Adopted July 3, 2012

Alameda Urban Farm and Garden Plan

PREPARED FOR THE CITY OF ALAMEDA

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This document was prepared by:

1625 Shattuck Avenue, Suite 300
Berkeley, California 94709
Tel: 510 848 3815
Fax: 510 848 4315

THE PLANNING CENTER DC&E

ChangeLab Solutions
Law & policy innovation for the common good.

2201 Broadway, Suite 502
Oakland, CA 94612
Tel: 510-302-3380

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Chapter 1: Introduction

ALAMEDA URBAN FARM AND GARDEN PLAN

Imagine a city where fresh food is part of the community landscape. Tucked into back- and front-yard gardens, growing in parks, schoolyards, and along trails and streets: urban agriculture brings local food and greening into the heart of the city.

This Urban Farm and Garden Plan lays out the great opportunities in the City of Alameda to promote urban agriculture through visionary policies and programs. By promoting urban agriculture in its many forms, Alameda can achieve community benefits in health, environmental sustainability, and economic vitality.

Benefits of Urban Agriculture:[1]

Healthier people: Increasing the amount of locally grown, minimally processed food promotes community health by expanding residents' access to fresh, nutritious food and decreasing hunger. Community gardeners eat significantly more fruits and vegetables than non-gardeners. Gardeners also eat a more balanced diet, consuming fewer sweets and sugar-sweetened beverages and a wider variety of vegetables.[2] Urban agriculture also increases food security by ensuring a local food source in the event of natural or man-made disasters that interrupt transportation networks.

Sustainable cities: Urban agriculture promotes environmental sustainability by reducing greenhouse gas emissions caused by transporting food over long distances. It provides green space in urban areas and can provide ecological and environmental benefits, such as preventing storm water runoff. Furthermore, adding organic content, such as compost, leaf mulch, and soil amendments, to support plant growth improves both the quality of soil and its water capacity, so that less water is needed to support growth.

Vital, engaged communities: Local food promotion may also benefit local economies by providing jobs for local residents. Urban agriculture can bolster property values,[3] promote community engagement,[4] and can be part of an effective crime-prevention strategy.[5]

[1] Public Health Law & Policy. *Seeding the City: Land use policies to promote urban agriculture*. 2011. Available at: http://www.phlpnet.org/sites/phlpnet.org/files/Urban_Ag_SeedingTheCity_FINAL_20111021.pdf

[2] Lee SH. "Community gardening benefits as perceived among American-born and immigrant gardeners in San Jose, California." 2002. Available at: http://nature.berkeley.edu/classes/es196/projects/2002final/Lee.S.pdf

[3] Been V, Voicu I. "The Effect of Community Gardens on Neighboring Property Values." *New York University School of Law and Economics Working Paper* (2006). Available at: www.community-wealth.org/_pdfs/articles-publications/urban-ag/paper-been-voicu.pdf

[4] Teig, E., et al., Collective efficacy in Denver, Colorado: Strengthening neighborhoods and health through community gardens. *Health & Place* (2009), doi:10.1016/j.healthplace.2009.06.003

[5] Handlin L, Tranel M. "Planting Seeds; Growing Community." University of Missouri–St. Louis Public Policy Research Center. Available at: www.gatewaygreening.org/assets/pdf/WhitmireStudy_FullReport.pdf

Key Terms

Throughout this report, we use a number of related terms to describe urban agriculture activities.

- **Urban agriculture** is used as an "umbrella" term to describe a range of food growing practices, from backyard gardens to urban farms.
- **Community gardens** generally describe smaller-scale urban agriculture (often serving a neighborhood) where individuals and families grow food primarily for personal consumption or donation.
- **School gardens** vary in design and use, but are generally learning-focused sites on school property used primarily by students, teachers, and others affiliated with that particular school.
- **Urban farms** are larger-scale, more intensive urban agriculture sites where food may be grown by an organization or private enterprise, and often include entrepreneurial opportunities such as growing food for-sale.

While there are overlaps between each of these categories of activities, this framework is helpful for understanding both the *purpose* for and the *needs* (in terms of land, people, and other resources) of each type of activity.

Plan Overview:

The Alameda Urban Farm & Garden Plan includes the following sections:

- **Existing Conditions:** A summary of the findings about the current state of urban agriculture in the City, opportunities and barriers, an opportunity site analysis, and summary of the community process that informed this Plan.
- **Recommendations for Policy & Programs:** Including updates to the general plan, zoning code, streamlining processes for allowing community groups to access public land for urban agriculture purposes, and other ordinances and programs.
- **Guidelines:** Best practices for management models, site location and design for community gardens, urban farms, school gardens, and edible streets.
- **Funding and Financing Models and Resources:** An overview of funding and financing opportunities for expanding urban agriculture, including an appendix of federal, State, and philanthropic funding sources.
- **Urban Agriculture for Alameda Belt Line Park:** Conceptual site designs, plan elements, and costs and action plan for including urban agriculture in the development of Alameda's proposed Belt Line Park.
- **Urban Agriculture for Alameda Point's Linear Park:** Conceptual site designs, plan elements, and costs and action plan for including urban agriculture into a possible linear park.

Chapter 2: Existing Conditions

Introduction

This chapter contains the existing conditions report prepared for the Alameda Urban, but has been revised to reflect community and staff feedback received on the Report.

This existing conditions report provides information about the current status of urban gardens in the City of Alameda, as well as the barriers and opportunities related to supporting and expanding urban agriculture. In particular, the key elements explored here are resident involvement and interest in community gardening and urban agriculture, as well as organizational capacity and physical resources, such as available land and opportunities for partnership. As a component of the Urban Greening Plan for Alameda, this report provides the City with key information about how to expand and protect urban agriculture and support the health, sustainability, and vitality of its residents and community.

The Alameda Urban Farm and Garden Plan Existing Conditions Report includes information gleaned from a variety of sources:

1) Local policy review (including zoning, general plan, and other relevant documents);
2) Key stakeholder interviews
3) Surveys of existing community and school gardens;
4) Resident surveys (conducted as part of the entire Urban Greening planning effort);
5) Community Workshops
6) Demographic information about Alameda's residents;
7) Nutrition and food access-related health data;
8) An analysis of potential opportunity sites for urban farms and gardens; and
9) Site visits to potential sites.

Report Summary

A brief summary of the issues and opportunities discussed in each section is presented below. Additional information and analysis can be found in the corresponding sections of this report.

Local Policy Review

- There are few mentions of community gardens in existing City plans, although the General Plan supports exploring new opportunities for gardens (however, this policy has not been actively implemented to-date).
- Existing zoning code presents some barriers to urban agriculture. For example, community gardens are not a permitted use in the Open Space District, which encompasses all public parks.
- Although the primary purpose of this report was to understand City barriers and opportunities for urban agriculture, this report also considers school gardens as a potential resource for the community overall. The school district Master Plan does not mention school gardens, though they exist at more than half of the City's schools. However, the Green Schools Resolution and the School Wellness Policy acknowledge the value of gardens and fresh, local produce.

Key Stakeholder Interviews

- A number of organizations and agencies (both public and private) provide support for and are involved in activities related to urban farms and community gardens.
- Stakeholders from the public and non-profit sector agreed that there is great interest among Alameda residents for more urban agriculture activities.
- Stakeholders also identified funding, programming, and land access barriers that currently present problems for the expansion of community gardens. A better alignment of these resources and partnerships could improve the long-term sustainability of urban agriculture in the city.

Community and School Garden Surveys

- There are currently two community gardens in Alameda: Bay-Eagle and Alameda Point Collaborative. Both are over-subscribed (there is a five-year waitlist for a garden plot at Bay-Eagle), and both focus on serving specific populations.
- The Bay-Eagle Community Garden faces garden management challenges that could affect its long-term sustainability, and is located on a site that the Housing Authority may want to develop as affordable housing in the future
- Fifteen of 27 elementary schools (both public and private) surveyed in Alameda have school gardens; this is a significant existing resource. However, lack of funding and personnel resources prevents their full utilization and expansion.
- The mismatch of peak growing season (summer) and the school calendar (fall, winter, spring) is an additional barrier to maintaining school gardens.

Resident Surveys

- Findings from a survey of households in Alameda show strong interest in growing food, with nearly half of households (43 percent) already doing some food gardening at home.[1]
- Additionally, there is significant support for expanding opportunities to grow food in the city through the creation of new community gardens in public parks, with 74 percent of residents indicating they were very or moderately interested.

Demographic Information

- The City of Alameda has an increasingly diverse population with growing numbers of Asian and Latino residents. Culturally-appropriate outreach and programming are important for incorporating the rich agricultural knowledge that immigrant communities can bring to a city.
- People of color tend to live in higher-density neighborhoods and in the western parts of Alameda. These are also neighborhoods where there are opportunities for developing new urban agriculture sites.
- Alameda has significant youth (20.7 percent of residents are under 18) and aging (13.5 percent of residents are 65 or older) populations. Consideration should be given to creating locations accessible to these target participants.

Nutrition-Related Health Data

- The City of Alameda generally has better health outcomes than the County, but there are existing health disparities within the city that should be noted. The western portion of the city has worse rates of coronary heart disease and diabetes, both diet-related chronic health conditions.
- SNAP (Supplemental Nutritional Assistance Program, or food stamps) and WIC benefit receipt rates indicate that the City of Alameda also has a lower rate of food insecurity than the county. Again, however, disparities within the city should be considered when allocating urban agriculture resources.

Urban Farm & Garden Opportunity Sites

- The City of Alameda is situated on an island, a geography that lends to its tight-knit community and also imposes restrictions – there is a limited supply of land, and most is built out in the form of single-family homes, retail, amenities and other services. Many single-family households have built secondary units in backyards or additions with the result being that although some people have access to yard space that could be used for edible gardens, there are also many people living in two-family units without access to land. In addition, the island's limited available open space creates a challenge to building community gardens and urban farms that could serve residents with limited home gardening options.
- Four high potential sites and four medium potential sites that could be suitable for new community gardens or urban farms, and eight low potential sites that could potentially be suitable for community gardens if some barriers are overcome, were identified.
- In addition to the identified sites, schools, parks, and rooftops, provide additional opportunities for urban agriculture in Alameda.

Local Policy Review

Supportive local policies, such as General Plan and Zoning ordinances, can promote the development of urban farms and community gardens and ensure their long-term viability. By adopting policies that address urban agriculture, the City can also provide guidance or operating standards that ensure that urban agriculture activities will be carried out in such a way that it protects the public's health, reducing conflicts with neighboring uses, and minimizing nuisances (such as limiting hours of operation for sales from urban farms, or prohibiting roosters while allowing chickens). School district policies, while not promulgated by City government, can also promote maximizing school garden resources, and school-city partnerships can expand access to gardens for broader community use, through mechanisms such as joint use agreements.

Opportunities

- Supportive General Plan language:
  - 1991 Plan supports exploring community garden development[2]
  - 2006 Plan amendment supports maintaining Bay-Eagle community garden.[3]
- School district policies support healthy eating (especially fresh, seasonal food).[4]

Barriers

- Zoning ordinance does not specifically mention or promote urban agriculture.
- Specifically, urban farms and gardens are not permitted uses in the Open Space District, which encompasses all public parks.

[1] Alameda Park System Survey, 2011.

[2] Alameda General Plan, Section 5.2.b, 1991.

[3] Alameda General Plan Amendment, Section P-V.2, 2006.

[4] Alameda Unified School District Wellness Policy, 2007, available at: http://www.alameda.k12.ca.us/images/stories/pdfs/wellnesspolicy_foodservices.pdf

- Alameda Unified School District Master Plan (2010) does not acknowledge school gardens as tools for learning about healthy eating.

Existing Land Use Policies

The City of Alameda does not explicitly mention community gardens or urban farms in its Zoning ordinance. However, "home gardening, agriculture and horticulture" are permitted uses in all residential zones, though "retail sales of nursery products or the raising of rabbits, dogs, fowl or other animals for commercial purposes" are not allowed.[5] Gardening and agricultural uses are not permitted uses in the O (Open Space) District, posing a barrier to legally establishing community gardens in public parks.

The 1991 General Plan Open Space and Conservation Element states that it will, "explore interest in public and privately owned sites available for community gardens"[6]; however, only one community garden (established and operated by the Alameda Point Collaborative) was developed since 1991. The 1991 General Plan has no reference to urban farms and community gardens, but a 2006 General Plan Amendment specifically states that it will maintain the Bay-Eagle community garden which was established by the Alameda Housing Authority in 1982.[7]

Existing School Policies

While school districts and their activities are separate from City government, we included a review of school policies here since Alameda's existing assets include a number of school gardens (we found that 15 out of 27 schools surveyed, including public and private schools, have gardens). School gardens have the potential to serve as shared community resources through joint use agreements (where school property is opened for broader community use after school or during the summer). Through joint use agreements, schools and cities can mutually support each others' missions by sharing costs or resources and ensuring that public resources are used to the greatest community benefit. Schools often build edible gardens for educational and health purposes, and involve not only students, but also the school community, families and other community members.

Despite the significant number of school gardens, the Alameda Unified School District's 2010 Master Plan does not include any policies on school gardens or acknowledge their potential importance in curriculum educating students about healthy eating habits. However, the District-wide School Wellness Policy does acknowledge the importance of fresh, healthy food in general, stating: "The district food service program is encouraged to feature fresh, seasonal and minimally processed foods from local and organic sources to the greatest extent possible."[8] Additionally, in the 2009 Alameda Green Schools Resolution, the school district promotes school gardens through the following language: "Be it further resolved, that the district will encourage the development of school gardens and green schoolyards as hands-on learning tools that promote good nutrition, stewardship the land, and teach to standards." The launch of the Go Green Initiative via this resolution has provided district level support to schools and teachers participating in a range of green projects and programs including school gardens.

[5] Alameda Zoning Ordinance, Chapter XXX, Article I, Section 30-4.1 to 30-4.6.

[6] Alameda General Plan, Section 5.2.b, 1991.

[7] Alameda General Plan Amendment, Section P-V.2, 2006.

[8] Alameda Unified School District Wellness Policy, 2007, available at: http://www.alameda.k12.ca.us/images/stories/pdfs/wellnesspolicy_foodservices.pdf

Stakeholder Interviews

A number of organizations and agencies (both public and private) provide support for and are involved in activities related to urban farms and gardens. We identified and conducted phone interviews with eight key stakeholders, including:

- Alameda Point Collaborative
- Alameda Food Bank
- City of Alameda Housing Authority
- Meals on Wheels in the City of Alameda
- Alameda County Department of Public Health
- Alameda County Cooperative Extension
- Alameda Backyard Growers
- Project LEAF

The goal of the interviews was to ask stakeholders to identify and share opportunities and challenges for expanding urban agriculture in the city. Opportunities and barriers to growing food in Alameda that were identified by stakeholders include:

Opportunities

- ***Demonstrated interest in more garden capacity***
  - Food Bank recipients: some have farming skills and have expressed interest in putting them to use
  - Five-year waiting list for Bay-Eagle Community Garden
  - Establishment of Alameda Backyard Growers, a new resident group dedicated to promoting urban agriculture in Alameda
- ***Existing assets (both land and organizational/ institutional capacity)***
  - Alameda Point Collaborative's willingness to share their staff's years of experience growing food crops in an urban setting

- Alameda Master Gardeners who are trained lend assistance to any home or community gardeners within Alameda County
- The City's Parks and Recreation Department offers gardening classes for seniors (age 50+)
- Alameda County Department of Public Health has experience supporting another city in Alameda County (Oakland) with formulation of garden policies
- Potential large-scale urban farm or community garden sites (Belt Line and Alameda Point)
- The Community Development Block Grant program administered by the Alameda Housing Authority funds the Food Bank, APC's farm and nursery programs, and potentially a large community garden at Belt Line Park.

- ***Interest in receiving and distributing more fresh produce***
  - Food Bank could accept hundreds of pounds per day; Backyard Gardeners already donates to the Food Bank
  - Mastic Senior Center is also interested in distributing fresh produce

Barriers

- ***Lack of existing available space***
  - Not enough garden plots to satisfy demand
  - Distribution of available space versus demand: there is more space on the west end of the city and more demand on the east end of the city
- ***Logistics of operating a community garden***
  - Bay-Eagle garden coordinator expressed need for a professional garden coordinator to oversee disputes between members and ensure general upkeep
- ***Stretched resources***
  - Funding: current plot fees at Bay-Eagle garden do not cover the costs of running the garden (water costs, in particular, are significant)
  - Master Gardeners currently answer all requests but may become over-extended if gardening picks up widely in Alameda
- ***Sustainability***
  - Gardens may be of great interest now, but there is concern about abandonment five to ten years down the road
  - Use of public land for Community Gardens may conflict with other uses, such as affordable housing

Stakeholder Profiles

Descriptions of the organizations interviewed, their work in Alameda related to urban agriculture, and their feedback are provided below.

Alameda Point Collaborative (APC) is a non-profit organization that provides a variety of services, including affordable housing, job training, and health services to formerly homeless residents. The APC operates a community garden that provides free plots to APC residents to grow their own food. All community garden plots are currently being used. APC also has an urban farm, the Growing Youth Project Farm, that grows organic produce and raises bees and chickens. The urban farm products are used in a variety of ways: food is served at community events (weekly breakfasts, after school activities and workshops) where it has replaced sodas and junk food that were previously served; food is sold to residents at a highly subsidized rate; food is sold to other community members at a seasonal farm stand at market price; and food is sold to local restaurants. In addition, APC operates Ploughshares Nursery. The nursery sells garden equipment and holds skills training courses and gardening information sessions that are open to the public. In addition to providing organic, fresh food products to the APC community, the urban farm and nursery are used for job training; employees are mostly APC residents. The APC urban farm and community garden model has been successful in helping formerly homeless residents gain confidence from the sense of success associated with gardening, which has been therapeutic for residents.

