plan; Treasure Island Development Agreement; Park Merced Sustainability Plan; Park Merced Development Agreement; Sunnydale HOPE SF Master Plan; and Correspondence with Skidmore, Owings and Merrill; Wilson Meany Sullivan; and Mercy Housing California.

The many forms of urban agriculture

In San Francisco, the most common form of urban agriculture outside of school gardens is the plot-based community garden. These gardens are subdivided into plots of land tended by individuals who usually pay an annual fee for their plot and harvest produce and flowers for personal use. The vast majority of community gardens managed by the RPD and the Presidio Trust within the Golden Gate National Recreation Area fall into this category.

Another popular form of community garden is the communally managed variety. Rather than being subdivided into plots, this type of garden is cultivated as a single space and managed by the gardeners as a group. Most of the gardens in the Street Parks Program, run by the Department of Public Works and the San Francisco Parks Alliance, fall into this category. Other prominent examples on public land include Alemany Farm and Hayes Valley Farm.

Some urban agriculture spaces, however, don't fall into these traditional categories. The Department of the Environment, for example, has recently installed a community orchard on public land. The Free Farm Stand distributes excess produce from gardens throughout the city at Parque Niños Unidos, which is owned by the RPD. The PUC owns nearly 3 acres of growing space at the Southeast Community Facility, a group of commercial greenhouses that it currently leases to a company specializing in indoor plants. Some forms of urban agriculture, such as rooftop gardens, don't exist on public land in the city, and others, such as aquaponic systems, don't yet exist in San Francisco at all.

Some of those forms of urban agriculture, however, exist in other parts of the country. Aquaponic systems, in which fish and plants are grown within the same indoor system, have gained momentum in Milwaukee, Wisconsin, and Chicago, Illinois, thanks to the work of the organizations Growing Power and Sweet Water Organics. In New York City, the nonprofit Added Value runs a commercial operation on 2.75 acres of city-owned land. In Seattle, the city-run P-Patch Program has three market gardens that allow residents to sell what they grow from their plots. In short, there is a greater variety of projects nationwide than currently represented in San Francisco. For a full list of the forms that urban agriculture can take, including examples in San Francisco, see Figure 3 on page 14.

Current demand for land

Though there are nearly 100 urban agriculture spaces on public and private land in the city — not including home or school gardens — many San Franciscans are still looking for a place where they can grow food. This demand for land is hard to gauge, but a mix of indicators demonstrate a broad interest in finding space.

One such indicator is community garden waiting lists. A 2011 survey of existing community gardens conducted by the Department

of the Environment revealed that all the plot-based gardens that responded had waiting lists.¹² The wait times ranged from two months to 18 years, with two-thirds of the gardens reporting a wait list of two years or more. The majority of gardens participating in the survey also reported that their waiting lists had increased in the past year, while smaller numbers reported their waiting lists as stable or declining. This data confirms earlier findings from surveys conducted in 2005 by the San Francisco Food Alliance and in 2009 by the nonprofit San Francisco Garden Resource Organization.¹³ San Francisco's waiting lists, which include at least 550 people, likely underrepresent actual demand. According to the manager of the RPD's Community Gardens Program, individuals who don't live near a garden with a waiting list may not sign onto a waiting list far from their home or, seeing that the waiting list is so long, may decide not to add their name.

Another indicator of demand for community gardens comes from a needs assessment conducted by the RPD in 2004.¹⁴ The survey of 1,000 San Franciscans indicated that community gardens were the third most frequently desired recreation facility (behind walking/biking trails and swimming pools) and fell in the top tier of facilities that residents consider most important — ranked above playgrounds, tennis courts and dog runs.





A more anecdotal indicator of demand is the explosion of urban agriculture projects that have started in the past few years on both public and private land. A sample of projects launched or expanded since 2009 includes Hayes Valley Farm, 18th and Rhode Island Garden, the Free Farm, Little City Gardens, Please Touch Community Garden, Growing Home Community Garden, Tenderloin People's Garden, Family Resource Center Garden in Potrero Hill and Little Red Hen Garden. Collectively, these projects have placed 3 acres of the city under cultivation and involved thousands of residents in urban agriculture, yet they only meet a portion of residents' demand for space.





12 San Francisco Department of the Environment, "Draft 2011 Urban Agriculture Resource Gaps and Analysis"

13 "2005 San Francisco Collaborative Food System Assessment" San Francisco Food Alliance, 2005, http://www.sfgov3.org/ftp/uploadedfiles/sffood/policy_reports/FoodSystemAssess.pdf; and "San Francisco Community Gardens," San Francisco Garden Resource Organization, accessed November 2011, <http://www.sfgro.org/sfgardens.php>

14 Leon Yunger, "Recreation Assessment Report: San Francisco Recreation and Park Department," August 2004, http://sf-recpark.org/ftp/uploadedfiles/wcm_recpark/Notice/SFRP_Summary_Report.pdf

Figure 3: What Types of Urban Agriculture Does San Francisco Have?

	Form of Urban Agriculture	Description	Examples in San Francisco, on Public and Private Land
Allison Arief	 <p>Home/kitchen garden</p>	A garden managed by residents, adjacent to or near a home, most often cultivating food and flowers for personal use.	Throughout the city
Colleen McHugh	 <p>Community garden, plot-based</p>	Land subdivided into plots but managed by a group of people, usually volunteers. Individuals cultivate plots as they see fit. Most grow produce and flowers for personal use. Commercial activity is rare.	Most of the community gardens in San Francisco
Richard Kay	 <p>Community garden, communally managed</p>	A plot of land managed and cultivated as one parcel by a group of people, usually volunteers. Commercial activity is rarely the focus.	Alemanly Farm, Hayes Valley Farm, 18th and Rhode Island Garden, Free Farm, Quesada Garden
Michael Waldrep	 <p>Demonstration garden/farm</p>	Similar to a community garden but with a strong emphasis on education and demonstration rather than production.	Garden for the Environment, Hayes Valley Farm, school gardens
Little City Gardens	 <p>Market garden/farm</p>	A plot of land cultivated by a small number of individuals, emphasizing maximum production and commercial sales.	Little City Gardens
Eli Zigas	 <p>Orchard</p>	A site planted with multiple trees cultivated to maximize production of fruit and/or nuts. Most often requires in-ground planting and long land tenure.	Portion of Alemanly Farm and a Department of the Environment project that's underway

Form of Urban Agriculture	Description	Examples in San Francisco, on Public and Private Land
 <p>Animal husbandry</p>	<p>Raising animals for food. Scale in residential areas is often small. Beehives can be located in many dense areas, including atop buildings. Poultry, rabbits and goats require more space and have more health and nuisance considerations.</p>	<p>Beehives are located at numerous community garden sites and at Laguna Honda Reservoir. Chicken coops are in many backyards and in a small number of community gardens.</p>
 <p>Aquaponics</p>	<p>A system that combines the raising of fish (aquaculture) with the hydroponic cultivation of plants, most often operated within a greenhouse or other climate-controlled building.</p>	<p>None yet in San Francisco. Prominent examples in Milwaukee, Wis. and Chicago, Ill.</p>
 <p>Large greenhouse</p>	<p>Large structures, either on the ground or on roofs, that provide a controlled environment in which to grow plants in containers.</p>	<p>Southeast Community Facility</p>
 <p>Rooftop garden/farm</p>	<p>The growing of food atop a building. In San Francisco, most frequently involves container gardening. Can also involve covering the roof with soil in which edible plants are then grown.</p>	<p>Graze the Roof at Glide Memorial Church, San Francisco Chronicle Rooftop Garden</p>
Spaces That Support Urban Agriculture		
<p>Resource center</p>	<p>A site where urban gardeners and farmers can pick up mulch, compost, seedlings, tools and other resources. Does not require land suitable for cultivation and could easily be established on paved sites. Requires large-vehicle access for pick-up and drop-off.</p>	<p>Pilot project pending at Garden for the Environment</p>
<p>Food retailer</p>	<p>A produce stand, farm stand or farmers' market where food is distributed to the public. Certain health regulations apply depending on the form of the retail operation.</p>	<p>Free Farm Stand, Little City Gardens</p>
<p>Food processing facility</p>	<p>A site, usually a commercial kitchen, where raw produce is processed to produce goods such as jams, sauces and pickles. Certain health regulations apply.</p>	<p>Commercial kitchens exist throughout the city, but none have been built on the same site as an urban agriculture project.</p>

Funding for urban agriculture

Space is just one ingredient necessary for expanding urban agriculture in San Francisco. Money is another. Current public funding for community gardening and urban agriculture is scattered among various city agencies, as Figure 4 indicates (see page 18).