The APC sees two significant potential opportunities for future gardening in Alameda: community gardens for those living in secondary units ("granny units") or apartments with limited yard space, and a network of backyard gardeners for those with more space. The APC notes that there is a great interest in gardening across the City, and the east side of the island needs more community space to grow food. The APC noted that there is space on the west end of the island that could be used to serve Alameda residents that do not have access to community gardens in other areas of the city. With experienced staff and nursery, the APC would like to serve as a resource for new community gardens and backyard gardeners. The APC also would like to see a strong network for gleaning, gathering and dispersing food throughout the city. This would require the city designating land for community gardens, and updating the municipal code to specifically allow people to grow edible food in their yards in order to promote edible home gardens. The APC notes that grant money is often given for façade improvements, and could similarly be given for edible landscape improvements.

Alameda Food Bank has been involved in urban agriculture in the City of Alameda since the food bank helped residents establish the Bay-Eagle community garden in 1982 by acting as the sponsoring agency. Local community members have since maintained a plot used to grow produce that is donated to the Food Bank. Additional fresh produce donations to distribute to Alameda households come from daily donations by Safeway supermarket and Trader Joe's grocery store, and recently, from the Alameda Backyard Growers. (See

below for more information on the Alameda Backyard Growers) The Food Bank also has a budget that is used to purchase additional produce from wholesale vendors in Jack London Square. The Food Bank would be interested in purchasing produce at a subsidized price from an urban farm in Alameda, if the produce was requested by the Food Bank recipients and not attainable through donations. The Food Bank can absorb a couple hundred pounds of produce daily; even large produce donations would be accepted.

The Food Bank noted that many community members ask about developing a community garden in the lot next to the Food Bank and adjacent vacant Belt Line property, which could help address the lack of land available to many recipients who live in in-law units, apartments and group homes without access to garden space. Many recipients already have farming skills and are very interested in starting their own gardens as a source of food security for families and households. There is definitely more interest in obtaining a community garden plot than there is supply at the moment, but they are also concerned that in five to ten years community garden land may become neglected. The Food Bank was interested in the role of the Urban Farm and Garden Plan in raising awareness about food security, and in engaging more community members to build a stronger community of donors, volunteers and recipients.

Alameda Housing Authority (AHA) is currently responsible for managing the Bay-Eagle Community Garden, which includes managing the volunteers who are responsible for maintaining membership lists and other community garden tasks, resolving conflicts between volunteers, maintaining the fence around the community garden, and paying for water and insurance. AHA owns the land where the community garden is located, which is adjacent to a housing facility also owned by the AHA. AHA tenants have priority for available garden plots, although a five-year long waitlist is a significant barrier to accessing this site. AHA noted that the current garden coordination situation is not ideal: in addition to mediating disputes among volunteers, AHA spends significantly more annually than it receives from members. Total plot fees paid by gardeners amount to $600 per year; however the water bill alone is approximately $1700 per year. AHA incurs other costs, such as liability insurance, which is a few hundred dollars (not a significant amount relative to the additional properties that the AHA insures) as well as a stipend of $2000 per year to the gardeners, who decide which garden projects are the most important to spend the funds on.

In addition to the Bay-Eagle site, AHA is responsible for managing a federal Community Development Block Grant (CDBG) program that provides support and funding to Plowshares Nursery and the Growing Youth Project through the Alameda Point Collaborative. The Alameda Food Bank is also a recipient of AHA's CDBG funding. AHA supports the relocation of the Bay-Eagle Community Garden to the proposed Belt Line Park parcel adjacent to the Food Bank as a preferred long-term site. The Housing Authority sees moving Bay-Eagle to a larger site within the neighborhood as a way to accommodate the 5-year waitlist, to provide a fresh start for garden management and structure to address ongoing gardener conflicts, and to make the current site available for future affordable housing development.

The AHA expressed interest in continuing to support community gardening through the CDBG program as well as through incorporating community and rooftop gardens in new housing developments. AHA is interested in locating community gardens or farms on land that is zoned for open space or that is not suitable for housing.

Meals on Wheels would like to serve recipients fresh produce but does not have the ability to store food or use a kitchen to prepare food from fresh ingredients. Currently, the program contracts with Bayview Nursing and Rehabilitation Center to obtain prepared meals and supplements those meals with fresh fruit purchased from Trader Joe's or Dan's Produce. The program has a budget of $200 per month to spend on produce for 150 recipients. Meals on Wheels would be happy to accept fresh, locally grown produce, but due to their logistical limitations, only ready-to-eat produce in limited quantities could be accepted. Most of their recipients do not have the ability to prepare produce that requires cooking in their own homes. Finally, the Meals on Wheels program recommended distributing produce not only to Meals on Wheels, but also to Mastic Senior Center and the Alameda Food Bank.

Alameda County Department of Public Health (ACDPH) has not been involved with urban agriculture in the City of Alameda. ACDPH does, however, assist local schools with finding and writing school garden grants, and helped the Oakland Unified School District develop school garden policies, and could be a valuable resource for school gardens in the City of Alameda. ACDPH recommended that urban farms and community gardens in the City of Alameda be connected to schools, ensure equal access, and utilize sustainable farming practices. ACDPH identified the most effective strategies for increasing urban farm and garden opportunities in the City of Alameda as: identifying vacant land, providing permission – zoning and/or permitting -- for use, serving as a liaison to connect those who want land to those who have it, establishing a system to deal with water expenses, and ensuring that land is uncontaminated, using organic remediation techniques if necessary.

Alameda County Cooperative Extension (ACCE) is responsible for coordinating Master Gardeners throughout the County. The Master Gardeners are trained volunteers who generally provide consultations and technical assistance to organizations and community members throughout the County, including private consults in backyards, at gardening clubs, senior housing developments, in libraries, and at schools. ACCE encourages residents to grow their own food. There are five Master Gardeners who live in the City of Alameda and are actively involved in gardening in Alameda. The Master Gardeners throughout the County are currently able to meet all requests for assistance. However, with

a larger budget, they would be able to train new Master Gardeners ever year rather than every other year, and expand training locations throughout the County in order to get participation from all areas of the County. With a larger base of volunteers, the Master Gardeners would be more able to assist communities with their urban agriculture needs. Recommendations included locating gardens in transit-accessible areas with parking near the site, and ensuring that fees charges are appropriate in relation to the actual costs of water and any other expenses.

Alameda Backyard Growers is a new, 150-member volunteer-based community group dedicated to "growing community one veggie at a time." The founders developed the organization in order to bring new and seasoned backyard gardeners together to form a community of growers, and to give back to the community (gardeners donate extra produce to the Alameda Food Bank). This year the group will be launching their "grow an extra row" program, which will distribute free seeds to members who have pledged to grow extra food for the Food Bank, and will evaluate the impact of the program. While increasing donations is the main priority of the group, they would also like to help growers sell produce to local restaurants, share produce among community members, and share seeds.

The Backyard Growers note that space is the largest barrier for gardening in the city – there are many group members without space of their own to garden, and in particular many seniors who want access to community gardens. The Backyard Growers suggest that the City increase transparency in the planning process and inform the public of when they plan to develop more community gardens. The group also notes that there is a large demand for gardening education. They host monthly meetings in the founder's home, but a more formal educational environment where people could learn gardening skills is desired.

Project LEAF (Local Edible Alameda Farm) is a community organization that has been working to establish a community garden and new green space on the former Island High School site at Everett Street and Eagle Avenue. They have established themselves as a 501(c)(3) non-profit organization for this purpose. The high school closed in 2006, and has remained vacant since then. The School District owns the property, but intends to sell it as advised by the Surplus Property Committee. The Housing Authority is interested in purchasing the site for the construction of affordable housing.

Community and School Garden Surveys

Surveys of the city's community and school gardens revealed additional opportunities and barriers for urban agriculture development. Community gardens consist of land used for the cultivation of fruits, vegetables, plants, flowers or herbs with the primary purpose of growing food for personal consumption and/or donation. School gardens are located on school or jointly-owned property and are managed by someone associated with the school to the benefit of students.

Community Garden Survey Findings

Surveys of managers at both community gardens in Alameda identified opportunities and barriers that exist for further food growing in the City:

Opportunities

- 44 existing community garden plots in Alameda
- Two gardens (Bay-Eagle and Alameda Point Collaborative) with strong histories and great community interest

Barriers

- ***Space: All plots are currently being used***
  - APC's garden is reserved for growers who live in their housing
  - Priority is given to Housing Authority residents at the AHA Bay-Eagle garden
- ***Funding***
  - Membership fees at Bay-Eagle do not cover costs of water, materials and maintenance

Garden capacity and gardener demographics: The Bay-Eagle Community Garden has 28 plots and the APC garden has 16. All plots are occupied in both gardens, and at Bay-Eagle, community members can wait up to five years for a plot. AHA residents have first priority for a plot at Bay-Eagle, then other low-income residents, followed by other interested community members. The APC community garden is for residents of APC housing and includes a diverse community of some formerly homeless and some professionals ranging from 20 to 60 years old.

Costs and space: Both community gardens recognize two barriers to developing more community gardens: 1) funding, and 2) space. As AHA pointed out, membership fees of $25 for 100 square feet to $45 for 200 square feet do not cover maintenance costs at the Bay-Eagle community garden; the APC does not charge garden membership fees. The APC is on the west end of the city where the majority of the city's open space still exists. The APC suggested expanding community gardens on the west end for residents living on the east end since demand is high and space limited there. At the Bay-Eagle community garden the gardeners have responded to the high demand by splitting the 200 square feet plots into two 100 square feet plots whenever the 200 square feet plots become available.

Use of produce: Produce at both community gardens is most often consumed by gardeners and their families, though some at the Bay-Eagle community garden trade produce, or donate to the Alameda Food Bank. According to a garden member, Bay-Eagle garden rules prohibit the sale of produce.

Public safety: While both gardens have experienced some damage or stolen produce from youth in the community, neither have had serious problems.

Events and programming: The Bay-Eagle community garden holds some garden events including educational gardening courses; however, neither these events, nor is the garden in general open to the public. At the APC, the community garden is open to the public as there is no fence around it, and although the community garden does not hold gardening education classes, the affiliated Ploughshares Nursery holds free classes that are open to the public. Both community gardens would like assistance in determining who to collaborate with in order to expand community garden services, and the Bay-Eagle community garden is interested in increasing collaboration with Master Gardeners, the City of Alameda, garden suppliers and non-profit organizations that can provide assistance with garden programming (such as the APC).

School Garden Survey Findings

Ten of the 27 schools surveyed in Alameda have food-producing gardens with varying levels of integration into school activities and curriculum. Gardens are funded at widely differing levels, from less than $500 annually at most schools, to a $25,000 grant at one. Gardens produce a small amount of food – 10 pounds per week at most – which is consumed by student gardeners. Conversations with teachers and parents responsible for eight of the ten food-producing school gardens in Alameda revealed a number of opportunities and barriers:

Opportunities

- Large number of existing gardens: 10 of 27 schools in Alameda have food-growing gardens
- Strong student interest

Barriers

- Peak growing season is during summer when there are fewer people (students/parents/teachers) around to tend the garden
- Lack of technical knowledge and assistance
- Funding: nearly all schools surveyed had budgets of $500 or less per year, augmented only by parent and teacher support
- Time
  - Parental volunteers are not always available
  - Teachers cannot take too much time out of school day

The 27 public and private schools in Alameda include one adult school and a school that provides pre-kindergarten through 5th grade education. Each school's main office was contacted by phone in order to identify the schools with food-producing gardens. Of the 27 schools contacted, 10 have school gardens that are used to grow food, and five either have gardens that do not grow food, or used to have edible gardens but no longer do. Two schools were not reachable and did not respond to the question of whether or not they have gardens. When the main office indicated that the school had a food-producing garden, we either gave our contact information and online survey link or to be passed along to the teacher or parent responsible for the garden or, when possible, contacted the garden coordinator directly to ask them to complete the online survey.

Of the 10 schools with food-producing gardens, nine schools responded to our survey (90 percent). In addition, two of the five schools that previously had gardens or are planning to build gardens responded to the survey. Two respondents identified their school as a Title 1 school, six stated that their school is not and one respondent was uncertain. Title 1 schools are those that have a large percentage of their population that come from low-income households and are eligible for free or reduced-price food service.

Land tenure: Almost all school gardens are situated on school-owned land, although one school garden is located on land shared by the school and the city through a joint-use agreement.

Food grown: All schools grow vegetables, five grow fruit, seven grow herbs and one raises chickens for eggs (Lincoln Middle School). One elementary school selects and grows culturally appropriate produce that appeals to the diverse student body, and another school focuses on plants that are native to the area.

The garden yields are generally small (less than 10 pounds per week during peak seasons), and some respondents note that since peak season is over the summer and there are no garden activities over the summer, it is challenging to water plants, resulting in lower yields.

Funding: Annual garden funding also differs from school to school. Two schools received grants of $15,000 and $25,000, which fund part time garden coordinators and supplies. All other schools receive less than $500 annually from varying sources: seven noted that funding comes from parent and Parent Teacher Association donations, three stated that teachers contribute to the garden, and one school (Lincoln Middle School) has a dedicated funding from the school budget through School Site Committee Funds.

Coordination and management: Of the two elementary schools with large grants to fund garden coordinators, one provides garden education to all students, and the other provides garden education to all kindergarten and first grade students, and some second and third grade students. In the other elementary schools, garden participation is based on teacher interest. In middle schools, garden participation is based on enrollment in the garden elective. Survey respondents stated that barriers to garden utilization included lack of funding, time, teacher interest, parent interest, and available people to lead activities. No schools cited "lack of student interest" as a barrier.

Other programming: Students reap the benefits of their work: children at all schools get to eat the produce grown in the garden. None of the produce is integrated into school lunch programs, and none of the produce is donated. One school is planning to set up seasonal crop rotations in order for students to be able to sell produce at a farm stand in the parking lot after school. Schools also note that they would like to expand the existing program to more or all classrooms, but, again, teachers' lack of time and the lack of funding is an ongoing challenge to expanding garden activities. Many schools, including the two that are in process of developing gardens, would like assistance connecting to resources such as garden suppliers, the City of Alameda, non-profit organizations that can provide assistance with garden programming, and Master Gardeners to assist with growing produce in the garden. Additionally, many schools have other problems that they would like assistance with, but don't necessarily know who to ask for assistance. There is a clear need for technical assistance and in-depth conversations between garden coordinators, experts and school stakeholders in order to expand existing gardens, and develop new gardens in Alameda public and private schools.

Resident Surveys

As a component of the development of the Alameda Urban Greening Plan (of which the Urban Farm and Garden Plan is a part), a survey of a representative sample of Alameda residents was conducted in March 2011. Respondents were asked a number of questions regarding their opinions on community gardens and food growing in the city.

Opportunities

- A large number of respondents, 47 percent, identified community gardens as an improvement they were "very interested" in seeing in public parks. Twenty-five percent indicated they were "moderately interested."
- Forty-seven percent supported additional public funding to create community gardens in public parks. Twenty-five percent were neutral on the issue.
- Forty-seven percent also indicated that they had a "definite interest" in participating in community garden activities.
- Forty-three percent said they currently grow food in a home or community garden.
- A small group of residents overall expressed interest in selling food grown in community gardens (15 percent); among low-income households (earning <$60,000/yr), however, 36 percent expressed interest.

Barriers

- Other proposed improvements to open space in Alameda, such as playing fields and aquatic facilities, also received significant support; balancing available space and resources for developing different facilities may be challenging.

Community Workshops

Community Workshops

Two community workshops for the Parks Master Plan and Urban Farm and Garden Plan were held on July 15th and 16th, 2011. At these workshops, participants were asked to comment on a list of potential factors to consider when selecting urban agricultural sites, types of urban agriculture appropriate/desired, and on potential sites for urban agriculture. Participant comments are summarized below.

Property Ownership, existing use of property, zoning, soil quality, water availability proximity to housing, transit and bicycle routes, and geographic distribution were identified as important factors for consideration. Additional factors that participants identified include whether existing uses are problematic/ detrimental to the community, whether the proposed project would provide neighborhood revitalization, and whether or not the area is underserved in terms of green space.

Participants offered insight on the opportunity sites identified in the Draft Report, and suggested additional sites to be considered. (The maps in this chapter were revised from the Draft Report to reflect the outcomes of this discussion). Participants also discussed the wide range of garden types that they would be interested in having in the City, including hatcheries, heritage farms and aquaponic farms. Participants also provided information on related projects in the City, including projects that have been seeking grant funding.

Youth Workshop

A workshop with the Alameda Point Collaborative was held on Tuesday, August 9th, to solicit input from youth. During the workshop, youth worked in three groups to design their dream community gardens and to brainstorm ideas for Beltline Park.

The dream gardens ranged in size from one to four acres, and all involved a variety of food production and social activities. All of the dream gardens grew fruit and nut trees, vegetables and berries, and included sheds and compost areas. Some of the gardens included additional gathering areas, such as barbeque pits and a fire circle; some raised chickens, turkeys, cows and/or bees; and one garden was solar powered. Events envisioned for the farms included pumpkin patch parties, community farm days, farm dinners, and cooking classes. Produce grown at the farms would sold, donated or eaten by the participants.

For Beltline Park, participants envisioned agricultural uses including community gardens, orchards, farmers markets and an organic café. Other features that participants would like to see at Beltline Park included play areas, amphitheatre, community center, a gym, a BMX Park, a dog park, basketball courts, baseball and softball fields, paint ball park, a swimming pool, a BBQ arena, bike trails, a drive-in theatre, a gift store and an Automatic Teller Machine (ATM).

Demographic Data[9]

The City of Alameda is the sixth largest municipality in Alameda County, with a population of 73,812. From 2000-2010, the City's population grew by 2.1 percent. During this time period, racial and ethnic diversity also increased, with people of color (including Black, Asian, Non-White Hispanic, Native Hawaiian, Pacific Islander, American Indian, and Alaskan Native people) comprising 48.2 percent of the population (up from 41.4 percent in 2000). A decrease in White residents (down 6.2 percent) has been accompanied by a substantial (5.1 percent) increase in Asian residents. Asians, a diverse group including people who identify as Indian, Hmong, Chinese, and Filipino, and other cultures, now make up Alameda's largest minority group at 31.2 percent of the population. Additionally, people of color appear to live in greater concentration in the western portions of the city and often live in the higher density blocks of the city (see Figures 2-1 and 2-2).

Youth under 18 years comprise 20.7 percent of the population and tend to live outside of the downtown district (see Figure 2-3). Alameda also has a significant aging population with 13.5 percent of residents 65 years or older and 27.4 percent of residents age 55 or above. There is a notable trend of elder residents locating on or near waterfront properties in specific communities (see Figure 2-4).

Given the demographic landscape of the city, a few key elements should be considered in developing priorities for the Urban Farm and Garden Master plan. Retired persons and youth are often target populations for community gardening and urban agriculture programs. Specific attention should be paid to location and creating urban gardening spaces that are accessible for families as well as elder residents. With a growing population of Asians and Latinos, urban agricultural opportunities should also respond to cultural traditions and that tap into the rich agricultural knowledge that many immigrant communities possess. Areas of high population density should be given particular consideration in the plan as people in these locations are less likely to have access to private yards and land for gardening. Targeting communities of color, youth, and families with children in outreach and planning is important for incorporating the voices and needs of all residents, particularly those with less access to land, into Alameda's farm and garden future.

[9] "American FactFinder," *U.S. Census Bureau*, http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml; Urban Strategies Council, "2010 Census Population Changes in Alameda County Cities," *Info Alameda County*, March 9, 2011, http://www.infoalamedacounty.org/index.php/Research/Demographics/Census-2010/2010-Census-Population-changes-in-Alameda-County-Cities.html.

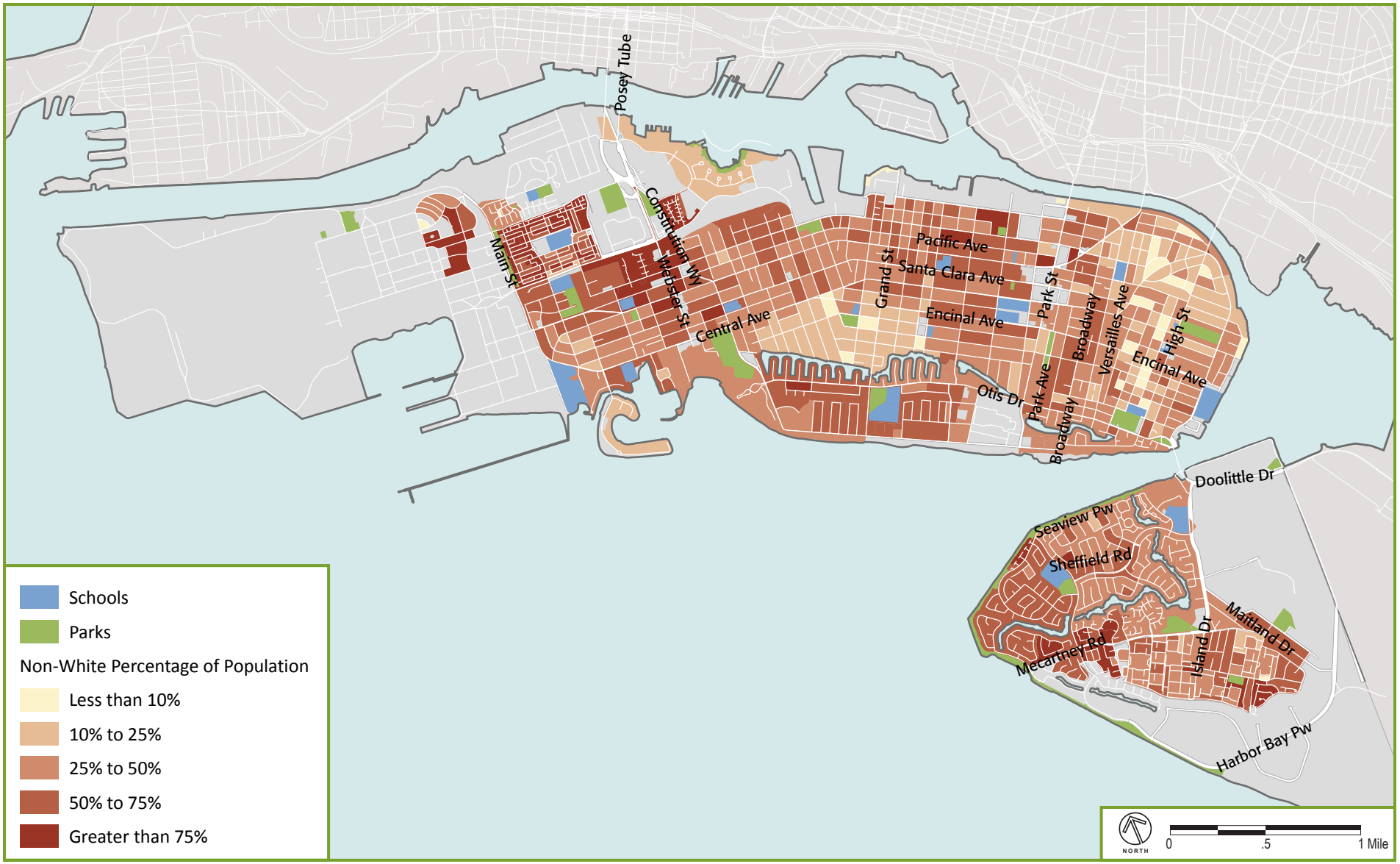
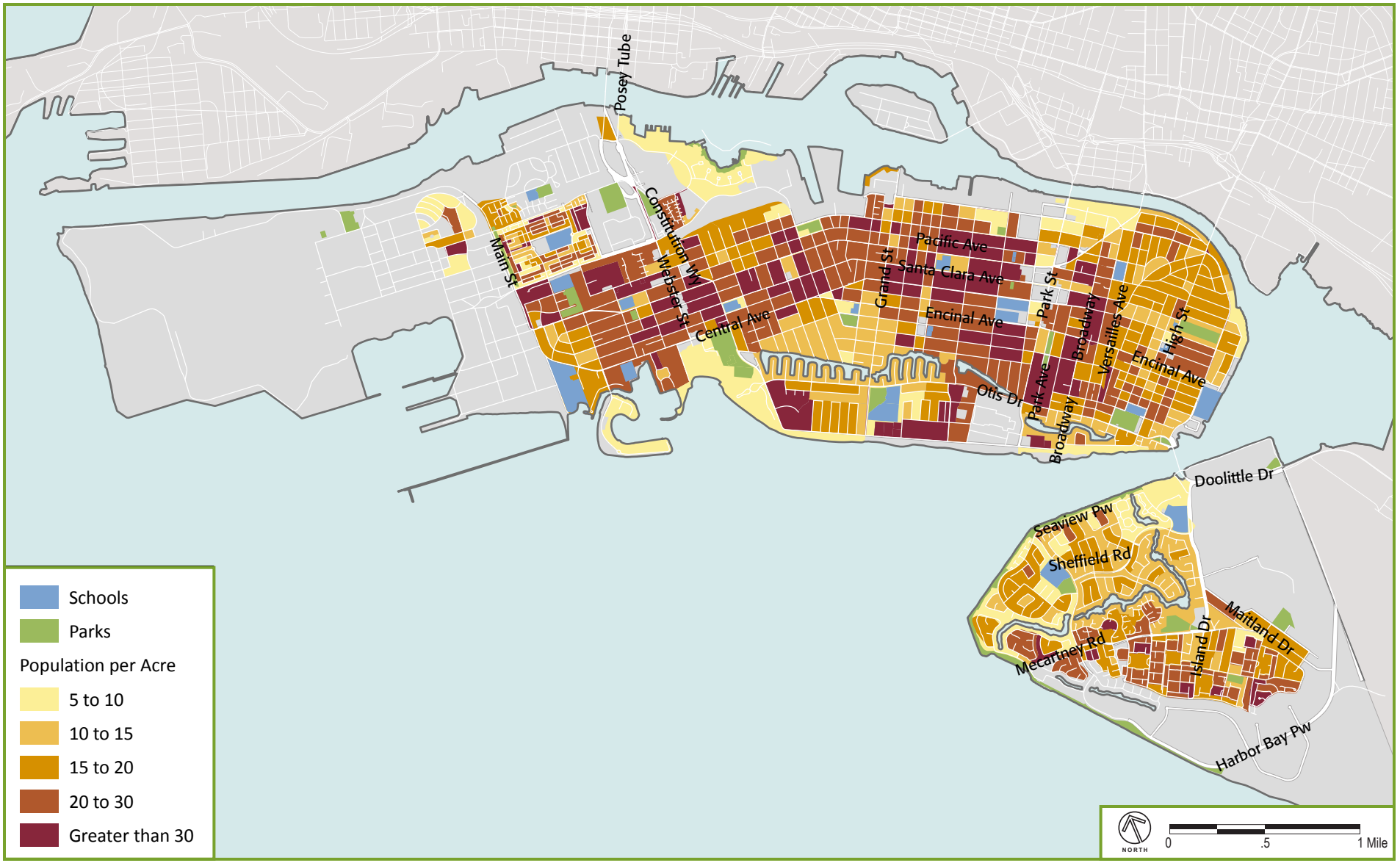


Figure 2-1: **Communities of Color**

Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.

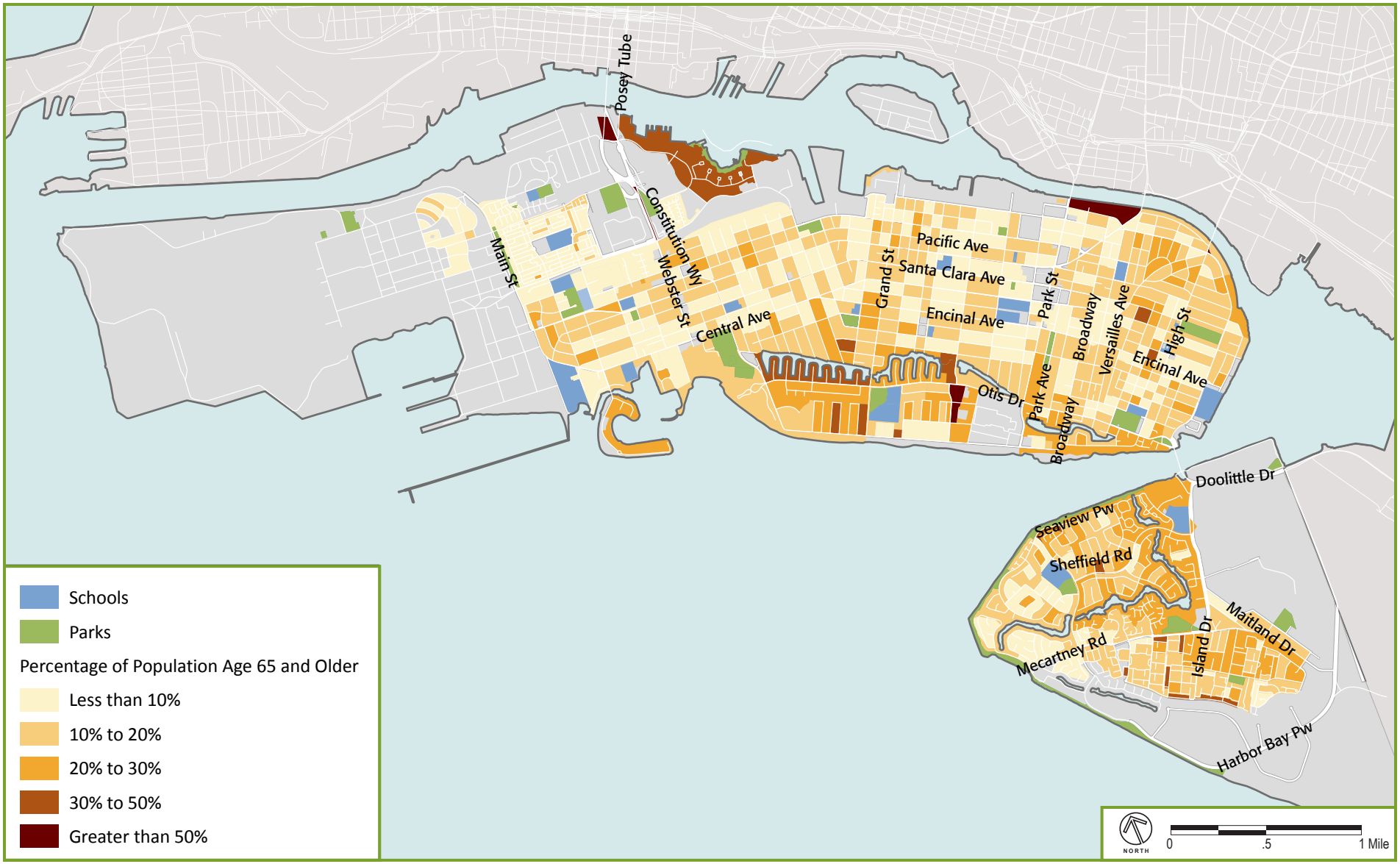


Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.

Figure 2-2: **Population Density**

Figure 2-3: **Youth Population**

Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.



Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.

Figure 2-4: **Percentage of Population Age 65 and Older**

Nutrition-Related Health Data

Community gardens and urban farms can make important contributions to improving the diet of residents – through growing food for personal consumption, receiving donated fresh fruits and vegetables, or even buying food grown in the city at a neighborhood farm stand or farmers' market. These benefits can have an impact both on food security—the ability of residents to access sufficient, safe and nutritious food, and on health outcomes related to diet such as diabetes and coronary heart disease.

Opportunities

- The City of Alameda has lower rates of diet-related chronic disease than the County, but there is opportunity to further improve health outcomes especially in the western half of the city where disease rates are higher.
- More detailed data about current health and food security indicators specifically within Alameda could give a better picture of the opportunities presented for integrating more fresh fruits and vegetables into diets through increased agricultural space.

Barriers

- Since most health data is aggregated to a higher level (usually county-level), there is a lack of information about food security in the city.
- Additionally, federal food assistance (WIC SNAP) program participation rates do not fully account for residents who may suffer from food insecurity but who do not utilize these programs.
- Health indicators show an imbalance between the eastern and western halves of the city with the western half having consistently worse outcomes.

Table 2-1: **Changes in Percent of Population by Race from 2000 to 2010: The City of Alameda and Alameda County**[10]

Race	City of Alameda Percent Population (2010 Census)	City of Alameda Change in Percent* from 2000 to 2010	Alameda County Percent Population (2010 Census)	Alameda County Change in Percent* from 2000 to 2010
White	50.8%	- 6.2%	43.0%	1.3%
Black/ African American	6.4%	0.2%	12.6%	- 2.1%
American Indian/ Alaskan Native	0.6%	- 0.1%	0.6%	0.3%
Asian	31.2%	5.1%	26.1%	5.4%
Native Hawaiian/ Pacific Islander	0.5%	- 0.1%	0.8%	0.2%
Other Race	3.3%	- 6.1%	10.8	8.0%
Two or More Races	7.7%	n/a	6.4%	n/a
Hispanic	11.0%	1.7%	22.5%	3.4%
Total Population, 2010	73,812	2.1%	1,510,271	3.9%

Key: Significant decrease in percent of the population
Significant increase in percent of the population

** Change in percent of the total population. For example, Asians went from 26 percent of the total population in 2000 to 31.2 percent in 2010, which means the change in percent is 5.1 percent.*

Compared to Alameda County as a whole, the City of Alameda appears to have a lower incidence of families suffering from food insecurity. This can be assessed by examining the number and percentage of residents who receive benefits under federally-funded food assistance programs. The City of Alameda had 3,907 residents receiving SNAP (formerly food stamps) in March 2011, or five percent of the population, compared to seven percent across Alameda County.[11] Additionally, over

[10] Urban Strategies Council, "2010 Census Population Changes in Alameda County Cities."

[11] Alameda County Social Services Agency.

1,000 families in the city received WIC food assistance.[12] However, these are opt-in programs that historically have low utilization rates, indicating that Alameda residents may in fact suffer from food insecurity at a higher rate. Further on-the-ground survey research would be needed to better assess the status of city residents with greater accuracy.

The City of Alameda also generally has better health outcomes than the County. However, when taking a closer look at the east and west portions of the city (zip codes 94502 and 94501, respectively), there are stark disparities. The east end has very low rates of emergency department asthma visits, and hospitalizations and mortality related to coronary heart disease and diabetes compared to Alameda and the County. The west end has consistently worse health outcomes as compared to the Alameda and has higher coronary heart disease hospitalization and mortality rates than the County (see Table 2-2).

Table 2-2: **Asthma, CHD and Diabetes Morbidity and Mortality: Alameda County and the City of Alameda**

Geography	Emergency Department Asthma Age-Adjusted Rate 2006-2008	Hospitalization Coronary Heart Disease Age-Adjusted Rate 2006-2008	Coronary Heart Disease Mortality Rate 2006-2008	Diabetes Mortality Rate 2006-2008	Hospitalization Diabetes Age-Adjusted Rate 2006-2008
Alameda County	505.2	924.6	115.3	21.4	937.4
City of Alameda	417.6	893.7	130.8	16.7	733.1
94501 - West Alameda	473.4	963.9	138.9	17.2	797.5
94502 - East Alameda	186.6	600.2	92.9	-1.0	468.4

Key: Lowest rates of disease
Highest rates of disease

Rates are age-adjusted per 100,000

Opportunity Site Identification

A significant barrier to increasing all types of urban agriculture in Alameda is the availability of space for gardening activities. Since Alameda is an island, there is a finite amount of land in the city and almost all of it has been developed with houses, offices, stores and industrial buildings. Because of this reality, identifying any available space for establishing new agricultural activities such as community gardens is an important part of this Existing Conditions Report.

The Planning Center | DC&E has undertaken a preliminary analysis of available land in Alameda that could be used for community-oriented agriculture and gardening activities. We focused on identifying three types of sites:

- **Community Garden Sites**. These sites are mostly publicly owned, and have between 1/8 of an acre and one acre of land not covered by a building. These sites could potentially be considered as places to start new community gardens.
- **Urban Farm Sites.** These sites are mostly publicly owned, and have more than one acre of land that is not covered by a building. These sites could potentially be considered as locations to start urban farms.
- **School Garden Sites**. These sites include schools that do not have existing school gardens but could potentially establish a school garden in the future.

Opportunities

- There are sites in Alameda that could potentially be used for urban agriculture.
- Many of these sites are publicly owned, which would allow the City to have full control over maintenance, regulation and programming.
- Some available sites are located in established neighborhoods that currently lack community gardens and urban farms.