In the past five years, not including funding for school gardens, city agencies have spent an average of \$581,000 per year on urban agriculture, including maintenance and administration of community gardens, educational programming and capital expenses for new sites. During this time, funding has steadily increased, much of that due to large one-time infusions of money to specific projects from the city administrator's Community Challenge Grant Program and the RPD's Community Opportunity Fund. In San Francisco (unlike New York, Chicago and Seattle), no agency dedicates a full-time staff person to community gardening or urban agriculture. The combined partial staff time of numerous individuals in city agencies and city-funded nonprofits equals approximately 3.5 full-time employees.¹⁵

The RPD, which manages the largest community gardens program, consistently spends the most of all agencies.¹⁶ In 2010, the RPD appropriated \$235,000 from the Community Opportunity Fund for the installation of one new garden. The Community Opportunity Fund is funded by the 2008 Clean and Safe Neighborhood Parks General Obligation Bond. The budget for day-to-day operations, administration and maintenance for the Community Gardens Program — which has ranged between \$90,000 and \$230,000 annually during the past five years — is funded by the Open Space Fund set-aside from property tax revenue that was passed with Proposition C in Spring 2000. This range of funding, which averages approximately \$150,000 per year, has not changed substantially in more than a decade.

The city administrator's Community Challenge Grant Program has supported more than 20 different groups that manage community gardens or urban agriculture projects on both public and private land. Previously known as the Neighborhood Beautification Fund, this pool of money flows from businesses that designate up to 1 percent of their payroll tax obligation toward the fund. Recipients of Community Challenge Grants can be nonprofits, community groups or businesses and must have some level of matching funds and demonstrated community support for their project. In the past three years, the Community Challenge Grant Program has provided an average of \$220,000 to non-school projects with some urban agriculture component.¹⁷

The Department of the Environment and the PUC also contribute significant funds toward urban agriculture. Both agencies have given grants to nonprofit organizations that offer educational and community engagement programming. The PUC also runs water management initiatives, such as a subsidized rain barrel and cistern

program, along with a water meter installation fee waiver for urban agriculture projects.

San Francisco compared to other cities

The combined level of annual funding for urban agriculture in San Francisco is in the middle of the spectrum when compared on a spending-per-site basis with several other large U.S. cities with active community garden programs. (See Figure 6 on page 21.) Obtaining comprehensive data from other cities is difficult, because, just as in San Francisco, funding for urban agriculture is often spread among multiple agencies and nonprofits with varying accounting methods. Though not perfectly parallel, rough comparisons provide a sense of the spectrum of financial support.

San Francisco's funding, when combined across agencies and nonprofits, provides more staff and money per site than New York City's GreenThumb program, which is run by its Department of Parks and Recreation. Compared to Chicago's NeighborSpace program, a nonprofit community garden land trust funded by a mix of public grants and private philanthropy, San Francisco has slightly higher funding levels across the board. In contrast, Seattle's P-Patch Program, which is operated by the city's Department of Neighborhoods, spends nearly double that of San Francisco on a similar number of sites and acres under cultivation.

Seattle's higher level of funding allows it to better meet residents' demand for urban agriculture space. Since 2008, the P-Patch Program, the city's main community garden initiative, opened 11 new sites and currently has 14 more under development. San Francisco, in contrast, opened eight community gardens on public land in that time, none of them through the RPD's Community Gardens Program, and has half the number of projects under development as Seattle. Seattle has better matched supply with demand than San Francisco. In 2011, one-third of gardens in the P-Patch Program with waiting lists had wait times of two years or more. In San Francisco, in contrast, twice as many gardens have waiting lists that long.¹⁸

15 This figure includes only paid employees and does not account for volunteer time.

16 One exception is fiscal year 2009–10, when the Community Challenge Grant allotted more funding toward urban agriculture projects than the RPD did.

17 SPUR analysis of Community Challenge Grants from fiscal years 2008–11, accessed December 2011, <http://sfgsa.org/index.aspx?page=4272>

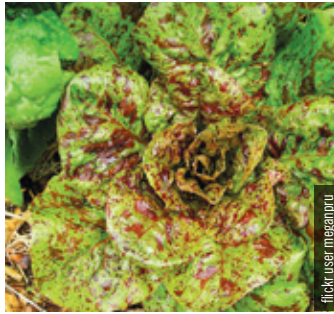
18 "P-Patch Community Gardening Program Factsheet," Seattle Department of Neighborhoods P-Patch Program, December 2011, <http://www.seattle.gov/neighborhoods/ppatch/documents/FactSheetnewcombinedversion2012.pdf>; and San Francisco Department of the Environment, "Draft 2011 Urban Agriculture Resource Gaps and Analysis."



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flickr user Hayes Valley Farm

An astonishing variety of food — ranging from artichokes to squash, fava beans to honey, salad greens to kale, cabbage to carrots — can be grown in San Francisco under the right conditions. Booka Alon explains the role that worms play in fertilizing soil to a group of youngsters visiting Hayes Valley Farm.



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Figure 4: How Much Does San Francisco Spend on Urban Agriculture?

The Recreation and Parks Department, the Department of the Environment and the Community Challenge Grant Program are the three largest source of public funding for urban agriculture in San Francisco. This table does not include school gardens.