Barriers

- Current uses of potential urban agriculture sites may have to be transferred to another location for sites to be viable as agricultural.
- Soil contamination could be an issue at some of the identified sites. Site-specific soil studies,

[12] Alameda County Social Services Agency, May 2010-April 2011

appropriate design and potentially, remediation programs would be needed prior to use of sites for growing food.

- Ownership and use agreements would need to be established on some of these sites.
- Some available sites are not centrally located, and some sites may have accessibility issues either due to location or the characteristics of the site.
- Funding for conversion of these sites into gardens would need to be secured.

Community Garden and Urban Farm Sites

The Consultant has identified sites that could be considered as potential locations for establishing new community gardens or urban farms. This list of sites was developed through a combination of sources, including a list of garden sites identified by Community Action for a Sustainable Alameda (CASA), an analysis of County Assessor parcel data to identify additional potential sites, site visits and specific consideration of both parkland and the Alameda Point redevelopment area.

The consultant considered all sites previously identified by CASA. CASA identified a list of twelve potential sites for establishing new community gardens as part of the involvement with the Local Action Plan for Climate Protection. CASA preliminarily identified these sites, and a full analysis of feasibility on these sites was not completed.

The consultant identified sites that could be considered for the initiation of new community gardens or urban farms in addition to the sites identified by CASA. These sites were identified through a city-wide, parcel-based analysis of County Assessor data. We developed this list by identifying all parcels in the city with a public land use, or a land value of 0, which indicates some sort of public or tax-exempt land ownership. This list of approximately 800 parcels was narrowed down by eliminating parcels owned by homeowners associations, rights-of-way (streets), and parcels with at least 30 percent coverage by an existing building. This list of sites was narrowed down further to only sites that have more than 1/8 of an acre of land that is not covered by an existing building. Parcels with existing uses that were obviously not compatible with urban agriculture were eliminated by looking at an aerial photograph. This screen resulted in a list of about 30 potential sites; consultant visited these 30 sites and assessed their potential for community gardens or urban farms. Fourteen of the 30 sites were eliminated because they were not suitable.

The promising sites have been split into high, medium and low categories according to their potential for new community garden or urban farm sites. Sites are listed in Table 2-3 and mapped in Figure 2-5. High, medium and low potential for garden sites has been determined based on individual consideration of each potential site. Sites that are in the high category have adequate space for a garden or farm, have favorable site conditions such as access and layout, and are located in neighborhoods that would benefit most from a new community garden or urban farm. Sites in the medium category have some favorable characteristics for community gardening and urban farming, but are not as desirable as the sites in the high category. Sites in the low category have been determined to be inappropriate for a new community garden or urban farm due to conflicting planned uses for the site, or because the sites are not in desirable locations.

In determining the neighborhoods and locations that would benefit most from a new community garden or urban farm, the consultant considered the following factors:

- **Ownership.** Sites owned by the City are given highest priority because the City has full control over the use of these sites. Sites owned by other public entities were considered but were less desirable.
- **Existing and planned uses of the site.** Vacant sites without planned uses were considered ideal, but sites with uses compatible with gardens were considered as well.
- **Zoning**. Sites zoned for open space uses were preferred, but all zoning districts were considered since it would be possible for the City to amend the Zoning Code to allow a community garden at a desired site.
- **Proximity to transit network (see Figure 2-6).** Sites that are within a half-mile of transit were preferred.
- **Proximity to bicycle network (see Figure 2-7).** Sites that are within a half mile of a bicycle route were preferred.
- **Proximity to population density (see Figure 2-8).** Sites that were located in a neighborhood with significant population density were preferred.
- **Geographic distribution (see Figures 2-9).** Sites were selected to be distributed evenly throughout Alameda to the extent possible, and accessible to the diversity of Alameda's neighborhoods.
- **Proximity to youth population (see Figure 2-10).** Sites that were located adjacent to or near neighborhoods with higher percentages of youth population were preferred.
- **Proximity to elderly population (see Figure 2-11).** Sites that were located adjacent to or near neighborhoods with higher percentages of elderly population were preferred.

Table 2-3: **Suitable Community Garden and Urban Farm Sites**

Site Number	Land Owner	Acreage	Comments
High Potential			
1	United States of America	1,414	This site is Alameda Point. As redevelopment occurs, there will be potential for urban agriculture opportunities, including community gardens and urban farms. Some of the land on the point is Tides Trustland, which does not allow agricultural uses. The site is discussed in more detail in its own section, below.
2	City of Alameda	2	This site is across from Washington Park. This site could be used for a community garden and/or urban farm. The site is easily accessible by central Alameda neighborhoods.
3	Alameda Belt Line	29	The Alameda Belt Line is a key site. There is ample space for agriculture including a community garden or larger urban farm. As the City develops a park plan for this site, a large urban agriculture component is appropriate.
4	Alameda Belt Line	6	The linear space along Appezzato Parkway could be used for a community garden or orchard plantings.
Medium Potential			
5	United States of America	81	The northern end of this site has space for a community garden. However, the location of the site is not central and it is not in close proximity to a lot of people.
6	State of California	66	This site is part of the Robert Crown Memorial State Beach. The grassy open space area is a suitable location for a garden. However, since the site is owned by the State, it would require additional coordination with the State to develop gardening facilities.
7	College of Alameda	55	The west side of the property has space for a garden. However, the site is owned by the college, and would require extensive coordination to develop for gardening facilities. However, the college could provide additional resources and opportunities to integrate with student and academic programs.
8	Alameda Unified School District	0.8	This is the old Island High site. Project Leaf has been advocating for starting a community garden on this site. The Housing Authority also may acquire the site for construction of housing.
Low Potential			
9	City of Alameda	25	There is some vacant space on this parcel that could fit a community garden, but it is windy and exposed and not centrally located.
10	City of Alameda	2	City Hall lawns have been identified in the past as a potential location for community garden space (or “victory garden”). This would be highly visible and prominent, but would require converting the existing lawns and may not be most appropriate community gardening space.
11	Alameda Belt Line	0.3	This site is adjacent to a busy street. Access to this site could be an issue.
12	Alameda Belt Line	0.5	This site is currently fenced off, has an industrial feel, and is not centrally located.

Table 2-3 (Continued): **Suitable Community Garden and Urban Farm Sites**

13	S P CO 872-1-73F-POR 22	0.7	This site is an old railroad right-of-way. The City has been working with BART and AC Transit on a station area plan and street improvements that would use this right of way.
14	S P CO 872-1-73F-POR 22	0.9	This site is an old railroad right of way. This site is an old railroad right-of-way. The City has been working with BART and AC Transit on a station area plan and street improvements that would use this right of way.
15	City of Alameda	43	This site is an old landfill with adequate space for a garden. Using this site for a community garden would require soil analysis and remediation or appropriate site design such as raised planters with soil brought in from off-site.
16	Alameda Belt Line	0.6	There is good access and site is ideally located in residential neighborhood. There are a number of existing eucalyptus trees. However, the Fire Department is planning on building a new station on this site once funding has been established.

Alameda Point

Alameda Point is a large site owned by the Navy encompassing the western tip of the island. Years of use by the Navy have left the site with significant environmental contamination, and soils contain hazardous levels of toxic substances. However, the Navy is undertaking remediation of the site and environmental cleanup is expected to leave the site available for redevelopment by the City of Alameda with housing, parkland and other appropriate types of development. The Parks and Open Space and Urban Farm and Garden Plan, also called the Urban Greening Plan, is part of this planning effort.

The large amount of available land at Alameda Point makes it a tremendous opportunity for the establishment of urban agriculture as an integrated part of future development. The pending redevelopment plan currently being developed will integrate mixed use, residential and open space in a sustainable manner.

At this stage of the planning process, identifying specific sites for urban farms and/or community gardens in Alameda Point is not as important as ensuring that the redevelopment planning process includes plans that incorporate urban agriculture. Since the community shows substantial support for increasing the resources for community gardens in Alameda, urban agriculture enthusiasts must organize to convey the desire for community garden and urban farm space in Alameda Point.

Parks

Parks are an ideal location for community gardens. Parks are already community-oriented places where people get together for various forms of recreation, and parks are generally located in central parts of existing neighborhoods. Gardens in parks are also highly visible and educational, and can be easily incorporated into City programming, maintenance and funding regimes. Since parks are existing green spaces, there are less likely to be problems with soil contamination or conflicts with surrounding uses.

However, establishing community gardens in public parks requires dedicating a portion of the park's land to the garden, and not all parks have space available. Additionally, park space may be valued by community members for other purposes besides gardening.

The consultant has identified parks in Alameda that are potential locations for establishing new community gardens. We applied the following criteria to determine if there is an appropriate space in each park:

- Availability of at least 1/8 acre of space
- Good solar access
- Reasonably close to vehicular access location or parking

Parks that meet the criteria above and are suitable sites for community gardens are listed in Table 2-3. Park sites have been split into high, medium and low potential categories based on the same criteria that were used for the opportunity sites in Table 2-3. These parks are also mapped in Figure 2-12.

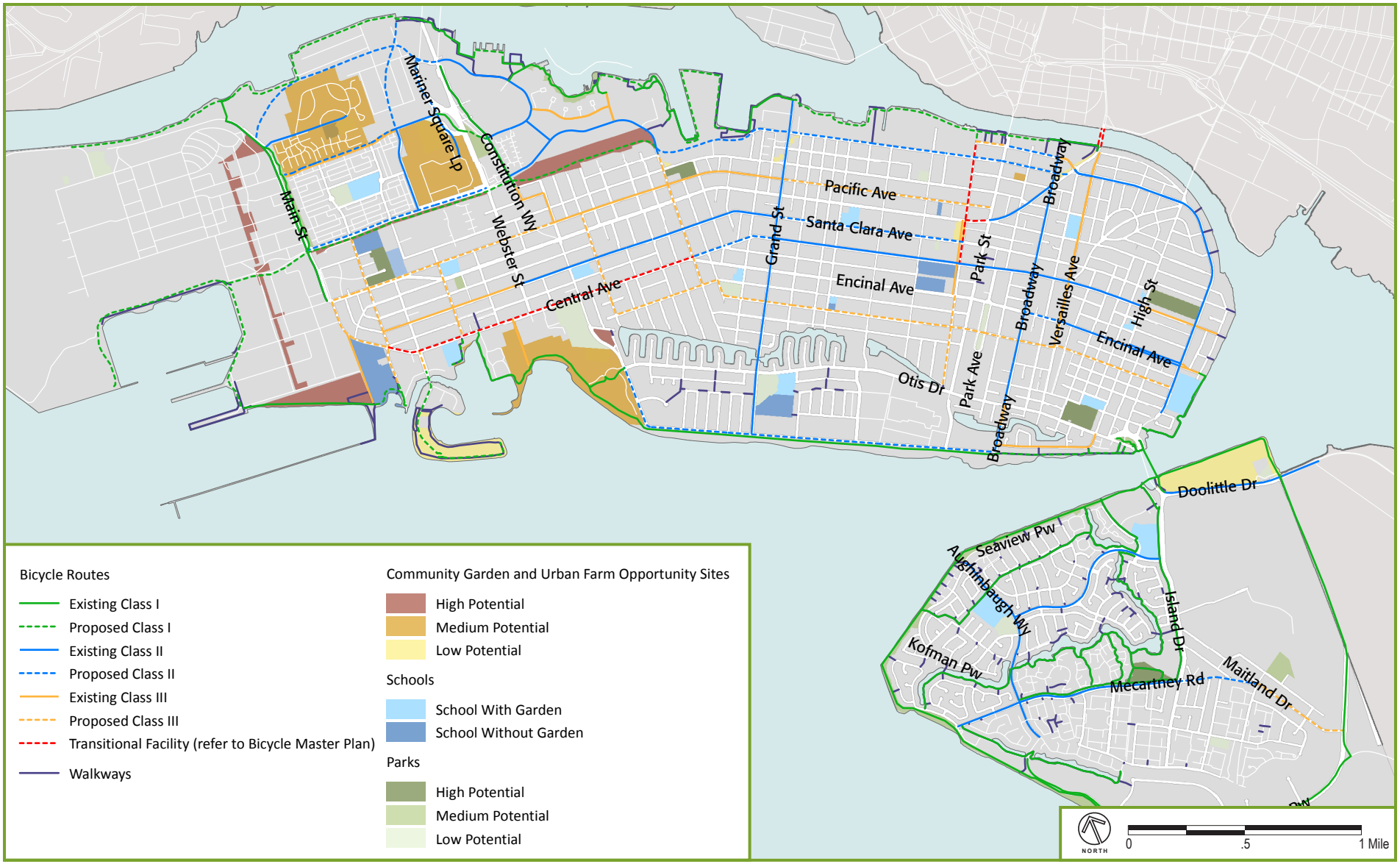
Schools

Seventeen of Alameda's 27 schools do not have food-producing gardens, as shown in Figure 13. Three of these 17 schools either have gardens that do not grow food, or used to have edible gardens but no longer

Figure 2-5: **Opportunity Sites**

Figure 2-6: **Transit Routes**

Source: City of Alameda, October 2010.2-



Source: Bicycle routes from Metropolitan Transportation Commission, 2008; Trails from City of Alameda 2011.

Figure 2-8: **Bicycle Routes and Pedestrian Paths**

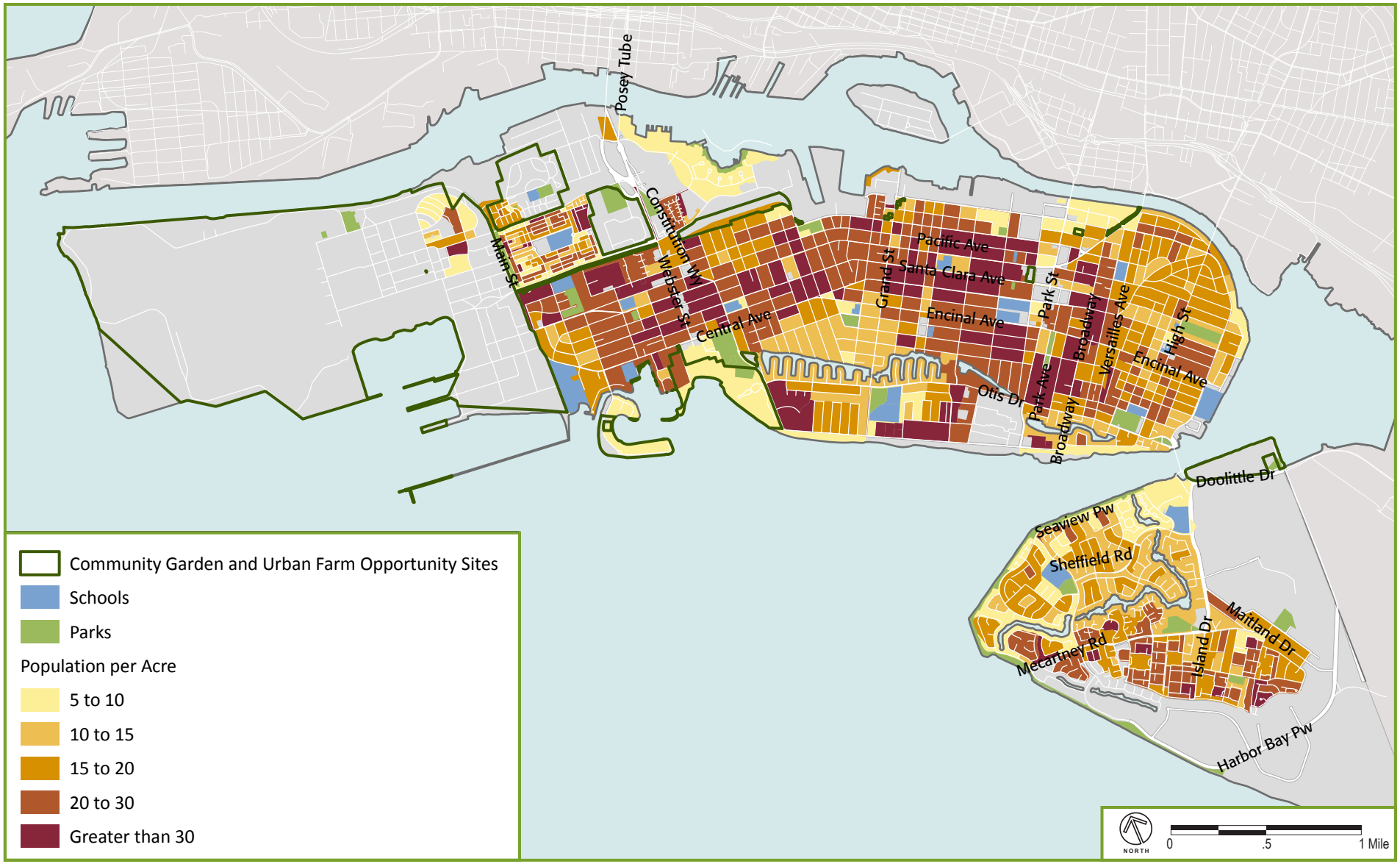
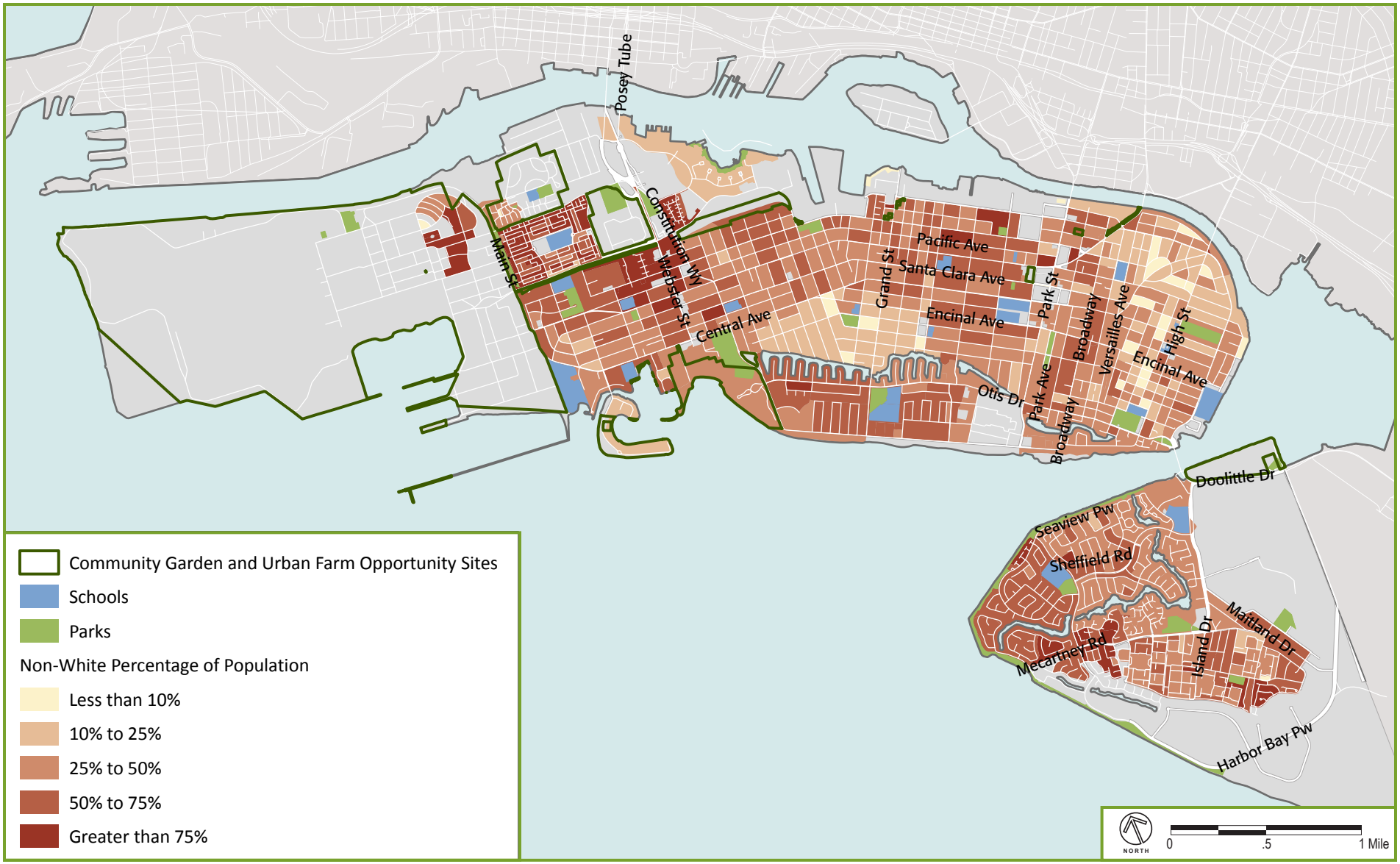


Figure 2-8: **Population Density**

Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.

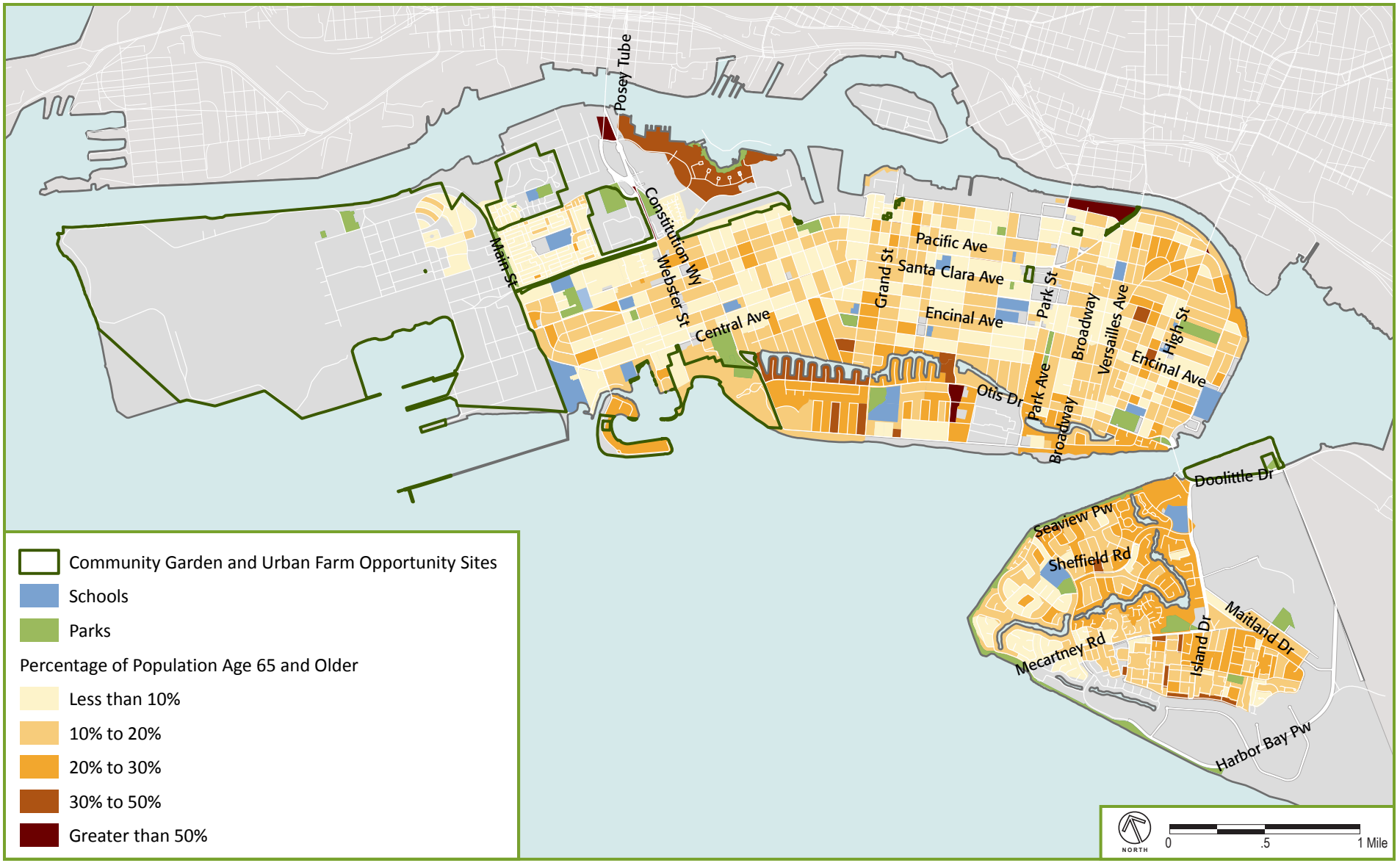


Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.

Figure 2-9: **Communities of Color**

Figure 2-10: **Youth Population**

Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.



Source: US Census, 2010. Data shown for areas with a population density greater than 5 people per acre.

Figure 2-11: **Percentage of Population Age 65 and Older**

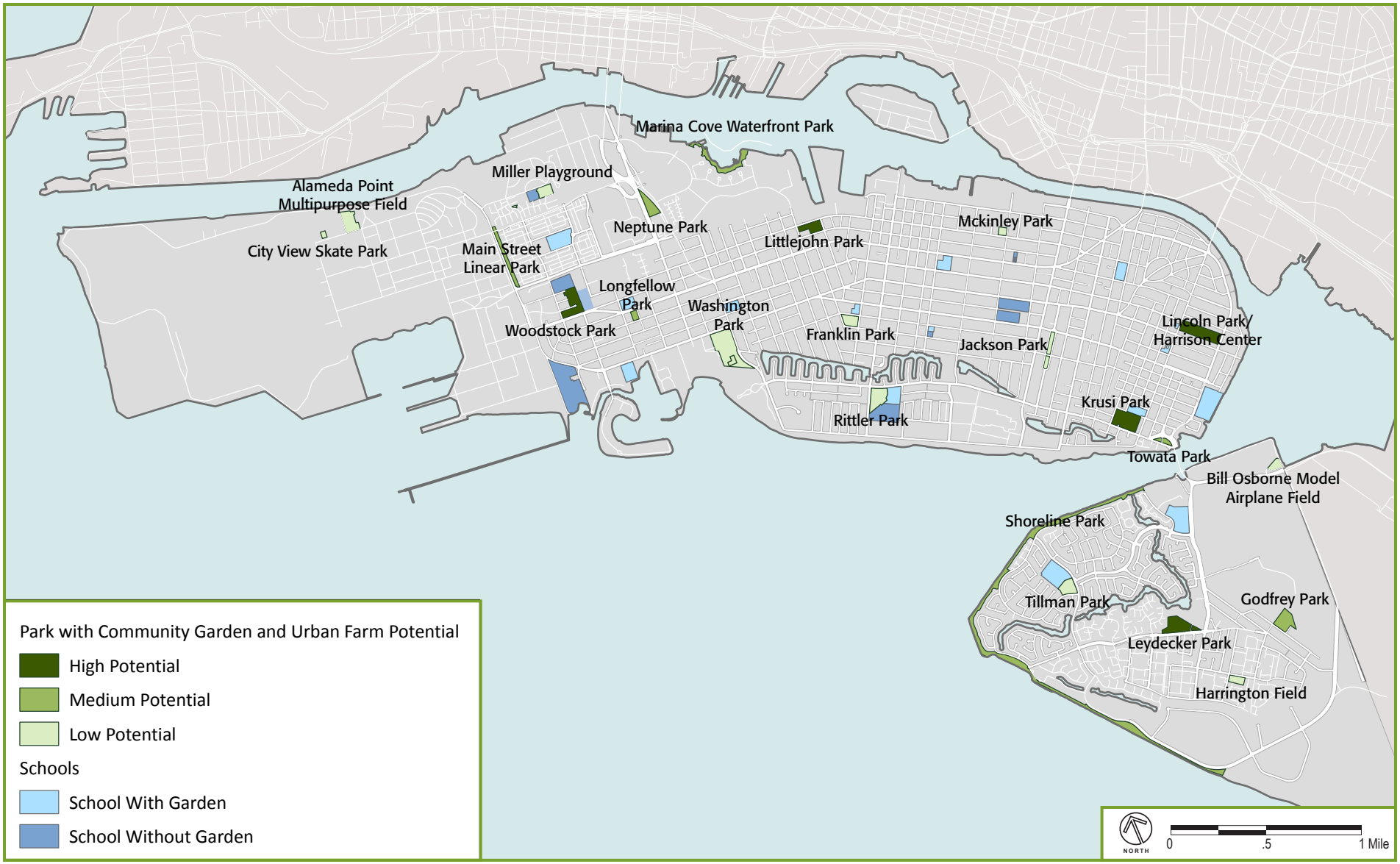


Figure 2-12: **Park Sites**

do. Two schools (Henry Haight School and St. Joseph Elementary) do not have gardens but plan to have gardens in the near future. Together, these five schools and the remaining 12 schools that do not have gardens are potential opportunity sites for new school gardens. Two of these schools, Applied Scholastics Academy and St. Barnabas School, did not respond to the survey and are not shown in Figure 2-13.

Additionally, the ten existing school gardens in Alameda are potential opportunities for increased community gardening. One beneficial way to increase the productivity and utility of these existing gardens would be to establish joint-use agreements between the School District and the City for use of the school gardens by community members who are not students. This would allow school gardens to be used and maintained in summer, which is the peak growing season, when school is not in session. The lack of garden activity over the summer has been listed as a key barrier by many schools in Alameda. In addition to helping the school garden by keeping up maintenance during the summer, the local neighborhood would benefit from having increased community gardening opportunities, especially in the summer.

Conclusion

As shown in this existing conditions report, there are significant opportunities for urban agriculture in Alameda. The consultant team recommends that the City consider the four high potential community garden and urban farm sites, and the five high potential park sites as the best locations in Alameda to start new community gardens and urban farms. As new community garden and urban farming facilities are planned and developed, it is important to consider their geographic distribution and ensure that opportunities are available to people of all age, income and race. The geographic distribution of the sites identified with high potential in this chapter would provide gardening opportunities throughout the city that would be accessible to the diverse population in Alameda.

In order to create gardens on these sites, the final Urban Farm and Garden Plan will include an analysis of available funding sources and resources for the development of community garden and urban farming sites. The Plan will also include guidelines and best practices for urban agriculture, and two conceptual site plans for community gardens or urban farms.

Figure 2-13: **School Sites**

Table 2-4: **Suitable Park Sites for Community Gardens**

Park Name	Acreage	Comments
High Potential		
Krusi Park	8	This park would be a good location for a community garden because it is accessible to neighborhoods on the eastern side of the island. There is some space available on either side of the tennis courts that could serve as an ideal location for gardens.
Leydecker Park	6	There are sites near Community Center and existing seating area that would have sufficient space for a community garden. Leydecker Park centrally located within the Bay Farm neighborhood and would easily accessible to all residents of this neighborhood.
Lincoln Park	8	This park would be a good location for a community garden because it is accessible to neighborhoods on the eastern side of the island. There are appropriate garden sites in the center of the park near buildings or picnic site.
Littlejohn Park	4	This park has good access by the relatively dense neighborhood in central Alameda. There is an appropriate site for a garden area in center of park, near the playlot.
Woodstock Park	7	This park is a good location for a community garden because it is located in a densely populated community of color on the western part of the island. There are appropriate garden sites on two areas south of ballfields.
Medium Potential		
Main Street Linear Park	4	Main Street Park has limited space for a community garden but its linear orientation makes it a good spot for community orchard plantings.
Marina Cove Linear Park	10	Eastern end of this park has an appropriate space for a community garden. This location is in a neighborhood with a large percentage of population aged 65 and older. However, the site is exposed, right on the water, and accessibility is difficult from surrounding neighborhoods.
Neptune Park	4	This park may be limited by parking, but it is a good potential site that would serve nearby senior housing development.
Towata Park	1	This park has two locations that could serve as community garden space. There is parking on site. However, the park is not as central or accessible to the surrounding neighborhood as nearby Krusi Park.
Godfrey Park	5	This park has space for community gardens along existing cul-de-sac, but it's peripheral location to the Bay Farm neighborhood makes it less ideal than Leydecker Park.

Table 2-4 (Continued): **Suitable Park Sites for Community Gardens**

Longfellow Park	1	This park is an excellent location for a community garden its proximity to the surrounding neighborhood, but developing a community garden would require taking some space from the field area.
Shoreline Park	43	This long linear park has some space that could be used as a community garden. However, since the park is along the shoreline it is exposed to the bay and wind and is not centrally located in the Bay Farm neighborhood.
Low Potential		
Alameda Point Multipurpose Field	5.3	This site has limited space and accessibility for a garden.
Bayport Park	0.2	This site does not have adequate or appropriate space for a garden.
Bill Osborne Model Airplane Field	2.0	This site does not have adequate or appropriate space for a garden.
City View Skate Park	0.6	This site does not have adequate or appropriate space for a garden.
Franklin Park	3.0	This site does not have adequate or appropriate space for a garden.
Harrington Field	2.1	This site does not have adequate or appropriate space for a garden.
Jackson Park	2.7	This site does not have adequate or appropriate space for a garden.
Mckinley Park	1.2	This site does not have adequate or appropriate space for a garden.
Miller Playground	2.9	This site does not have adequate or appropriate space for a garden.
Rittler Park	5.6	This site does not have adequate or appropriate space for a garden.
Tillman Park	3.8	This site does not have adequate or appropriate space for a garden.
Washington Park	13.5	This site does not have adequate or appropriate space for a garden.

Chapter 3: Recommendations for Policy & Programs

The City of Alameda has a number of opportunities to promote urban farms and gardens through the development and adoption of new policies. Existing policy barriers limit the expansion of urban agriculture, and new policies can help both legalize and appropriately regulate these uses. The following policy changes are recommended in order to reduce barriers to growing more food in Alameda and to ensure that new gardens and farms will equitably benefit Alameda's diverse population and responsibly utilize the City's land base.

Model general plan policies and zoning laws for urban agriculture can be found in the toolkit, Seeding the City: *Land Use Policies for Urban Agriculture*.[1]

1. Enhance language regarding urban agriculture in the City's General Plan.

Alameda's current general plan is largely silent on the issue of urban agriculture.[2] As the guiding land use policy document for California cities and counties, the general plan can play an important role in setting policy priorities for land use and open space that directly impact urban agriculture. Such language could be developed as part of a comprehensive update, or through a stand-alone amendment process. Specifically, Alameda should incorporate the following into its general plan:

1a. Establish specific policy goals related to the growth of urban agriculture.

Explicit language should be adopted that establishes support and goals for the development of new community gardens and urban farms throughout Alameda. Goals may include the development of new gardens, requiring and/or incentivizing new development to incorporate open space for gardening, permitting community gardens to count towards existing open space requirements for new development projects, distributing gardens equitably throughout the City, and promoting agriculture through programs and partnerships.

1b. Outline actions to achieve urban agriculture goals.

The General Plan can outline specific actions that can be taken to promote urban agriculture. This plan identifies priority sites for establishing new urban farms and community gardens throughout the City. Additional general plan action items may include amending relevant land use regulations to ensure that urban agriculture is a permitted use of the land in all relevant districts and establishing density standards for community gardens.

Seattle, WA has one of the largest municipal garden programs in the country, a program that has been strengthened by supportive language within the City's Comprehensive Plan. In particular, the City created specific density requirements of one community garden for each 2000 households in the Urban Villages element of its C.P., ensuring that gardens will continue to grow along with the City's population.

2. Amend current zoning law to allow urban agriculture in all relevant districts.

A significant existing policy barrier to urban agriculture is the lack of zoning language for these uses. Alameda should amend its zoning ordinance to expressly permit and facilitate a range of urban agriculture activities, including home gardens, community gardens, and urban farms, as an allowed use in applicable districts.

2a. Identify the form(s) of urban agriculture to be allowed in the list of permitted uses in residential, open space, mixed use planned development, and appropriate commercial and special use overlay districts.

This amendment will be particularly important as five (5) of the high-potential opportunity sites identified in the Existing Conditions report were located within public parks, which are subject to the open space district zoning laws that currently do not include urban agriculture as a defined, allowed use.

2b. Establish use regulations and operating standards to regulate the safety and aesthetics of urban agriculture sites.

Specific operating standards and use regulations may address the following issues:

- Onsite sales/farm stands
- Soil Testing
- Structures (e.g., greenhouses, hoop houses, raised beds, etc.)
- Other issues, including accessibility requirements, parking, requirements to submit management plans, etc.