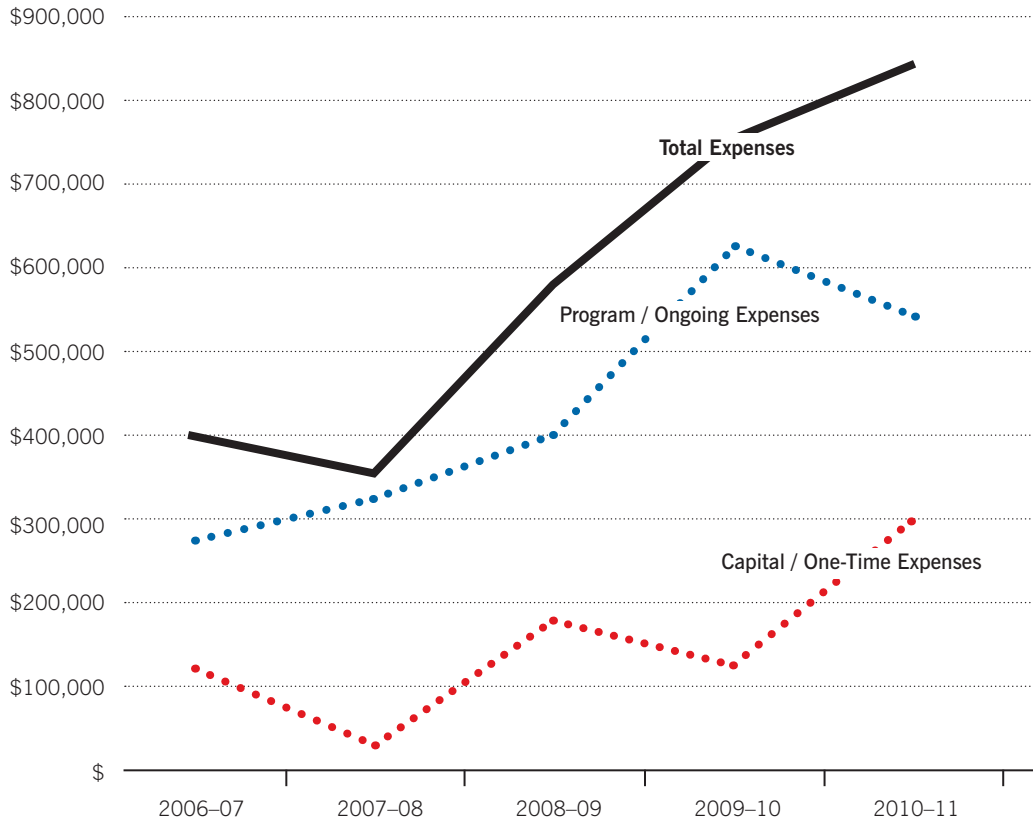
Agency or Organization	2006–07	2007–08	2008–09	2009–10	2010–11	Average
Ongoing Expenses						
Recreation and Park Department, Community Garden Program	\$98,821	\$58,947	\$51,809	\$96,432	\$64,551	
Department of the Environment	\$159,000	\$160,000	\$100,000	\$120,000	\$142,178	
Department of Public Works			\$27,000	\$27,000	\$35,840	
Department of Public Health ¹⁹				\$3,204	\$3,204	
Public Utilities Commission (not including school garden related expenses)		\$88,553	\$63,553	\$63,553	\$63,553	
Community Challenge Grant City Administrator's Office			\$139,000	\$307,276	\$221,331	
SF Parks Alliance Street Parks Program ²⁰	\$14,000	\$15,000	\$16,000	\$6,500	\$9,000	
Ongoing Expenses Subtotal	\$271,821	\$322,500	\$397,362	\$623,965	\$539,657	\$431,061
Capital/One-Time Expenses						
Recreation and Park Department, Community Garden Program	\$119,498	\$30,694	\$176,300	\$73,800	\$46,022	
Recreation and Park Department, Community Opportunity Fund					\$234,764	
Public Utilities Commission (not including school garden related expenses)					\$18,230	
Mayor's Office of Economic and Workforce Development				\$50,000		
Capital/One-Time Expenses Subtotal	\$119,498	\$30,694	\$176,300	\$123,800	\$299,016	\$149,862
Total	\$391,319	\$353,194	\$573,662	\$747,765	\$838,673	\$580,923
Percent for Program/Maintenance	69.46%	91.31%	69.27%	83.44%	64.35%	
Percent for Capital/One-time	30.54%	8.69%	30.73%	16.56%	35.65%	

Expenditures for Urban Agriculture Projects on City-Owned Land in San Francisco, Fiscal Years 2006–07 to 2010–11

Source: Budget figures from various agencies as submitted to the Office of Supervisor David Chiu and from SPUR research.

Figure 5: How Has Funding Changed in Recent Years?

Funding for urban agriculture on city-owned land has increased steadily during the past five years. The funding, spread among at least seven agencies and one nonprofit, goes primarily to pay for ongoing expenses such as staff time, maintenance and programming.



Change in Expenditures for Urban Agriculture on City-Owned Land in San Francisco, Fiscal Years 2006-07 to 2010-11

Source: Budget figures from various agencies as submitted to the Office of Supervisor David Chiu and from SPUR research.

19 Funding listed is for the edible gardens at the Laguna Honda Hospital. The Department of Public Health funds other urban agriculture programming, but SPUR was unable to obtain those figures prior to publication.

20 Figures provided by the San Francisco Parks Alliance represent a small percentage of overall Street Parks Program expenditures.

San Francisco's current level of funding for community gardens nearly matches that of the early 1990s. At that time, the city partially funded the nonprofit San Francisco League of Urban Gardeners (SLUG). In 1992, SLUG had a budget of \$180,000. Adjusted for inflation, this is equivalent to an annual budget today of nearly \$300,000. By 1994, SLUG's budget was \$500,000, roughly \$750,000 in today's dollars. In 1997, the organization reported a \$2 million budget, with half of the revenue from city grants. Adjusted for inflation, the city was providing \$1.4 million to SLUG, approximately 50 percent more than the city's total funding for urban agriculture in 2010–11.²¹ As SLUG matured and expanded its mission, it increasingly secured federal block grant funding. By the early 2000s, it had a budget of \$3.5 million. The majority of this funding went toward job training, youth development and education, with only a small portion going toward the basic upkeep of community gardens that had formed the core of SLUG's work in its earlier years. Following management issues and a political scandal, SLUG disbanded in 2004.²² Since then, public funding for community gardening and urban agriculture has declined to only a fraction of the previous peak levels.

Institutional support

After SLUG shut its doors, the city's support for urban agriculture was dispersed across the patchwork of city agencies and nonprofits detailed in Figure 4. Today, these organizations coordinate only loosely. This has led to an ad hoc approach to citywide support for urban agriculture.

The RPD's Community Gardens Program is the most prominent urban agriculture program within a city agency. It manages 35 sites throughout the city, serving approximately 1,000 gardeners. The Community Gardens Program is managed by one staff member at the RPD whose time is split between community gardens and other RPD capital projects. Most of the Community Gardens Program's budget goes toward maintenance of existing sites and staff time. While the program supports many existing gardeners, it has difficulty meeting demand for more garden space. No new community gardens have been built on RPD land since Victoria Manalo Draves Community Garden was completed in the South of Market neighborhood in 2007. The last major renovation was of the Arkansas Friendship Community Garden in Potrero Hill in 2008. Two proposed gardens are pending. The RPD manages at least

21 San Francisco League of Urban Gardeners, "Development: 1997 Financials," *SLUG Update*, Winter 1998: 22.

22 Mary Beth Pudup, "It's Not Easy Being Green: The Birth, Death, Demise, Rise and Otherwise Continuing History of Community Gardening in San Francisco," Conference Paper, Association of American Geographers Annual Meeting, April 15, 2010; Ilene Lelchuk, "City Confirms Workers' Charges: SLUG Employees Were Coerced to Vote for Newsom," *San Francisco Chronicle*, September 10, 2004; and City and County of San Francisco, Office of the Controller, *Office of the City Attorney: the San Francisco League of Urban Gardeners Mismanaged Grant and Contract Funds from the City* (Audit Number 03005), July 22, 2004.

one other garden — at the Golden Gate Senior Center — but that site's recreation staff coordinates its operation separate from the Community Gardens Program.

Individuals or community groups interested in creating new community gardens on RPD land must demonstrate community support for the project, design a site plan and secure funding. However, the RPD does not offer an application or public workshops for potential applicants. After project sponsors have finalized a design and obtained funding, they must secure the support of the Recreation and Parks Commission for the proposal. If the project is approved, either the RPD will put the contract to build the garden out for competitive bidding, or the project sponsors can hire their own contractors and gift the completed garden to the city. For many individuals and community groups, this can be a complex, expensive and daunting process, even with the support of RPD staff.

In contrast, the Street Parks Program, administered jointly by the Department of Public Works and the San Francisco Parks Alliance, has proven to be a very effective model for activating new community-managed spaces in the city today. This program allows community groups to develop land owned by the Department of Public Works as open space. It has been remarkably successful. Residents have created 145 new open spaces since the program began in 2004, with 100 of those projects launched just in the past three years.²³ Many of these projects are on remnants of unfinished streets, medians, stairways or other rights-of-way. Only a small fraction of the street parks — approximately 15 sites — have edible plants. But, as a process for facilitating community activation of publicly owned land, the Street Parks model could be applied to an initiative that focuses on urban agriculture.

The success of the Street Parks Program stems from its simplicity and the support provided by organizational sponsors. For residents and community groups, the process begins with a one-page application that asks basic questions about the proposed plan for the site. Based on this application, one staff member at the

23 Correspondence with Julia Brashares, San Francisco Parks Alliance, September 2011.

24 "A Stroll in the Garden: An Evaluation of the P-Patch Program," City of Seattle Department of Neighborhoods: August 2009, <http://www.seattle.gov/neighborhoods/ppatch/documents/PPatchEvaluation2009.pdf>

25 Not all of the sites managed by NeighborSpace are urban agriculture projects. One-third of the sites are native prairie plantings, another third are a mix of ornamentals and edibles, and the final third are community gardens. Source: Correspondence with Ben Helphand, Executive Director, NeighborSpace, November 2011.