Such regulations will ensure that community gardens and urban farms are operated in a way that promotes and protects public health, safety, and welfare.

2c. Permit on-site sale of fresh produce at urban agriculture operations.

Permitting produce sales at food growing sites will bring community members to the farms to better understand their food sources. This allowance will also minimize costs for operators who would otherwise devote funds to trucking goods elsewhere. Produce sales can be specified as an incidental/accessory use under the use categories of community gardens and urban farms in the City's zoning ordinance. Direct sales of agricultural products on or near the site where they are grown are allowed with minimal food safety and handling requirements through the State's Field Retail and Farm Stand laws.[3]

San Francisco, CA,[4] Seattle, WA,[5] Cleveland, OH,[6] and Kansas City, MO[7] are all examples of communities that have recently updated their zoning codes to specifically define and allow urban agriculture. Model zoning ordinance language can be found in PHLP's toolkit, Seeding the City: Land Use Policies for Urban Agriculture.[8]

3. Amend current urban livestock regulations to support integrating animals into urban farms and gardens.

Either as a part of a zoning update to urban farm and garden codes, or as a separate policy process, the City should undertake a review and amendment of its codes relevant to urban livestock.

3a. Identify any additional allowable urban livestock, in addition to those currently permitted.

Currently, the code references chickens, ducks, geese, goats, and rabbits. Other animals, including pigs, bees, and aquaculture maybe appropriate to add as allowable livestock.

3b. Review codes for opportunities to promote high standards for animal welfare and good urban livestock husbandry.

Many cities are now updating their codes to set high standards for animal welfare, by specifying the minimum amount of square footage per animal (as a replacement for, or in addition to, maximum allowable number of animals).

3c. Review codes related to processing urban livestock and their products.

Currently, the City only allows butchering of poultry and rabbits in the M-2 General Industrial district, and dairy product processing plants (excluding canning operations) are a permitted use in the Commercial Manufacturing District. Dairy farming requires a Use Permit in the Agricultural Combining District.

Some communities, such as Seattle, are including a wide range of animals in their urban agriculture ordinances, such as pigs, rabbits, and other poultry like geese.[9] Both Cleveland and Seattle allow beekeeping as a permitted use in residential districts, subject to certain regulations.[10] Model zoning language for both bees and chickens can be found in PHLP's toolkit, Seeding the City: Land Use Policies for Urban Agriculture.[11]

Two animal welfare organizations provide standards for humane farm animal care. Humane Farm Animal Care, a nonprofit charity dedicated to improving the lives of farm animals by providing viable and monitored standards for humane food production, has established Humane Farm Animal Care standards.[12] The Animal Welfare Institute has established Animal Welfare Approved standards for the care and keeping of animals. These standards are formulated for large farming operations, but are helpful models for municipalities to consider when drafting standards of care.[13] The City of Vancouver has established regulations regarding appropriate care of backyard chickens.[14]

4. Identify preferred management model(s) for urban agriculture sites.

This Plan outlines possible management and operating models that the City of Alameda could employ and promote in developing urban agriculture sites and programming. More details on these models can be found in Chapter 4 (Guidelines) and Chapter 5 (Funding and Financing Models and Resources).

4a. For priority urban agriculture development sites, review available resources, partnerships, and the desired purpose of the activity, and select an appropriate operating model.

Priority sites identified by this Plan are exclusively on public land; other operating models may be employed as the City promotes urban agriculture on private land.

4b. Identify opportunities for City agencies/ staff to support and promote urban agriculture.

Because many opportunity sites for urban agriculture are located on public land, there is an important promotion and coordination role for the City to play. Identifying the appropriate agencies and staff to fulfill this role is a long-term goal.

5. Consider developing a clear, streamlined, and transparent request for proposals and lease process for opening public land to urban agriculture use.

One option for increasing urban agriculture opportunities in Alameda without taking on costly public construction or maintenance responsibilities is to develop public-private partnerships, where community-based organizations and private groups can lease underutilized or available public land from the city, and put it into agricultural use. Leases can be used to develop long-term or interim/temporary garden sites.

5a. Identify and prioritize available public sites for privately-operated urban agriculture.

This Plan ranks public sites in terms of suitability and desirability for urban agriculture sites. This ranking provides a starting place for selecting sites that are suitable for privately-operated urban agriculture.

5b. Develop a "Request for Proposals" to solicit private groups.

Such a request for proposals could ask groups to provide information about how they would put sites into productive use, provide healthy food for residents, include educational opportunities, and generate environmental benefits.

5c. Create a lease template that meets the needs of urban agriculture activities and promotes public benefit from such activities.

The lease should incorporate appropriate terms, rent, liability, and operations and maintenance of parcel, such as requirements for using organic/sustainable growing methods.

There are good examples of urban agriculture that is designed for temporary/mobile activities (see Urban Adamah[15] in Berkeley, or the Hayes Valley Farm[16] in San Francisco as examples).

Boston, MA[17], Baltimore, MD[18], and Cleveland, OH[19] all have issued requests for proposals for urban agriculture on public land that provide good examples of criteria and structure.

A model community garden lease agreement can be found in Public Health Law & Policy's toolkit, Ground Rules: A Legal Toolkit for Community Gardens.[20] This toolkit is designed to help overcome the legal and practical barriers to establishing community gardens.

6. Pass a local "Quimby Ordinance" to require developers to contribute land or fees for open space.

As discussed in the Funding chapter of this plan, the Quimby Act is a state law that was passed in 1975 authorizing localities to require developers to contribute a minimum amount of their land, or in-lieu fees, for the development of new parks and open space.

6a. Include "community gardens and urban farms" as permitted use of open space.

In order to leverage this policy for the growth of urban agriculture, Alameda can specifically define community gardens and urban farms as permitted uses of required open space under their local Quimby ordinance. Note that under the Quimby Act, community gardens and urban farms must be non-commercial activities.[21]

Many cities have passed ordinances that make use of the Quimby Act, including the city of Coachella, CA.[22]

7. Support the establishment of a centralized produce gleaning and donation programs; encourage new gardens and farms to participate in gleaning programs.

Alameda has an existing produce donation program run by the Alameda Backyard Growers (ABG) and the Alameda Food Bank (AFB). Based on stakeholder interviews conducted for the Existing Conditions report, there is interest in expanding the existing donation program. Currently, the ABG provides free seeds to community and backyard gardeners who volunteer to "grow an extra row" of food for the Food Bank. However, lack of available space is a major barrier to growing more food, as many of the participants in their program lack garden space of their own. At the same time, the AFB has room for more produce donations; they are able to accept up to a couple hundred pounds of produce per day.

Alameda has the potential to expand this produce donation program to include additional gardens and farms throughout the city and to encourage new farms and gardens to participate, especially those on public land. Establishing a centralized produce donation program will ensure that the development of new farms and gardens is connected to the food needs of local low-income populations.

Seattle's Lettuce Link, a private non-profit partner to the City's P-Patch program, offers a model of a citywide produce donation program that builds on the city's robust network of community gardens. Lettuce Link provides seeds, plants, education, and outreach to promote their "plant an extra row" program with 30+ gardens throughout the City. In 2010, they coordinated the growth and donation of over 21,000 pounds of produce to local food banks and meals programs.[23]

In addition, Alameda can enhance the supply of donated produce by supporting the establishment of a centralized produce gleaning program. While donations require the grower to produce additional crops and/or voluntarily contribute a portion of their crops (i.e. "grow an extra row"), gleaning is the act of harvesting excess or non-marketable produce that would otherwise be wasted or excluded from the yields of commercial farms and private gardens. Gleaning can be done by volunteers and other non-growers as long as consent of the grower has been established.

The Pierce County Gleaning Project in Tacoma, WA collects excess produce from local farms, farmers' markets, private fruit trees, and community gardens for donation to local food banks and hot meal sites. This collaborative effort of state and local hunger relief organizations conducts outreach and education to local residents, registers willing fruit tree owners and farmers for participation in the gleaning project, and coordinates volunteers to harvest and distribute produce. Last year, the Gleaning Project salvaged and donated almost 30,000 lbs of produce to local food banks.[24]

8. Support the incorporation of school gardens into the AUSD Wellness Policy as an opportunity for nutrition education, and pursue joint use opportunities with AUSD to increase access by community residents to school gardens.

As documented in the existing conditions report, 15 public and private schools within Alameda already have educational gardens, but the Alameda Unified School District's 2010 Master Plan does not mention school gardens as potential educational resources. Given that the existing School Wellness Policy mentions the importance of fresh, healthy, and local produce in students' diets, the District Master Plan should promote gardens as integral resources for facilitating nutrition education, local food sourcing, and healthy eating.

Many schools across the country are also incorporating school gardens into science education and environmental literacy curriculum. AUSD can explicitly promote school gardens as educational resources that offer benefits beyond healthy eating.

The City and School District of Portland, OR have created a joint use agreement to allow the city to build gardens on school property without needing to acquire new land or lose existing green space. The agreement encompasses most school properties throughout the City and allows schools to access free garden plots for educational activities. The Rigler School, a public high school in Portland, is the host of one such shared school/community garden. In 2000, a group of residents saw an opportunity to develop an under-utilized parking lot adjacent to the school into a much-needed green space for neighborhood residents. Today, the Rigler Community Garden accommodates a number of school activities and includes student artwork at the entrance, a gazebo where teachers can facilitate outdoor classes, and a native tree garden maintained by different classrooms at the school.[25]

9. Promote urban agriculture through ongoing programming and partnerships.

The City should establish partnerships and initiatives with public agencies and private and nonprofit groups that expand urban agriculture throughout Alameda, including school district(s), neighborhood groups, senior centers, businesses, and civic and gardening organizations. Ongoing and long-term opportunities to communicate and collaborate will support the implementation of this plan.

(Endnotes)

1 Available online at: www.phlpnet.org/childhood-obesity/products/urban-ag-toolkit

2 The 1991 General Plan Open Space and Conservation Element briefly mentions community gardens: "explore interest in public and privately owned sites available for community gardens."

3 Cal. Food & Agr. Code § 47030; Cal. Food & Agr. Code § 47050; Cal. Health & Safety Code §§ 113778.2, 114375(c)(3). For more information, see PHLP's fact sheet, "California Certified Farmers' Markets and Farm Stands: A Close Look at State Law." *Available at:* http://www.phlpnet.org/phlp/products/ca-certified-farmers-mrkts-farm-stands

4 San Francisco, CA Planning Code § 102.35.

5 Seattle, WA Municipal Code § 23.42.051

6 Cleveland, Ohio Zoning Code § 336.

7 Kansas City, Mo. Zoning and Devel. Code § 88-312-02.

8 Available online at: www.phlpnet.org/childhood-obesity/products/urban-ag-toolkit

9 Seattle, Wash. Municipal Code § 23.42.052.

10 Cleveland, Ohio Zoning Code Title VII §§ 337.23 (2010); Seattle, Wash. Municipal Code § 23.42.052 (2010).

11 Available online at: www.phlpnet.org/childhood-obesity/products/urban-ag-toolkit

12 More information on Humane Farm Animal Care standards is available at: www.certifiedhumane.org.

13 More information on Animal Welfare Approved Standards is available at: www.animalwelfareapproved.org/standards.

14 Vancouver, British Columbia, Can. Animal Control By-Law No. 9150, § 7.16 (2010). Available at: http://vancouver.ca/bylaws/9150c.PDF.

15 More information available at: http://urbanadamah.org/the-farm

16 More information available at: www.hayesvalleyfarm.com/faq.html

17 More information available at: www.cityofboston.gov/news/default.aspx?id=5188

18 More information available at:www.baltimoresustainability.org/media/newsDetail.aspx?id=174

19 More information available at: http://neighborhoodprogress.org/uploaded_pics/FINAL%20ReImagCleveGrant%20Guidelines%20and%20Application_file_1244815791.pdf

20 Available online here: www.nplanonline.org/nplan/products/CommunityGardenToolkit

21 California Government Code §66477(f): Park and recreation purposes shall include land and facilities for the activity of "recreational community gardening," which activity consists of the cultivation by persons other than, or in addition to, the owner of the land, of plant material not for sale.

22 To see a copy of Coachella's ordinance, visit: http://www.coachella.org/documentView.aspx?DID=748

23 More information about Lettuce Link can be found at: www.solid-ground.org/Programs/Nutrition/Lettuce/Pages/default.aspx.

24 More information about the Pierce County Gleaning Project can be found at: www.piercecountygleaningproject.org/home.

25 More information on the Rigler Community Garden is available at: www.portlandonline.com/parks/finder/index.cfm?action=ViewPark&PropertyID=1261.

Chapter 4: Guidelines

Urban Agriculture Design Guidelines

Despite the gardener's best intentions, Nature will improvise. ~Michael P. Garafalo

The goals of urban agriculture vary from producing high crop yields, building community, and providing tangible nature experiences, to imparting neighborhood beautification. While design strategies for urban agriculture projects will vary depending on project goals and site conditions, there are some design considerations that are essential for all urban agriculture projects. The purpose of this chapter is to (1) outline possible operating and management models that can be used in different urban agricultural projects, (2) provide appropriate design consideration recommendations for urban agriculture in Alameda, and (3) ensure that the management and design of urban agriculture projects provides maximum benefit for the community.

After outlining possible operating models, design considerations that apply to all urban agriculture projects are identified in Section II, followed by specific recommendations for community gardens, urban farms, school gardens, and edible street-side plantings. An overview of design considerations for these four types of urban agriculture is provided in Table 4-2. The specific recommendations in the following pages include guidelines for site selection and garden/farm layout and design. Guidelines are intended to provide guidance, rather than prescriptive rules, for the development of urban farms and gardens. Consistent with policies in Chapter 3, it is assumed that urban agriculture projects on public land will utilize organic and sustainable farming practices; urban agriculture on private land is strongly encouraged to follow these practices.

Operating and Management Models for Urban Agriculture Projects

As discussed in Chapter 3: Recommendations for Policy & Programs, there are several primary operating models used by urban agriculture programs. Selecting an operating model should be done considering available resources, partnerships, and the purpose of the activity. The City may choose to employ one or more operating models for promoting urban agriculture, as circumstances dictate. Key elements of each model are illustrated in Table 4-1.

Note that hybrid operating models may be used (such as a model where the City enters into a joint use agreement with a public agency to use available land for urban agriculture purposes, and then sub-leases the land to a community group or non-profit). For more on funding and financing sources available under each model, see Chapter 5: Funding and Financing Models and Resources.

Design Considerations for all Urban Agriculture Projects

Design considerations that are relevant to all urban agriculture projects are described below.

1. **Site Selection and Garden Organization**
   - **Sunlight**. Vegetables need at least six hours of full sun a day during the growing season. At least 50% of a site should receive 6 hours of sunlight a day. When evaluating sun exposure, consider different seasons and different times of day. Shaded areas of a garden site may not be good for growing food, but can be excellent places for gathering, resting, storage, cooking, reading and other garden activities.

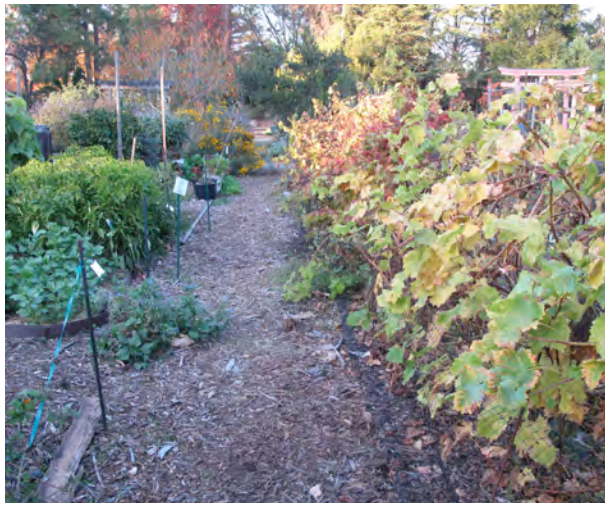


Table 4-1: **Overview of Design Components**

Management Model	Intended Users	Manager	Who Pays for Development?	Who Pays for Operations?
A: Privately-operated on public land	Residents; participants in specific community groups/organizations	Non-profit or community group, through lease or agreement with public agency	City or non-profit or community group	Non-profit or community group
B: Jointly-operated on public land	Residents and/or specific groups (e.g., school children)	Jointly managed by two or more agencies through a joint use agreement	Shared costs; depends on terms of joint use agreement	Shared costs; depends on terms of joint use agreement
C: Privately operated on private land	Residents of a specific development; participants in specific community groups/ organizations	Land trust; home owners association; non-profit	Land trust; private developer; non-profit	Land trust; home owners association; non-profit

*Organizations are typically non-profit groups, such as "friends of" groups or larger entities.

- **Soil health/contamination**. Soil health can generally be built over time through various strategies, such as compost or fish-bone meal application. However, it can be difficult to treat soils that contain lead and other contaminants. Since many opportunity sites have a high potential for contamination, soil should be tested for lead prior to planting. If contaminant levels are found, remediation may be necessary. Depending on the type of contamination, raised beds with imported soil may be used to grow dwarf trees and seasonal crops. The Environmental Protection Agency provides guidance on soil testing and remediation in *Brownfields and Urban Agriculture: Interim Guidelines for Safe Urban Agriculture*; this document should be referred to when initating a garden or farm project (Please see http://www.epa.gov/swerosps/bf/urbanag/pdf/bf_urban_ag.pdf).
- **Access**. For any site, it is necessary that appropriate visual and physical access can be established. Key considerations related to access include: proximity to populated areas; safe pedestrian, vehicular and equipment access; visibility in relation to safety, educational opportunities, and wayfinding; and Americans with Disabilities Act (ADA) accessibility.

  ADA routes and entrances to facilities must be accessable as established by the ADA Standards for Accessible Design or the Uniform Federal Accessibility Standards. Accessible routes must be of sufficient width so that wheelchair users can navigate between garden components (garden beds or plots). Raised beds that allow wheelchairs to pull up should also be provided.
- **Utilities**. It is important to know the location of infrastructure when selecting and locating plants. Infrastructure maintenance needs and access for utility companies must also be considered.
- **Neighborhood Context**. All urban agriculture projects should contribute positively to the aesthetics and health of the neighborhoods where they are sited. Projects should incorporate perennial crops, establish aesthetically-pleasing buffer plantings, contribute to urban greening efforts, and be identified by signage that is both friendly and professional in appearance.

2. Planting

- Plants that will conflict with above- and below-ground utilities or are hazardous to human safety (such as being toxic or extremely sharp) should be avoided.
- Plants should not overhang roads or walkways.
- Landscape buffers should be comprised of diverse, multi-benefit plants that attract insects, mammals, reptiles, and birds that benefit crops, such as pollinators, and contribute to agriculture and year-round appearance. (See discussion of buffers below)
- Diverse crops should be planted where possible.
- When planting trees, future size and related impacts, such as shade, should be considered. Trees should only be planted on sites for which tenure is guaranteed.
- When including orchard plantings, trees should be planted in a grid-like planting with adequate space to allow at least 5 feet between trees when they reach desired canopy width. Fencing for orchards should be determined based on management scenario.

Figure 4-1: **Examples of Building Material**

Garden Beds


In-ground


Concrete


Wood


Stone

Trails


Mulch


Decomposed Granite


Grass


Concrete

Gates/Fencing


Entry Gate


Entry Gate


Chainlink


Steel

3. Building Materials

General guidelines for building materials are provided below; Figure X illustrates a few of the many material options for raised beds, trails, and gates and fencing.

- Materials that are known to contaminate soil or to be harmful to human health, such as pressure-treated wood, should be not be used in raised beds or other places that may come in contact with human hands or soil where food will be grown.
- Use recycled materials and/or found materials where possible, when it is known that they are non-contaminating.
- Raised beds should be built with concrete, stone or long-lasting wood like redwood, cedar or other non-treated hardwood. Pressure-treated wood should not be used.
- Garden trails should be firm and stable, and established using decomposed granite, compacted soil, woodchips, or grass. Impermeable surfacing, such as concrete or asphalt, should be utilized where necessary to provide accessible access.
- Roads should be unpaved with compacted base materials.

4. Buffers

Buffers, or separations between different areas, improve the relationship between urban agriculture projects and adjacent uses. In some cases, buffers are intended to protect urban agriculture from outside areas, such as roads or commercial areas. In other cases, buffers protect other uses (especially residential areas) from the noise and activities associated with agriculture. Buffers may also be established within an urban agriculture project, especially when a project includes both public and private uses. For instance, an urban farm may include buffers between public trails and the individual plots of farmers.

Buffers should be designed to provide as many benefits as possible. Hedgerows, linear grouping of trees and shrubs planted along the edge of fields, are one type of multi-beneficial planted buffer that is often used in agricultural areas. For instance, hedgerows can create habitat, prevent top soil loss, improve water retention, and filter surface runoff. Planting hedgerows with diverse, native plants, including grasses, perennials, shrubs and trees, will help to attract beneficial insects, mammals, reptiles and birds that are beneficial to agricultural activities. Fences, trails, swales and other features may be included as well, depending on what uses are being buffered.

The width of a buffer depends upon the type of agriculture and the adjacent use, and therefore are addressed for each urban agriculture type separately.

5. Animals

Animals can make many great contributions to gardens and farms. In addition to bringing new liveliness to a garden or farm, animals can enhance the soil, provide food (such as dairy products, eggs, and honey), and offer excellent learning opportunities. Prior to incorporating animals into a garden or farm, it is essential to make sure that there is a dependable management system for ensuring that the animals are cared for and to make certain that the animal species selected is a good fit for the site. For most projects, small animals like chickens or bees are the most feasible to manage. Other animals may be considered based upon the experience and interest of participants and the site characteristics. Once the program and management for the animals have been established, the following guidelines can help inform the design of animal areas:

- Animal areas must comply with City and County regulations. Please see Chapter 3, Recommendations for Policies & Programs, for recommendations regarding livestock. Buffers should be provided between animal areas and adjacent land uses as well as internal growing areas to reduce conflicts related to soil contamination, noise, smell, and other hazards (such as stinging bees). Buffers of 5- to 25- feet are generally adequate, depending on the type of animal and associated noise, smell, and hazards. Buffers may also be necessary between growing areas and animal areas.

- Animals should be sited in locations that meet the requirements of the particular species and ensure animal comfort. Site conditions to consider include area size, sun exposure, shade, grade (steep or flat), and visibility. Most animals will do best when they have a protected place to retreat from the hustle and bustle of surrounding activities.
- For additional recommendations regarding the incorporation of beehives and chicken coops into a project, please refer to *Seeding the City: Land Use Policies to Promote Urban Agriculture*, available online at: http://www.nplanonline.org/sites/phlpnet.org/files/Urban_Ag_SeedingTheCity_FINAL_20111021.pdf.

Table 4-2: **Overview of Design Components**

	Community Garden	School Garden	Urban Farm
Purpose	Small scale production for home consumption; education; community building	Education; small scale production; supplement cafeteria offerings	Small to mid-scale production; typically entrepreneurial
Operational Model (Refer to Table 4-1)	A, B, C	A, B, C	A, C
Size	1/8 to 1 acre	1/8 acre minimum	1 acre minimum
Garden Features	Individual plots Accessible plots Storage shed Tables and benches Compost area Gathering area Greenhouse/seed frame	Group/class plots Accessible plots Storage shed Tables and benches Compost area Outdoor classroom/gathering area Kitchen area	Planting areas Compost Maintenance area/ corporation yard Public access feature such as trails or viewing points Gathering area (optional) Farm stand (optional)
Circulation	Foot trails Limited maintenance vehicle access (10 foot wide) ADA accessible trails (5 foot wide)	Foot trails ADA accessible trails (5 foot wide)	Farm maintenance roads (12 foot wide) May include pedestrian and multi-use trails
Utilities	Drip irrigation and hose bibs Portable toilets Waste and recycling receptacles	Drip irrigation and hose bibs Gas and/or electrical (if kitchen) Use schoool toilets or include portable restroom	Drip irrigation and hose bibs Electrical connections Permanent or portable toilets
Parking	Near garden; one space for every 5 plots	Use school parking	Staging area for farm equipment Parking for farmers/staff and visitors
Signage	Garden identification Contact information Garden rules Message board	Garden identification Contact information Educational signage Garden rules	Garden identification Contact information Educational signage (optional)

*Organizations are typically non-profit groups, such as “friends of” groups or larger entities.

Community Gardens

The greatest gift of the garden is the restoration of the five senses. ~Hanna Rion

Community gardens are places for growing food as well as community. This section provides guidance for selecting community garden sites and designing the garden.

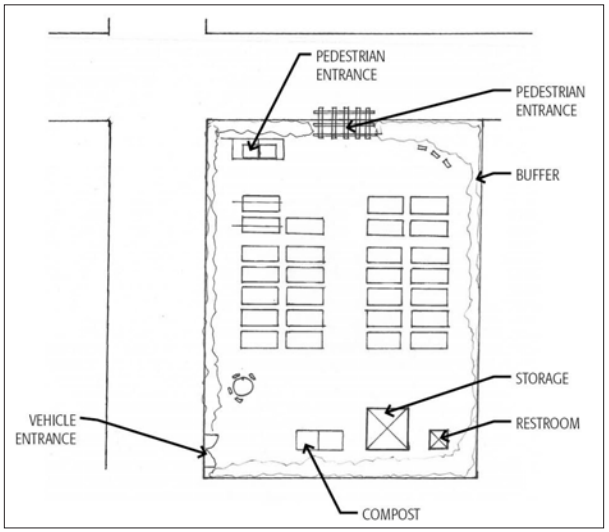
1. Site Requirements

The ideal size for a community garden is between one-eighth (1/8) and one acre. While smaller and larger gardens can also be feasible, it can be challenging to provide enough individual beds and shared spaces in small gardens, and challenging to coordinate and maintain larger gardens. Smaller sites might be better suited for communal gardening rather than for plot-based gardening. Creative design, excellent programming, and dependable human resources can make such sites successful. Gardens in the ideal range (1/8 to 1 acre) are favorable because they can host a viable population of gardeners while being relatively easy to manage and coordinate.

Other basic requirements of a community garden site are access to a road on at least one side, and adequate solar access. Solar access should be sufficient without the removal of existing trees or structures, unless trees and structures need to be removed for other reasons. Community gardens should also be located in proximity to the community members that will be involved in the garden.

2. Layout and Design Guidelines

Guidelines for the layout and design of a community garden site are provided in Table 4-3. Refer also Chapters 6 and 7 for additional examples.



Community Garden prototype

Table 4-3: **Community Garden Features**

Feature	Layout and Design Guidelines
Plots	• Provide at least 15 plots per garden; at least 3 of which should be raised beds that are accessible to wheel chairs. • Individual plots should be at least 20 square feet and no larger than 200 square feet. • Plots may be grouped to save space, providing that each plot is accessible by a trail. Raised beds should be grouped in groups of four or less. • Plots/raised beds that are not intended to be walked in should be 5 feet wide or narrower so that they can be tended from the sides. Length may vary. • Raised beds should be 8- to 36-inches high; wheel-chair accessible raised beds should be 2 feet tall and 30 inches wide for access from one side or 60 inches wide to be accessible from all sides, in at least some portion of the garden; and raised beds that will be tended from standing gardeners should be 3 feet tall. The latter type of bed is desirable by individuals for which sitting or kneeling is uncomfortable.
Trails and Roads	• Trails that access plots should be at least 2 feet wide; access to wheelchair accessible raised beds and associated uses shall be a minimum of 5 feet wide. • Trails that provide access to group areas should be at least 5 feet wide. • Vehicular roads should be 10 feet wide, and should be limited to that which is necessary for material loading/unloading by authorized vehicles. Vehicular roads may double as gathering space when not in use. • Materials for trails can include dirt, mowed grass, concrete, or decomposed granite.
Shared Spaces	• Shared spaces, at a minimum, should include a gathering space, composting area, and storage area. Shared spaces should be visible and easily accessible. Kitchen areas, potting areas, and other shared spaces may also be included. • Gathering spaces should include at least one space that is at least 400 square feet, and several smaller (50 square feet) spaces with seating. The size and number of gathering areas should be determined based on number of plots and garden size. • Composting areas should be at least 100 square feet, and provide adequate space for composting bins, spinners, or other selected system. Gardens greater than a half acre may include multiple composting areas to improve access. • A shed for shared tools should be provided; a 10 foot x 10 foot shed is ideal for most gardens.

Table 4-3 (continued): **Community Garden Features**

Feature	Layout and Design Guidelines
Fencing/Security	• 6-to 8-foot tall fencing should be placed around site (unless other physical barriers are present). Chainlink fence should not be used on street-facing sides of the garden. • One to two entrance gates should be provided; gates should be at least 4 feet wide, and at least one gate should be able to open 12 feet to accommodate vehicles when necessary. • Main entrance should be inviting and well marked. • Locks should be provided on all gates and on storage shed. • Any night time lighting should be dark-sky approved and/or directed downward to reduce light contamination.
Setbacks and Buffers	• Garden plots should be located at least 10 feet from the edge of the parcel and 10 feet from the entrance. • Compost area should be 10 feet from growing areas. • Vegetated buffers should be established between busy streets and gardens. Orchard planting may be used as a buffer. • Bathrooms, if provided, should be located at least 15 feet from garden beds.
Materials and Furnishings	• Recycling and garbage receptacles should be provided in a visible location, preferably near entrance. • Provide chairs, benches or other seating close to gathering areas and in shaded areas. • Consider providing potting tables/work tables.
Utilities	• Provide hose bibs at each plot or plot grouping. • Electricity should be available at main gathering area and near storage.
Parking	• One parking space for every five plots should be provided. • Parking may be accomodated by on-street parking, depending on the site and neighborhood context. • If off-street parking is provided, the parking area should be clearly signed. • If all visitors/gardeners live in very close proximity to garden, less parking may be required.
Signage	• Locational signage should be provided at entrance and key features. • Signage should provide garden rules and contact information.

Urban Farms

While urban farms share many functions and requirements with community gardens, they are generally distinguishable from community gardens by their purpose and size. Community gardens typically support small-scale gardening efforts geared towards personal consumption. Urban farms, as the word "farm" suggests, are larger in scale and are entrepreneurial in nature, usually focused on generating income, producing food, animal feed, or material crops.

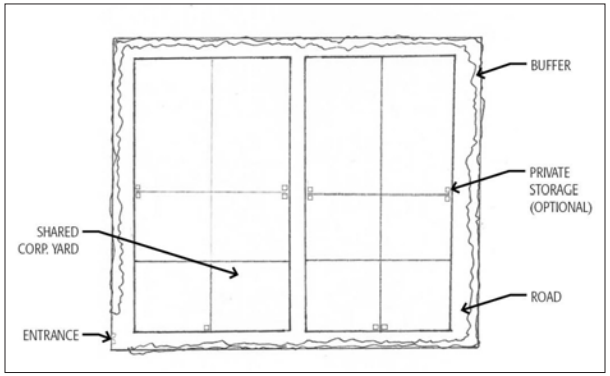
1. Site Requirements

Urban farms do not necessarily need to be located in close proximity to a large residential population, as is preferable for community gardens. On the contrary, urban farms can be located in any area of the City as long as it meets basic requirements. The quality of on-site soil is a key consideration for urban farms, since raised beds and imported soil are likely to be cost prohibitive at the farm scale. Soil can be enhanced over time, but if conditions are prohibitive to growing crops, alternative sites should be considered. Other basic requirements include adequate solar access and the availability of at least an acre of land that is not covered by a building.

An urban farm may be operated solely by one individual or organization, or may be subdivided and farmed by two or more tenants. In the latter case, one entity typically manages the farm and shared facilities may be established.

2. Layout and Design Guidelines

Guidelines for the layout and design of an urban farm site are provided in Table 4-4. As suggested by the guidelines, it is wise to design for flexibility as farmer preferences, crop type, and even the size of plots may vary over time.



Urban farm prototype

Table 4-4: **Urban Farm Features**

Feature	Layout and Design Guidelines
Common Areas and Shared Facilities	The type and quantity of common areas and facilities will vary depending on the number of farmers and the type of management system, but may include: • Protected storage • Restroom • Composting area • Farm stand • Corporation yard (shared equipment storage, bathroom, etc.) Public access features such as trails and demonstration gardens may also be included.
Plots	• The farm may be managed as one farm, or subdivided into plots. • Plots should be at least 1/8 acre and accessible by a farm road. • Plots may include small storage sheds for equipment and supplies that will not be kept in larger corporation yard. Sheds should not exceed 100 square feet.
Structures	• Greenhouse and/or hoop house • Storage sheds • Chicken coop
Trails and Roads	• Farm roads should be 12 feet wide. • Public trails, where provided, should be 5 feet wide for pedestrian-only use and 10-to 12-feet for multiple uses.
Fencing/Security	• 6-to 8-foot tall security fencing should be placed around site (unless other physical barriers are present), and should separate public trails from farmed areas. • Gates should be at least 20 feet wide and locking. • Locks should be provided on all gates and on storage shed. • Any night time lighting should be dark-sky approved and/or directed downward to reduce light contamination
Setbacks and Buffers	• Growing areas should be set back at least 25 feet from active recreation areas and residential uses, and 10 feet from passive recreation areas. • Buffers between different plots should be approximately 10 feet wide. • Urban farms that include public access features, such as trails and demonstration areas, will require internal buffers between public and private areas.

Table 4-4 (continued): **Urban Farm Features**

Feature	Layout and Design Guidelines
Utilities	• Irrigation systems should be flexible to allow for changes in plot size over time. • Electrical connections should be provided as needed for irrigation, lighting, cold storage or other features.
Parking	• The number of parking spaces provided should be determined based on the number visitors/ workers expected. At least five on-site parking spaces should be provided, with additional parking for farms that include multiple tenants and/or public access features.
Signage	• Identification signage should be placed on at least one side of the farm, facing major roads or public points of interest. • Internal signage should be used as necessary to ensure visibility of farm rules and safety protocols, and to demarcate shared and private areas and facilities.

School Gardens

My garden is my favorite teacher.
~Betsy Cañas Garmon

Why try to explain miracles to your kids when you can just have them plant a garden.
~Robert Brault

1. Site Requirements

The characteristics of a school garden site can vary as much as the students that learn and grow in them. The size, organization, and features included in a school garden should be determined based upon available space, age and size of the student population, and the ability to maintain the garden and its features over time. For instance, large gardens and features like kitchens may be overwhelming to maintain without a strong management plan, committed individuals, and/or funding. School gardens can be as small as 100 square feet, if that is all the space that is available, or as big as one acre.

All school gardens should provide opportunities for experimentation, collaboration, and growth. To facilitate these goals, school garden sites should be safe, with adequate protection from roads, good visibility, and security fencing. Like all gardens, school gardens should have good solar access. School gardens should be far enough from classrooms to ensure that garden activities do not disturb class activities, yet close enough to provide a good connection between classroom and garden activities and to ensure ease of use.

If a school garden will double as a community garden, the guidelines provided in Section B, Community Gardens, should also be considered.

2. Layout and Design Guidelines

Guidelines for the layout and design of a school garden site are provided on the following page in Table 4-5.

The physical organization of the garden will depend largely on how it is managed and used by parents, teachers and students. Options for garden organization include:

1) Provide a planting area or bed for each classroom or age group to use as they choose.
2) Provide a planting area or bed for each classroom or age group and assign crops for each group to be responsible for (students go through multiple crops as they move through grades).
3) Manage the garden as one garden, with students helping throughout the garden depending on what is needed in the garden and/or the curriculum they are working on. In this scenario, portions of the garden may be left fallow. This system works best if there is a dedicated garden instructor/ manager.