26 San Francisco operating budget reflects an average of program/ongoing expenses for the past five years (see Figure 4). Full-time employee equivalent figures are based on SPUR research and includes only paid staff time, not any volunteer time. Sites managed and total acreage amounts are based on agency data and SPUR research (see Figure 1 and Appendix I).

Figure 6: Comparing Urban Agriculture Programs in Four U.S. Cities

On a per-site basis, San Francisco spends more on urban agriculture on city-owned land than New York's GreenThumb and Chicago's NeighborSpace programs — but far less than Seattle provides to its P-Patch Program. Though not perfectly parallel, these rough comparisons show the spectrum of financial support. Note: Operating budgets include general overhead, salaries and maintenance of existing sites. We have not included expenditures for creating new urban agriculture sites.



²⁷ Number of sites does not include school gardens managed by GreenThumb. Acreage figure is an underestimate reflecting only the area of the 294 GreenThumb sites owned by the New York City Parks and Recreation Department. Land area data is unavailable for 146 other GreenThumb sites owned by other agencies or private landowners. Source: Correspondence with Edie Stone, Executive Director, GreenThumb, October 2011.

San Francisco Parks Alliance and a staff member at the Department of Public Works guide the applicant through the process of building community support, securing necessary funding and designing the landscaping. To keep costs low while offering guidance to prospective applicants, the program sponsors offer two public workshops each year that provide an overview of the program in detail. The Department of Public Works occasionally provides materials, such as mulch and compost, as well as services like clearing, grading and path construction. The Parks Alliance serves as a technical advisor but does not provide funding for the creation of individual street parks. Project applicants are expected to secure funding for their projects from outside sources, which often includes public funding from the city administrator's Community Challenge Grant.

The biggest difficulty the Street Parks Program faces is ensuring that volunteers maintain the sites over the long term. Sponsors of Street Parks projects are required to agree to steward their site for at least three years, but neither the Department of Public Works nor the Parks Alliance has a mechanism for enforcing this agreement. Seven years into the program, the Street Parks administrators report that very few volunteer groups have abandoned their sites. Overall, the Street Parks Program has been highly successful with a low cost to the city.

Beyond the Street Parks Program and the RPD Community Gardens Program, various city agencies have supported urban agriculture on an ad hoc basis. The Mayor's Office of Economic and Workforce Development, for example, provided a \$50,000 grant that launched Hayes Valley Farm in 2010. At around the same time, the Department of Public Health began supporting Growing Home Community Garden, also in Hayes Valley. More recently, the Department of the Environment launched a community orchard project, and the Potrero Branch Library has begun a seed library in partnership with a local community group. While all of these projects have attracted considerable community support, to get off the ground each required committed project sponsors who had the time and ability to navigate city bureaucracy without an existing framework. This model can be effective, especially for agencies without much land, but it is difficult to replicate or expand.

Land trusts that support urban agriculture are a model of institutional support that's absent in San Francisco but present in a number of other cities. Examples include Chicago's NeighborSpace, Seattle's P-Patch Trust and New York City's three borough-level land trusts, which were recently spun off from the Trust for Public Land. These land trusts own the land or the easements for urban agriculture sites, many of which were city-owned vacant lots prior to becoming gardens. The trusts often work closely with city agencies that run parallel community garden programs. Though no urban agriculture land trust exists in San Francisco today, it is an option that could have promise in the future, especially for securing land tenure for projects on private land.



photo courtesy the Free Farm Stand

What Does Success Look Like?

SPUR's recommendations are focused on ensuring that more San Franciscans have access to space where they can grow food. From the perspective of a resident, this means the city would make it easier to find and obtain permitting for gardening space and resources. From the city's perspective, it means a more efficient and streamlined approach to providing support and public land to residents and community groups that want to start projects. Specific indicators that the city has gotten better at capturing the benefits of urban agriculture would include:

Residents waiting no more than a year for access to a community garden plot or communally managed garden space

New urban agriculture projects launched on public land where residents demonstrate desire for the projects

The creation of a "one-stop shop," which would provide information, resources and technical assistance for urban agriculture in the city, including a single application for starting a new project; this would be run either by a city agency or a nonprofit

More efficient use of public funds dedicated to urban agriculture, including lower costs for creating new sites and less duplication among city agencies

Recommendations

Since the dissolution of SLUG, various city agencies and nonprofit organizations have worked to maintain existing spaces and create new urban agriculture sites. Their efforts, however, are uncoordinated, with funding in the middle range among the cities SPUR studied and at historically low levels for San Francisco. Various institutional models for supporting urban agriculture exist within the city, with varying degrees of effectiveness. Residents' desire for more urban agriculture space provides city agencies with an opportunity to harness community energy for the improvement of the whole city. For San Francisco to better capture the benefits of urban agriculture, SPUR recommends a series of changes to provide more land, resources and institutional support to city gardeners and farmers.

SPUR's recommendations to increase funding and institutional support

1. Within the next year, the mayor should determine whether a city agency or nonprofit partner best serves as the main institutional support for urban agriculture.

The city's current support of urban agriculture is broad but uncoordinated and inefficient. There is no "one-stop shop" for urban agriculture. The city would be better served by an agency or nonprofit organization that provides:

- Site management: serving as liaison between volunteers and agency property owners, resolving conflicts among coordinators and participants and ensuring the maximum utilization of existing spaces
- Site maintenance coordination: placing work orders for repairs and providing resources such as tools, compost and mulch
- Technical assistance: guiding individual residents or organizations through regulations, developing site leadership and providing training on water-efficient gardening and low- or no-pesticide agriculture
- Interagency coordination
- Fund-raising support for community projects: directing individuals and organizations to public and private funding opportunities for open space and greening at the city, state and federal level

Currently, at least seven city agencies offer grants or programming. None of these agencies have a comprehensive approach that combines managing land, promoting gardening and farming across city departments, and reaching out to the community.

The RPD maintains the existing Community Gardens Program but, despite the intense interest in urban agriculture during the past few years, has not expanded the number of gardens or farms in the city. While it does manage land owned by other agencies, it has been involved in few of the urban agriculture initiatives supported by other agencies in recent years. The Department of the Environment, on the other hand, often works across agencies but does not own or manage land. Serving as the main sponsor of a comprehensive urban agriculture program doesn't fit well within the missions of either the Department of Public Works or the PUC, the two other agencies with the largest urban agriculture interests.

Changing priorities or reorganizing various agency programs under one roof could position a city agency as the main institutional support for urban agriculture. A change of this magnitude would likely require consolidating the funding for urban agriculture that is currently split among many departments. Seattle's P-Patch Program, operated by their Department of Neighborhoods, provides a model of this type of government-centered approach.

Alternatively, San Francisco might be better served if the majority of the existing government spending were directed to a nonprofit organization that specialized in urban agriculture and coordinated across government departments.

NeighborSpace in Chicago provides an example of such an organization. NeighborSpace serves as a land trust and steward working with community groups to maintain and create new open space within the city. It began with the support of three government agencies each pledging \$100,000 annually for 20 years. That core funding provides two-thirds of the organization's budget, with the rest coming from a variety of sources, including private philanthropy. SLUG played a similar role, especially in its early years, by helping maintain gardens, coordinate gardeners and start new sites. Both cases offer a model of how a government-supported nonprofit can catalyze the development of urban agriculture in the city.

Public funding for an agency with an expanded role in urban agriculture or for a nonprofit could come from a variety of sources. One stream of funding could be the \$150,000 provided by the Open Space Fund, currently used by the RPD for the Community Gardens Program but historically granted to SLUG.

In our 2011 report *Seeking Green*, SPUR recommended that the Open Space Fund be doubled. This increase in funding should include an increased financial commitment to the Community Gardens Program. Similarly, other agencies with smaller urban agriculture projects, such as the Mayor's Office of Economic and Workforce Development and the Department of Public Health, could partner with a coordinating agency or outside organization to help manage their urban agriculture grant programs.

To expand its support further, this agency or nonprofit focused on urban agriculture should leverage its core public financing to secure support from other funding sources, including federal grants, state grants and private philanthropy. It could also stretch its dollars further and deepen its impact by helping community gardeners and urban farmers access money for capital projects through both the Community Challenge Grant and the Community Opportunity Fund, much like the Street Parks Program currently does.

The strains on the city's current uncoordinated, multi-agency system that supports urban agriculture will only become greater as the city expands the number of projects on public land. In the next year, the mayor must determine whether the city can best support residents' gardening and farming efforts by consolidating its funding and coordination into one agency or by passing that funding onto a nonprofit partner.

2. The Recreation and Parks Department should review its estimates for building and renovating community gardens with an emphasis on reducing initial capital costs.

Building a new garden or urban farm on RPD property costs more than similar projects on other public land. The most recent RPD rebuild of a garden site with 14 plots cost nearly \$45,000. That total included picnic tables that cost approximately \$3,750 each and a toolshed for \$7,000.²⁸

In contrast, the Presidio Trust has recently built three new community gardens within the Presidio. Based on its recent budgets, the trust estimates that building 14 beds and installing water hookups would cost approximately \$12,000 (using raised-bed construction without major site preparation).²⁹

While accurate comparisons between different sites are difficult to make because each site entails different expenses, the initial numbers indicate that with changes in design and procurement, the RPD could significantly reduce the cost of building new urban agriculture sites.

3. The Public Utilities Commission, Department of the Environment and San Francisco Unified School District should continue supporting urban agriculture education with demonstration gardens, school gardens and educational outreach.

Education is critical to the success of urban agriculture, especially because people who move to San Francisco from other parts of the country and world often don't know how to grow food in the city's Mediterranean climate. Demonstration gardens, whether they are on school campuses or at local parks, provide one opportunity for

residents to learn how to grow their own food. The school district, with the support of the San Francisco Green Schoolyard Alliance, has already installed edible plants in close to 90 schoolyards, offering students on those campuses a hands-on opportunity to learn about how food grows. The school district capital bond that was approved by voters in 2011 provides funding for the expansion of this program.

The Department of the Environment and the PUC both support urban agriculture education by providing lesson plans, funding for school programs and grants to nonprofit organizations such as Garden for the Environment, Alemany Farm, Urban Sprouts and the Southeast Food Access Working Group.

In another educational model, exemplified by City Slicker Farms in Oakland, trained teachers travel to urban agriculture sites to provide instruction. Urban agriculture cannot thrive in San Francisco without organizations helping residents learn how to garden, and public agencies should continue to support the school district and nonprofits that offer this education.

4. The Public Utilities Commission should include urban agriculture as a stormwater management strategy.

In the next few years, the PUC will be developing the Urban Watershed Framework for stormwater management. This framework will ultimately lead to funding for "low-impact design" projects, which reduce stress on the sewage system during heavy rains. Urban agriculture is one form of low-impact design, because it allows water to seep into the ground rather than run off into the city's sewers and because it can reuse collected stormwater better than many other types of land uses. New York City's water department recently awarded grants to a number of urban agriculture projects, including some rooftop gardens, because they help mitigate stormwater runoff.³⁰ The San Francisco PUC should learn from New York's experience and examine the value of funding urban agriculture as green infrastructure.

5. City agencies managing land should adapt the Street Parks Program model for activating urban agriculture sites.

As discussed earlier, the Street Parks Program has helped community groups activate scores of new open spaces at a low cost to the city by streamlining the process. All city agencies that offer land for urban agriculture should look to the Street Parks process as a model. Going forward, city agencies should consider adopting a simple common application for community groups interested in utilizing public land.



SPUR's recommendations to provide greater access to public land

6. The Recreation and Parks Department and other city agencies managing existing community gardens should ensure that these spaces are fully utilized.

The Department of the Environment surveyed the 35 existing urban agriculture and community garden sites managed by the RPD in 2011. While most gardens were being fully utilized, of the gardens visited by staff, one in five had plots that were untended. Furthermore, 12 RPD community garden coordinators, representing one-third of the RPD sites, did not respond to the survey. With a high demand for community garden plots, it is important that the RPD, and all city agencies, work with community garden coordinators to maximize the use of existing urban agriculture sites.

28 Correspondence with Marvin Yee, Community Gardens Program Manager, Recreation and Parks Department, September 2011 and January 2012.

29 Correspondence with Jean Koch, Compost and Community Gardens Coordinator, Presidio Trust, November 2011.

30 Nevin Cohen, "Urban Agriculture as Stormwater Infrastructure," June 24, 2011, <http://www.urbanfoodpolicy.com/2011/06/urban-agriculture-as-stormwater.html>

31 Paula Jones, Summary Report of the Executive Directive on Healthy and Sustainable Food 09-03, (San Francisco Department of Public Health, December 2010), Appendix F: 46-51, <http://www.sfgov3.org/Modules/ShowDocument.aspx?documentid=503>

7. City agencies, especially the Recreation and Parks Department and Public Utilities Commission, should provide more land to community gardeners and urban farmers, including existing public greenspaces that are underutilized.

There is no one type of land best suited for urban agriculture. Nor is there one type of urban agriculture best suited for public land. Instead, the city should focus on promoting a diversity of sites and a diversity of urban agriculture types to capture the range of benefits that urban agriculture can provide while also meeting the broad demand for gardening and farming space.

In 2010, numerous city agencies identified land that was potentially suitable for urban agriculture in response to the Mayor's Executive Directive on Healthy and Sustainable Food in 2009.³¹ Subsequently, both the RPD and the PUC have identified additional sites. The PUC went a step further in October 2011 by authorizing two urban agriculture pilot projects, including one at a site that had not been included in the original land audit. This example indicates that the earlier land inventory should be considered as an initial, but not comprehensive, survey of potential sites.

City agencies that have identified land should actively seek out community partners to activate those spaces. See Appendix II for a full list of public land with potential for urban agricultural use.

For general guidelines about what types of projects fit best within certain types of spaces, see "Matching Urban Ag Uses With Available Sites" on page 26.

8. The mayor should direct the Department of Public Works, in coordination with the Real Estate Division, to survey city-owned buildings to determine which rooftops are most suitable for urban agriculture projects and should direct the relevant agencies to begin pilot projects on some of those sites.

Rooftops are a relatively untapped resource for urban agriculture. City-owned buildings that have suitable structural support and rooftop access could be excellent sites for new community gardens, as well as demonstration sites for how to build such a garden. Existing rooftop container gardens that could serve as a model include those at Glide Memorial Church and the San Francisco Chronicle Building. Rooftop models outside the Bay Area include New York City's Brooklyn Grange and Gotham Greens.

Suitable roofs are those that can structurally support either container gardening or a full layer of soil for edible plants, can provide access for gardeners and don't present a conflict with other rooftop or

Matching Urban Ag Uses With Available Sites

What types of public spaces are currently available in San Francisco, and which kinds of projects would be the best fit for each?

Publicly accessible greenspace

Example: City parkland

Especially suitable for:

- Community gardens
- Demonstration gardens
- Orchards

In a city as dense as San Francisco, publicly accessible greenspace is rightly treasured. Community gardens and urban agriculture projects can often serve to beautify an area and offer passive recreational opportunities, much like any other landscaped space. However, some urban agriculture projects — especially those with fencing — limit access to publicly owned space, reducing the number of people who benefit from that greenspace. Building gardens with fences is similar to installing a tennis court or playground built on public land: The practice is not inherently problematic but creates trade-offs between those who gain garden space and those who lose use of the existing area. In cases where urban agriculture projects are proposed on existing publicly accessible greenspace, it is especially important for those projects to demonstrate community support and accessibility.



Michael Waldrep



flickr user Steve Rhoades



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Greenspace not publicly accessible

Example: Fenced-in areas adjacent to San Francisco's reservoirs

Especially suitable for:

- Community gardens
- Demonstration gardens
- Market gardens/farms
- Orchards
- Animal husbandry
- Resource centers

Publicly owned greenspace that is not currently accessible to the public has a broader range of potential uses, because placing an urban agriculture project on that site will not impinge on any existing public amenities. A new garden inside the fenced perimeter of the College Hill Reservoir, for example, does not pose the same trade-offs as a new garden in an area occasionally used for picnics. Greenspaces that are not currently accessible lend themselves to intensive production, including commercial agriculture, and often do not need to offer public access for recreation.

Temporary spaces

Example: Vacant lots slated for future development

Especially suitable for:

- Demonstration gardens/farms
- Market gardens/farms with moveable infrastructure
- Resource centers

Urban agriculture can thrive in temporary spaces. Perhaps the most prominent example in San Francisco, Hayes Valley Farm, sits on the footprint of a former highway on-ramp that was damaged in the 1989 Loma Prieta earthquake. As the space has already been slated for development, Hayes Valley Farm project organizers agreed at the beginning that they would vacate once construction was ready to begin. After a little more than a year of operations, the project coordinators are now seeking a new location for the farm as the developer moves closer to construction.

While Hayes Valley Farm provides a successful example of a project in a temporary space, projects focused on building community are ill-suited for temporary locations. Establishing a public amenity such

as a community garden on a temporary site could sow the seeds of future conflict. These spaces often become cherished by the surrounding neighborhood, and it becomes difficult for a community to see a neighborhood greenspace they tended for years destroyed to make space for a building.

On the other hand, urban agriculture projects that focus more on production or education rather than community building can use temporary spaces without putting down deep roots. Examples include Urban Adamah's garden in Berkeley, where garden containers have been built on pallets so they can be moved at a future date, and City Farm in Chicago, a commercial urban farm that has moved four times in the past 25 years as its sites have become developed. Projects that can demonstrate their willingness to move, either through their use of mobile containers or by pursuing a model that isn't rooted in a specific place or neighborhood, lend themselves well to temporary spaces.

Permanent spaces

Example: City parkland

Especially suitable for:

- All forms of urban agriculture

Spaces that provide land tenure of at least 10 years offer the best opportunity for urban agriculture projects to realize their full potential. Successful gardeners and farmers require years to learn the specifics of their site, build soil and understand what works best on their land. The Recreation and Parks Department's Community Gardens Program recognizes this by not imposing a lease term



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limitation on the majority of its public garden sites. Most types of urban agriculture will have greater success over time in a space with secure land tenure than in a temporary space. Orchards in particular require long land tenure, as it takes multiple years before most fruit trees become established and productive.

Paved areas/developed sites

Example: Paved spaces adjacent to libraries and recreation centers, parking lots

Especially suitable for:

- Gardens/farms that utilize containers
- Large greenhouses
- Aquaponics
- Resource centers

Urban gardeners and farmers are especially good at figuring out how to grow food in nontraditional spaces. Pavement is not necessarily an obstacle. Large container gardens can work very well on top of gravel or asphalt. Many school gardens have been established directly on blacktops. Paved areas, especially those with good vehicle access, are well-suited for resource centers. Piles of mulch and compost, a small greenhouse and a toolshed can all be located on a previously developed area without difficulty. Such areas can also serve as sites for larger greenhouses and aquaponics operations.

Rooftops

Example: Flat rooftops on city-owned buildings

Especially suitable for:

- Rooftop gardens/farms

Rooftops provide abundant sun and space for urban agriculture. Before constructing a rooftop garden, the building owner must consider the roof's load capacity and its accessibility. While many buildings in San Francisco have not been built to carry heavy loads on their roofs, others have that capacity. Those with smaller capacity may still be able to include a small container garden and beehives.

building uses.³² After the Department of Public Works, working with the Real Estate Division, has identified publicly owned buildings with suitable roofs, the mayor should direct the agencies that manage those buildings to find a partner agency or organization and begin pilot rooftop urban agriculture projects.

9. The Recreation and Parks Department should notify all residents currently on waiting lists about potential sites and available funding for new urban agriculture projects.

The hundreds of residents currently on waiting lists for a community garden plot are some of the people most likely to have an interest in starting a new garden. The RPD should notify all of these residents about the potential sites that have been identified by city agencies through the 2010 land audit and subsequent land surveys, as well as about funding opportunities through the Community Challenge Grant and Community Opportunity Fund. This kind of outreach and coordination could help jump-start many projects and reduce the size of the waiting lists.

10. The San Francisco Unified School District should continue exploring the feasibility of using school campuses as locations for community gardens and urban agriculture sites.

The San Francisco Unified School District (SFUSD) has close to 90 school gardens with edible plants and is continuing to expand the number with funding from capital bonds. Currently, those gardens are used by students, teachers and parents affiliated with that school. While the SFUSD is understandably cautious about allowing the general public onto school campuses during school hours, these campuses are often located in the heart of residential districts and have significant open space. These characteristics offer great potential for exploring urban agriculture projects that benefit not just the school but also the surrounding neighborhood. June Jordan School for Equity and Aptos Middle School, for example, work with the nonprofit Urban Sprouts to make some of their garden plots available to community members connected to students at the school. In 2010, as part of a pilot project to turn schools into “community hubs,” the SFUSD and the city began making a small number of school playgrounds regularly available to the

32 For an in-depth examination of rooftop urban agriculture in the Bay Area, see: Bay Localize, *Use Your Roof*, 2009, <http://www.baylocalize.org/files/Use-Your-Roof-Final.pdf>; Bay Localize, *Tapping the Potential of Urban Rooftops*, 2007, http://www.baylocalize.org/files/Tapping_the_Potential_Final.pdf; and San Francisco Urban Agriculture Alliance, “Guide to Starting a Garden or Urban Farm in San Francisco,” 2011, <http://www.sfuaa.org/start-a-gardenurban-farm.html>

33 An in-depth exploration of joint-use of school facilities is included in: Manel Kappagoda and Robert S. Ogilvie, *Playing Smart: Maximizing the Potential of School and Community Property Through Joint Use Agreements* (Public Health Law and Policy, 2012), <http://www.nplanonline.org/nplan/products/playing-smart>

general public outside of school hours. The SFUSD should consider including urban agriculture in any future community hub model.³³

11. The Planning Department and Planning Commission should encourage urban agriculture as a community benefit when evaluating and approving large development projects.

The San Francisco Planning Commission and Board of Supervisors recently approved two large development projects, Treasure Island and Park Merced, both of which include substantial urban agriculture components. Similarly, the master plan for the renovation of the Sunnydale public housing site in Visitacion Valley includes a community garden and orchard (see “Urban Agriculture in Large Development Projects: Treasure Island, Park Merced and Sunnydale” on page 12). Because urban agriculture most often requires dedicated open space, having these gardens and farms built into the master plans and development agreements for the sites ensures that nearby residents will have access to these types of community resources. In some cases, such as Treasure Island and Park Merced, the development agreements also provide larger spaces for commercial operations, allowing the city to explore the economic development potential of urban agriculture. In its efforts to encourage urban agriculture, Vancouver, British Columbia, went so far as to publish urban agriculture design guidelines for private developers.³⁴ The San Francisco Planning Department and Planning Commission should continue to encourage urban agriculture sites within development plans.

34 City of Vancouver, “Urban Agriculture Design Guidelines for the Private Realm,” 2009, <http://vancouver.ca/ctyclerk/ccclerk/20090120/documents/p2.pdf>

35 Correspondence with Sibella Kraus, Founder and President, Sustainable Agriculture Education, February 2012.

36 Correspondence with Cathrine Sneed, Co-founder and Director, The Garden Project, February 2012.

37 Lisa Van Cleef, “The Power of Gardening: Horticulture Therapy at Log Cabin Boys Ranch,” *San Francisco Chronicle*, May 9, 2001, <http://www.sfgate.com/cgi-bin/article.cgi?f=/g/a/2001/05/09/green.DTL&ao=all>; “Log Cabin Ranch,” Urban Sprouts, Accessed January 2012, <http://urbansprouts.wikispaces.com/Log+Cabin+Ranch>; and Trey Bundy, “Grand Jury Issues Glowing Report on SF Program for Young Offenders,” *Bay Citizen*, July 6, 2011, <http://www.baycitizen.org/blogs/pulse-of-the-bay/grand-jury-issues-glowing-report-sf/>

City-Owned Ag Outside the City

In addition to supporting urban farms and gardens, San Francisco public agencies also support agriculture on property they own outside the city. These operations, larger than any urban farm but smaller than most rural farms, fall into a category called peri-urban agriculture.

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Sunol AgPark

Land owned by San Francisco Public Utilities Commission (PUC)

In 2006, the PUC began leasing 18 acres adjacent to the Sunol Water Temple to the nonprofit organization Sustainable Agriculture Education (SAGE). The Sunol AgPark project combines small farming enterprises, natural resource stewardship and public education about the agricultural, natural and cultural resources of the Sunol Valley. SAGE subleases the land to four farmers who each cultivate between 0.5 and 12.5 acres. SAGE also hosts elementary-school field trips, which integrate a standards-based curriculum into the visits, and an on-site service learning program for high school student.³⁵

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The Garden Project

Land owned by San Francisco Sheriff's Department

Started in 1992, the Garden Project operates a 14-acre organic farm at the San Francisco County Jail in San Bruno. Working with approximately 200 ex-offenders and at-risk youth, the project grows and distributes about 25 tons of vegetables per year to 35 community food pantries in the San Francisco neighborhoods in which many of the participants live. The project also donates approximately 150,000 plants and 50 tons of compost annually. The project's Earth Stewards program focuses on teaching landscaping skills, with an emphasis on native plants and open-space restoration. Funding for the projects comes primarily from the Sherriff's Department, PUC, Port Department and Police Department.³⁶

photo.courtesy.of Urban.Sprouts



Log Cabin Ranch

Land owned by San Francisco Juvenile Probation Department

Forty-five miles south of San Francisco in La Honda, the Juvenile Probation Department operates Log Cabin Ranch, a residential detention facility for boys. During the late 1990s and early 2000s, the San Francisco League of Urban Gardeners (SLUG) managed a 4-acre farm and large nursery that taught farming, native plant propagation and habitat restoration to the young men living there. This program ended after SLUG's dissolution in 2004.

Since 2009, the nonprofit Urban Sprouts has run a gardening program that teaches basic gardening, health, nutrition and culinary skills to the young men living at the ranch. The program now cultivates a half-acre.³⁷

Appendix I

Existing and Pending Gardens on Public Land in San Francisco

To view these existing and pending sites on an interactive map, visit <http://g.co/maps/skzhk>

Existing Sites			
Name	Location	Acreage	Owner
Candlestick Point Garden	Carroll Avenue & Fitch Street	0.32	CA State Parks Recreation Area
Progress Park	Indiana Street between 25th and 23rd streets	0.62	Caltrans
Quesada Gardens	3rd Street and Quesada Avenue	0.21	Department of Public Works (DPW)
Ogden Terrace Community Garden	Ogden Avenue and Prentiss Street	0.15	DPW
Connecticut Friendship Gardens	Near 698 Connecticut Street	0.14	DPW
Corwin Street	Corwin and Douglass streets	0.13	DPW
Arlington Garden	Arlington Street between Highland and Richland avenues	0.13	DPW
Arkansas Friendship Community Garden	Arkansas and 22nd streets	0.13	DPW
Dearborn Community Garden	Dearborn and Bird streets	0.13	DPW
Gates Street Wildlife Garden	Gates Street and Powhattan Avenue	0.10	DPW
Hooker Alley	Mason Street between Bush and Pine streets	0.06	DPW
Wolfe Lane	Rutledge and Mullen streets	0.05	DPW
La Playa	La Playa Street between Judah and Kirkham streets	0.05	DPW
Broadway Tunnel East Mini Park	Broadway and Himmelmann Place	0.04	DPW
Bridgeview Garden	Newhall Street and Bridgeview Drive	0.03	DPW
Good Prospect Garden	Cortland and Prospect avenues	0.03	DPW
FARM (Future Action Reclamation Mob)	Hooper Street near 8th Street	0.02	DPW
Los Paltos Garden	Foerster Street and Los Paltos Drive	0.00	DPW
Tenderloin People's Garden	Larkin and McAllister streets	0.08	DPW
Park Street Garden	San Jose Walkway between Park Street and Richland Avenue	0.05	DPW

Name	Location	Acreage	Owner
Fort Mason Community Garden	Near Building 201, Fort Mason	1.13	Golden Gate National Recreation Area (GGNRA)
Fort Scott Community Garden	End of Wisser Court near Wright Loop	0.12	GGNRA
West Washington Community Garden	Compton Road across from Building 1417, Presidio	0.06	GGNRA
Portola Street Community Garden	Portola and Rodriguez streets, next to Building 760, Presidio	0.06	GGNRA
MacArthur Community Garden	MacArthur Avenue near Building 857/859, Presidio	0.05	GGNRA
South Baker Beach Community Garden	Brooks Street, Presidio	0.02	GGNRA
Please Touch Community Garden	165 Grove Street	0.08	Mayor's Office of Housing (MOH)
Southeast Community Facility Greenhouses	1800 Oakdale Avenue	2.92	Public Utilities Commission (PUC)
Garden for the Environment	7th Avenue and Lawton Street	0.50	PUC
White Crane Springs Garden	End of Locksley Avenue near Lawton Street	0.40	PUC
Visitation Valley Greenway	Arleta Avenue between Rutland and Alpha streets	0.23	PUC
Hayes Valley Farm	Laguna Street between Fell and Oak streets	1.79	Real Estate Division and Mayor's Office of Housing
Growing Home Community Garden	250 Octavia Boulevard, between Lily and Oak streets	0.04	Real Estate Division
Alemanya Farm (formerly St. Mary's Urban Youth Farm)	700 Alemany Boulevard near Saint Mary's Park	2.94	Recreation and Parks Department (RPD)
McLaren Park Community Garden	Near Leland Avenue and Hahn Street	0.52	RPD
Brooks Park	Ramsell and Shields streets	0.45	RPD
Potrero del Sol Park and Community Garden	Northeast of Potrero Avenue and Cesar Chavez Street	0.38	RPD
Clipper Terrace Community Garden (a.k.a. Paige Bros. Clipper Garden)	Clipper Street and Grand View Avenue	0.35	RPD
Potrero Hill Community Garden	20th Street and San Bruno Avenue	0.30	RPD
Dog Patch/Miller Memorial Grove (a.k.a. Brewster Street Community Garden)	Brewster and Rutledge streets	0.25	RPD
Howard Langton Community Garden	Howard and Langton streets	0.21	RPD
Adam Rogers Park	Oakdale Avenue and Ingalls Street	0.16	RPD

Name	Location	Acreage	Owner
La Grande Mini Park and Community Garden	Near 263 Dublin Street	0.15	RPD
Crags Court Community Garden	Berkeley Way and Crags Court	0.14	RPD
Corona Heights	Between States Steet and Museum Way, next to States Street Playground	0.08	RPD
Page Street Community Garden	Page Street between Buchanan and Webster streets	0.08	RPD
Michelangelo Playground and Community Garden	Greenwich Street between Leavenworth and Jones streets	0.07	RPD
Noe Beaver	Noe and Beaver streets	0.06	RPD
Bernal Heights	Bernal Heights Boulevard near Gates and Banks streets	0.06	RPD
Victoria Manalo Draves	Cleveland and Sherman streets	0.04	RPD
Page and Laguna Mini Park (a.k.a. Rose/Page Mini Park)	Between Page and Rose streets near Laguna Street	0.04	RPD
Treat Commons at Parque Ninos Unidos	23rd Street and Treat Avenue	0.04	RPD
Lessing and Sears Mini Park and Community Garden	Lessing Street near Liebig Street	0.03	RPD
Alioto Mini Park and Community Garden	20th and Capp streets	0.02	RPD
Kid Power Community Garden and Park	Hoff Street between 16th and 17th streets	0.02	RPD
Golden Gate Park Senior Center	6101 Fulton Street near 37th Avenue	0.02	RPD
Koshland Park and Community Garden	Page and Buchanan streets	0.80	RPD
Crocker Amazon	Geneva Avenue and Moscow Street	0.01	RPD
Mission Creek	300 Channel Street near houseboats	0.22	SF Port Department
Laguna Honda Hospital Therapeutic Farm and Gardens Project	375 Laguna Honda Boulevard	0.13	San Francisco Department of Public Health (SFDPH)
SF General Hospital	1001 Potrero Avenue	0.01	SFDPH
Double Rock Community Garden (a.k.a. Alice Griffith Farm)	Near Griffith Street and Fitzgerald Avenue	1.11	San Francisco Housing Authority (SFHA)
Alemanys Residents Management Corporation Garden	Near Ellsworth Street and Alemany Boulevard	0.11	SFHA
Family Resource Center Garden	85 Turner Terrace	0.01	SFHA
Little Red Hen Garden	Near Amber Drive and Duncan Street	0.10	San Francisco Police Department

Name	Location	Acreage	Owner
Mission Branch Library	300 Bartlett Street	0.00	San Francisco Public Library (SFPL)
Noe Valley/Sally Brunn Branch Library	451 Jersey Street	0.00	SFPL
June Jordan School for Equity	Brazil Avenue near La Grande Avenue	0.38	San Francisco Unified School District (SFUSD)
Sunset Community Garden	37th Avenue and Pacheco Street	0.35	SFUSD
Argonne Community Garden	15th Avenue between Fulton and Cabrillo streets	0.35	SFUSD
Eco SF School Farm	555 Portola Drive	0.12	SFUSD
Aptos Middle School	105 Aptos Avenue	0.00	SFUSD
Treasure Island Job Corps Farm	5th Street and Avenue D	0.85	US Department of Labor
Garden for the Vets	Near Fort Miley 7 Road and Veterans Drive, VA Medical Center	0.00	US Dept. of Veterans Affairs

Pending Sites

Palou Community Garden	Palou Avenue and Phelps Street	0.28	CalTrain (Peninsula Corridor Joint Powers Board)
Corbett Slope	Corbett Avenue between Mars and Clayton streets	0.17	DPW
Bayshore and Salinas	Bayshore Boulevard and Salinas Avenue	0.11	DPW
Bayshore and Key Avenue	Bayshore Boulevard and Key Avenue	0.17	DPW
Southeast Treatment Plant	Phelps Street and Evans Avenue	1.51	PUC
College Hill Reservoir	360 Elsie Street	0.13	PUC
Golden Gate Park / HANC Recycling Center	780 Frederick Street	0.42	RPD
Geneva Avenue Strip	Geneva Avenue and Delano Street	0.25	RPD
Texas Street Garden	Near 25th and Texas streets	0.06	SFHA

Source: Inventory of urban agriculture sites based on data from: Recreation and Parks Department, Community Gardens Program, <http://sfrecpark.org/CommunityGardensMap.aspx>; "San Francisco Community Gardens," San Francisco Garden Resource Organization, accessed November 2011, <http://www.sfgro.org/sfgardens.php>; Correspondence with Marvin Yee, Recreation and Parks Department; Jean Koch, Presidio Trust; and Julia Brashares, San Francisco Parks Alliance; and additional SPUR research.

Appendix II

Public Land Identified as Potential Sites for Urban Agriculture

To view these potential sites on an interactive map, visit <http://g.co/maps/skzhk>

Name	Location	Owner
Observation Area (a.k.a. Portola Open Space)	191 Portola Drive	Department of Public Works (DPW)
Bosworth Street Remnant	600 Bosworth Street	DPW
Bosworth/Burnside	Bosworth Street and Burnside Avenue	Public Utilities Commission/ Department of Public Works
Old Burnett Avenue	Palo Alto and Glenbrook avenues	DPW
Broadway Tunnel Remainder	Broadway between Polk and Larkin streets	DPW
Undedicated Street	Augusta Street and Charter Oak Avenue	DPW
Undedicated Street #2	Carl and Arguello streets (SE corner)	DPW
Dwight Street Parcel	859 Dwight Street	DPW
Forest Hill Station	362 Laguna Honda Boulevard	Municipal Transportation Agency
99 San Diego and 96 Santa Cruz	Near 99 San Diego Avenue and 96 Santa Cruz Avenue	Public Utilities Commission (PUC)
Central Pump Station/Merced Manor	645 Sloat Boulevard	PUC
Summit Reservoir	Palo Alto Avenue and Marview Way	PUC
Laguna Honda Reservoir	Clarendon Avenue near Laguna Honda Boulevard	PUC
Sutro Reservoir	Clarendon Ave and Olympia Way	PUC
Sunset Reservoir	28th Avenue and Ortega Street	PUC
Lake Merced Tract	Lake Merced and Skyline boulevards	PUC
Shafter and Fitch	Shafter Avenue and Fitch Street	PUC/DPW
Franklin Square	17th and Bryant streets	Recreation and Parks Department (RPD)
Jefferson Square	Eddy and Gough streets	RPD
Lafayette Park	Laguna and Sacramento streets	RPD
Hyde-Vallejo Mini Park	Near 1904 Hyde Street	RPD
Coso Precita Mini Park	Coso Avenue and Coleridge Street	RPD

Name	Location	Owner
Fillmore-Turk Mini Park	Fillmore and Turk streets (SE Corner)	RPD
Head and Brotherhood Mini Park	Near 318 Head Street	RPD
Golden Gate and Steiner Mini Park	Golden Gate Avenue and Steiner Street	RPD
29th and Diamond Open Space Area	29th and Diamond streets	RPD
Angelo Rossi Playground - Edwards Street Annex	Edward Street and Arguello Boulevard	RPD
Balboa Park	San Jose Avenue and Havelock Street	RPD
Broadway Tunnel West Mini Park	Broadway and Cyrus Place	RPD
Brotherhood-Chester Mini Park	Near 84 Payson Street	RPD
Buchanan Street Mall	Buchanan Street between Grove and Turk streets	RPD
Bush-Broderick Mini Park	Bush Street between Baker and Broderick streets	RPD
Coleridge Mini Park	Coleridge Street between Fair and Virginia avenues	RPD
McCoppin Square	Santiago Street and 24th Avenue	RPD
Park Side Square	28th Avenue and Vicente Street	RPD
Prentiss Mini Park	Prentiss Street and Eugenie Avenue	RPD
Randolph-Bright Mini Park	Randolph and Bright streets	RPD
Selby-Palou Mini Park	Selby Street and Palou Avenue	RPD
West Sunset Playground	Qunitara Street and 39th Avenue	RPD
Fire Station 10	Masonic Avenue between Euclid and Presidio avenues	San Francisco Fire Department (SFFD)
Twin Peaks Reservoir	Near 150 Palo Alto Avenue	SFFD
Presidio Branch Library	3150 Sacramento Street	San Francisco Public Library (SFPL)
Parkside Branch Library	1200 Taraval Street	SFPL
Ingleside Branch Library	1298 Ocean Avenue	SFPL
Western Addition Branch Library	1550 Scott Street	SFPL
Golden Gate Valley Branch Library	1801 Green Street	SFPL
Portola Branch Library	380 Bacon Street	SFPL
Anza Branch Library	550 37th Avenue	SFPL
Eureka Valley Branch Library	1 Jose Sarria Court	SFPL

Source: Paula Jones, *Summary Report of the Executive Directive on Healthy and Sustainable Food 09-03*, (San Francisco Department of Public Health, December 2010), Appendix F: 46-51, <http://www.sfgov3.org/Modules/ShowDocument.aspx?documentid=503>; "Agenda Item 15: Authorize the General Manager to Establish an Urban Agriculture Pilot Program on SFPUC Lands in San Francisco and Conduct a Feasibility Assessment on Proposed Pilot Sites," October 11, 2011, <https://infrastructure.sfwater.org/fds.aspx?lib=SFPUC&doc=720223&data=277285855>; Correspondence with Marvin Yee, Recreation and Parks Department.



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