Table 4-5: **School Garden Features**

Feature	Layout and Design Guidelines
Garden Spaces	• Provide enough raised, accessible beds for at least ten students to access at a time (more may be necessary depending on student population). • Provide in-ground beds if possible given the site and soil conditions. • Beds that will not be stepped-in should be 3 feet wide so children can reach from either side. • Consider inclusion of a greenhouse. • Consider inclusion of theme gardens, such as butterfly gardens, flower gardens, pumpkin patches, and heritage gardens. • If space permits, consider establishing a school orchard. An orchard requires a long term commitment, but less day-to-day maintenance once established.
Other Spaces	• Provide a range of small and larger gathering areas, ranging from approximately 40 square feet to 500 square feet. These areas should be shaded. • Consider inclusion of a kitchen area. • Compost area should be 15 feet from growing areas, and at least 100 square feet in size • A locking storage area for tools, lesson props and other materials should be located within the garden or in close proximity to the garden. Storage area/sheds should be 50 square feet in size where possible.
Trails	• All plots should be accessible by trails that are at least 2 feet wide. • Group areas and accessible plots must be accessible by trails at least 5 feet wide. • Accessible routes must be of sufficient width so that wheelchair users can navigate between garden components (garden beds or plots). Trail width minimum of 36 inches with 5 foot wide turn around space. ADA accessible raised beds or plots should be about two feet high and 30 inches wide for access from one side or 60 inches wide to be accessible from all sides, in at least some portion of the garden.
Buffers	• Garden plots should be located at least 10 feet from the edge of school property and 10 feet from classrooms,s unless gardens are classroom-specific. • Low, vegetated buffers should be provided between garden plots and other parts of the campus. Buffers should be at least 3 feet wide. • Security fencing should be provided between the garden and non-school properties or roads. When possible, vegetated buffers should also be provided.

Table 4-5 (continued): **School Garden Features**

Feature	Layout and Design Guidelines
Materials and Furnishings	• Provide potting tables/work tables. • Provide trash and recycling receptacles. • Provide seating for adults and children.
Utilities	• Provide hose bibs and consider establishing flexible irrigation systems. Drip, overhead or hand-watering systems can all be effective. However, hand watering may pose a challenge over school holidays and vacations. • Provide electrical connections if required for kitchen, lighting, or other garden features.
Signage	• Identification signage should be provided at the garden entrance. Signage should appeal to student groups who will use the garden, and could be designed by students. • Signage should provide garden rules and contact information. • Education signage should be provided throughout the garden, including at compost area and other key features. Signage labeling crops should be provided where possible.

Chapter 5: Funding & Financing Models and Resources for Community Gardens and Urban Farms

Financing new urban agriculture projects, like other kinds of urban investment, can be complex and require multiple sources of funding and partnerships. And, different types of funding and financing sources may be more useful for different projects. In order to provide a clear framework for understanding possible funding and financing sources, this section is divided into three general urban agriculture operating models:

A. Privately-operated on public land

B. Jointly-operated (multiple public agencies) on public land

C. Privately-operated on private land

These three models broadly represent the different options that cities can use to promote and expand urban agriculture. However, it is also important to note that hybrids of these models frequently exist, and the general principle of creativity and leveraging resources is often found in successful real-life cases. Here, examples of cities that have used specific funding strategies are highlighted for each operating model, followed by a more in-depth discussion of each particular funding source. More detailed information about cited funding resources can be found in Appendix A.

A. Privately Operated Urban Agriculture on Public Land

A second operating model is to lease public land to private organizations – either non-profit or for-profit – specifically for the development and operation of community gardens and urban farms. This option is less time and resource intensive for the City, and it also builds on the existing capacity of local food and agriculture organizations who already have a wealth of expertise in creating and managing gardens, running farmers' markets, and educating local residents in farming and marketing skills. As outlined in the Existing Conditions report, there are a number of non-profit organizations in Alameda that already engage in urban agriculture but desire additional growing space. These include the Alameda Point Collaborative, the Alameda Food Bank, Alameda County Cooperative Extension, and Alameda Backyard Growers. These organizations are strong potential partners in developing and managing gardens throughout Alameda.

*The **Sunol Ag Park** in **Sunol, CA** provides a model for creating a privately operated urban farm on public land. This 18 acre urban edge farm is owned by the San Francisco Public Utilities Commission (SFPUC) and leased to a non-profit organization called Sustainable Agriculture Education (SAGE). SAGE in turn sub-leases the land to four private farming operations. Farm tenants share infrastructure, information, and equipment and pay license fees and water costs. For more information on the Sunol Ag Park, visit: www.sagecenter.org/sunol-agpark/overview/*

***Growing Power in Milwaukee, WI** operates a number of urban farms and community gardens throughout inner-city and greater Milwaukee. One of their community garden sites, the Maple Tree School and Community Garden, was leased from the City for 20 years as a community garden and educational resource for the*

students and families of the adjacent Maple School. The garden has been the basis for an innovative community-school agriculture partnership, resulting in over 1,000 feet of raised garden beds, stipends for local youth, and collaboration between students, families, and local colleges. For more information on Growing Power, visit: www.growingpower.org/milwaukee_projects.htm

***Boston's Natural Areas Network** is a non-profit organization dedicated to acquiring, preserving, and managing open spaces in Boston, including protecting land for community gardens. Since 1982, BNAN has secured ownership of 43 gardens and provides technical and organizational support, programming, and equipment to more than 150 public and privately managed gardens throughout the city. BNAN also coordinates events and activities between all of Boston's 250 community gardens. For more information on BNAN, visit: www.bostonnatural.org/aboutus.htm*

Federal Funds for Community Development Projects

Federal grants for local municipalities for community development projects can be used for the creation of urban farms and gardens. In particular, the **Community Development Block Grant (CDBG)** program and the **Section 108 Loan Guarantee** are potential resources for garden projects.

Several cities have used CDBG funding for urban agriculture, including **Madison, WI, Cleveland, OH, Boston, MA,** and **Hartford, CT. Green City Growers Cooperative** in **Cleveland, OH** has also utilized a HUD Section 108 Loan Guarantee for the development of a large hydroponic greenhouse.

- The **Community Development Block Grants** program is one of the longest-running federal programs offered by HUD to local municipalities for the development of community resources and infrastructure to benefit low and moderate-income populations. Projects funded by CDBG can be flexible based on local needs, but they must benefit low- and moderate-income persons, contribute to the prevention or elimination of slums or blight, or address urgent community health and welfare needs for which no other funding is available. *For more information, visit:* http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/entitlement

Federal Funds for Brownfields Redevelopment

The Alameda Belt Line properties has a history of industrial uses and will likely require substantial cleanup in order to be converted into safe food growing sites. The **EPA Brownfields** grant program can be used to support planning, cleanup, and development activities on contaminated and former industrial land, including for community garden projects. **HUD Brownfields Economic Development Initiative (BEDI)** grants can also be used to support community garden projects on brownfields sites.

*Several cities have utilized Brownfields funding for urban agriculture. The **Capitol Area Development Authority in Sacramento, CA** received a Brownfields Cleanup grant in 2006 to remediate and replenish contaminated soil in a historic community garden in the Fremont district. The **City of Somerville, MA** used a Brownfields Cleanup grant in 2007 to redevelop an abandoned residential lot on Allen Street into an abundant community garden. **Green City Growers Cooperative** and the city of **Cleveland, OH** have utilized a HUD BEDI grant along with a Section 108 Loan to remediate a Brownfields site for the development of a hydroponic greenhouse in the center of the city. For more information on Green City Growers Cooperative, visit: www.evergreencoop.com/index.html*

***Hartford, CT**, is one example of a city that has utilized both Brownfields and CDBG funding for urban agriculture. After receiving a $60,000 Brownfields assessment grant to conduct preliminary environmental assessments of an abandoned lot next to a school, the City discovered high levels of lead contamination in the soil, meriting a large remediation effort in order to prepare the land for use as a garden. Using a combination of private foundation grants, City funds, and a federal CDBG grant, Hartford was able to turn local residents' dreams of a garden into reality. For more information on Hartford's Chestnut/Edwards community garden, visit: www.epa.gov/brownfields/success/hartford.pdf*

For more information on using Brownfields funding for urban agriculture, visit: www.epa.gov/brownfields/success/local_ag.pdf

- **The Brownfields Assessment, Cleanup, and Revolving Loan Fund (RLF) Grants** offered by the U.S. Environmental Protection Agency (EPA) are an excellent potential funding stream for creating community gardens on Brownfields sites. Government can apply for all three grant types; non-profit organizations can apply for cleanup and RLF grants only. *For more information on the EPA's Brownfields program, including what constitutes a "Brownfields" site, visit*: www.epa.gov/swerosps/bf/applicat.htm

- **The Brownfields Economic Development Initiative (BEDI)** offered by the U.S. Dept of Housing and Urban Development (HUD) is another potential resource for converting Brownfields to community gardens. BEDI funds are only available to Section 108 Loan guarantee recipients, and are used to enhance the viability of large economic development projects on Brownfields sites. *For more information on BEDI grants, visit:* http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/BEDI

Other State and Federal Funding Sources

- **Federal Land and Water Conservation Funds** administered by CA Department of Parks and Recreation can be used to reimburse acquisition and development costs for outdoor recreation areas and facilities. Cities and counties can apply for matching reimbursement funding (covering 50% of project costs). *For more information, see:* www.parks.ca.gov/default.asp?Page_id=21360

Taxes, Fees, and Bonds for Open Space

A number of state and local policies can be leveraged to fund the development and maintenance of urban gardens. These include **developer fee requirements**, the **Quimby Act**, and **Prop 84**.

***Encinitas, CA** has leveraged developer fee requirements for the acquisition of land for an urban farm project. The School district was given a plot of land from the developer of a large residential project adjacent to a school in lieu of fees.*

*The City of **Coachella, CA** has enacted an ordinance leveraging the Quimby Act that requires residential developers to dedicate 3 acres of land per 1,000 residents of a new subdivision. The ordinance also explicitly defines community gardens as an open space and recreational use. To see Coachella's ordinance, visit: www.coachella.org/documentView.aspx?DID=748*

*The City of **Richmond, CA** approved the use of impact fees from the West Contra Costa Sanitary Landfill Bulk Materials Processing Center to pay for the establishment of community gardens on vacant lots throughout North Richmond. The City partnered with Urban Tilth, a Richmond-based non-profit urban agriculture organization, to implement and manage the gardens. For more information, visit: www.urbantilth.org/*

***City Slicker Farms**, a community-based non-profit in **Oakland, CA** applied for and was awarded $4 million in Prop 84 funds in 2010 for the development of a new 1.4 acre urban farm in West Oakland. For more information on City Slicker Farms, visit: www.cityslickerfarms.org/*

- **The Quimby Act** was passed in 1975 to authorize local governments in CA to require residential developers to contribute a portion of their land or pay in-lieu fees for the improvement and expansion of open spaces. Cities can pass local ordinances that leverage the Quimby Act and explicitly allow green space to be used as community gardens. The formula to calculate a proposed development's requirement under the Quimby Act is: (persons per household) X (number of units in development) X (3 to 5 acres per 1,000 residents). Estimates for "Person's per household" can be found in the Housing Element of a City or County's General Plan or via the census website, available at: www.census.gov. Specific acreage requirements will be determined by local ordinance. If the developer dedicates fees, these can be used to create gardens on public land.

- **The Mitigation Fee Act** was passed in CA to allow local cities or counties to collect "impact fees" or "developer fees" from developers to compensate for the environmental, infrastructure, or resource costs incurred by new development projects. These fees are then allocated to public facilities and improvement projects that directly compensate for any negative consequences of the project from which fees were drawn.

- **Prop 84** is a California bond initiative passed in 2006 that authorized $5.4 billion in general obligation bonds to fund safe drinking water, water quality and supply, flood control, waterway and natural resource protection, water pollution and contamination control, state and local park improvements, public access to natural resources, and water conservation efforts. $368 million of the Prop 84 funds have been dedicated to the Statewide Park Program, which funds new parks and green spaces in underserved communities.

See Appendix A for more details on public funding sources for urban agriculture.

Private Funding Sources

Partnering with private organizations can be an effective way to develop and maintain gardens once land has been acquired. See section (B) below on privately operated gardens on public land. Additional private sources of funding include:

- **Fee-based Revenues** from gardeners are another way that cities can generate funding for municipal gardens. However, because participation in a garden may vary over time, and because high user fees could discourage people from participating, this should not be used a primary fundraising strategy. Small plot fees could be solicited as a supplement to existing funding sources in order for gardeners to "buy-in" to the garden and contribute to basic maintenance and supply costs.

See Appendix A for additional private funding sources for urban agriculture.

Special Considerations

The cost of staffing a municipal garden program can be substantial – although many cities use part of one or more staff to cover community garden management, rather than hiring new staff who are solely dedicated to gardens. Prioritization in the City's Parks and Recreation budget is required to provide adequate staffing levels.

Funding Sources for Privately Operated Gardens on Public Land

If the City chooses to partner with a private organization to fund the development of garden infrastructure, the grants discussed above are all applicable. However, if the private organization leasing the land is solely responsible for developing gardens, there are a number of grants available exclusively to non-profits for community gardens and urban farm projects.

Federal Funding Sources for Privately Operated Gardens

The most promising federal grant programs for private operation of community gardens are the USDA's Community Food Projects Competitive Grants program, the Beginning Farmer and Rancher Development Program, and the Specialty Crops Block Grant Program (these funding sources are dependent on passage of the 2012 US Farm Bill).

*Alameda's own **Alameda Point Collaborative (APC)** utilized a Community Food Projects grant in 2007 for a youth development project involving the expansion of its garden and CSA program for the supportive housing community. For more information on APC, visit: www.apcollaborative.org/GYPSectionfiles/meet_GYP_home%20page.htm*

***San Pasqual Academy's Agriculture Enterprise Program** in **San Diego, CA** received a Community Food Projects grant in 2007 for the expansion of an existing community garden into a self-sustaining urban farm led by foster youth. For more information on San Pasqual Academy's agriculture program, visit: www.sanpasqualacademy.org/integrated_campus_programs.htm*

***Truly Living Well (TLW)** in **Atlanta, GA** received a Beginning Farmer and Rancher Development Program grant to create a training, technical assistance, and mentorship program to support urban farmers and farming operations within Atlanta. For more information on TLW, visit: www.trulylivingwell.com/*

***People's Grocery** in **Oakland, CA** received a Specialty Crops Block Grant for the creation and management of an educational fruit and vegetable garden at the California Hotel, a low-income housing complex in West Oakland. For more information on People's Grocery, visit: www.peoplesgrocery.org*

*The **Central Coast Ag Network** in **San Luis Obispo County, CA** received a Specialty Crops Block Grant to fund acquisition, promotion, and research for the development of a 25 acre urban farm in the City of San Luis Obispo. For more information on the Central Coast Ag Network, visit: www.centralcoastgrown.net*

- The **Community Food Projects Competitive Grants Program**, offered by the U.S. Department of Agriculture (USDA), awards grants to non-profit organizations for the establishment of community gardens, urban farms, farm stands, and job training programs related to farm and market business development.
- The **Beginning Farmer and Rancher Development Program (BFRDP)**, offered by the USDA, funds non-profits for training, outreach, and educational activities related to urban and rural agriculture.
- The **Specialty Crops Block Grant Program,** also offered by the USDA, funds projects that enhance the competitiveness of specialty crops through education, production, research, and promotion. Specialty crops are defined as fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops.

Private Funding Sources for Privately Operated Gardens

See Appendix A for more info on private funding sources for urban agriculture.

Special Considerations

Leases should be sensitive to ensuring long-term use of the land for urban agriculture, unless they are developed with an explicit interim/mobile operations plan. In addition, Requests for Proposals should be crafted to

ensure private operation of gardens aligns with overall vision and goals for urban agriculture in Alameda. More information on resources for developing both Requests for Proposals and leases can be found in Chapter 3: Recommendations for Policy and Programs.

B. Joint Use Agreements for Community Gardens and Urban Farms

Joint Use Agreements (JUA's) are formal agreements that allow two entities (often a school district and a city/county) to share use of public property. JUA's are one way the City could access available land for community gardens without having to pay acquisition costs and also share costs associated with operations and/or maintenance.

In Alameda, a number of schools already have gardens on school property (10 of 27 schools). However, school surveys indicated that maintaining gardens is a challenge because teachers have limited time and students aren't around during the summer to tend to the garden during its most productive season. To address this issue, the City could implement a JUA with schools, or help facilitate a JUA between schools and interested non-profits, to ensure that existing school gardens are made accessible to local communities and that they are actively maintained throughout the year.

*In 1997, the **Milpitas Unified School District and the City of Milpitas, CA** agreed to allow joint use of school property for a community garden. The garden, located on a lot just east of the school, is open to the public 7 days a week, from 8am to Sunset. The JUA outlines the City's responsibilities for construction, operation, maintenance, and liability costs as well as the right of the District to enter the garden at any time. For more information on the Cesar Chavez Community Garden JUA, visit: www.ci.milpitas.ca.gov/_pdfs/council/2010/030210/item_09.pdf*

*The **Portland, OR Parks Department** signed a city-wide joint use agreement with the Portland School District, allowing the city to create gardens without losing existing public green space or needing to purchase new land. To see Portland's JUA, visit: www.portlandonline.com/parks/index.cfm?c=39846*

*The **City of Kingston, NY** has also facilitated joint use agreements with a number of Kingston public schools for joint community and school use of gardens. For more information on Kingston's school and community garden initiatives, visit: www.healthykingston.org/*

Funding Sources for Joint Use of Gardens

While JUA's can share or potentially eliminate land acquisition costs, there are other costs associated with developing and managing gardens that will depend on the particular JUA designation of responsibilities. If the garden will be used by both community members and students, there are a number of grant opportunities that are specifically targeted to school and youth garden projects. For additional info on school garden grant opportunities, see Appendix A.

If the garden will not involve students in the gardening process, then the city will likely have sole responsibility for funding the development and management of the garden.

Special Considerations

Whether the community at-large will benefit from JUA's that give cities access to school gardens depends on the structure of the program.

C. Privately Operated Urban Agriculture on Private Land

Development Standards and Incentives

One way for cities to generate new garden and farm space is by requiring or incentivizing developers to dedicate a portion of their land or revenues to new parks and open space for community use (including use by residents only). This strategy ensures that new development projects contribute, rather than detract, from the overall amount of community garden space within a City. There are a number of ways to encourage developers to create new garden space, including **tax credits, expedited permitting, green development standards**, and **open space requirements**. Note that many of these tools can also be used to expand urban agriculture that is managed publically, depending on the structuring of the ordinance.

The following examples show how cities have leveraged existing law or passed new laws to create more garden space via private development:

Coachella, CA *passed a local ordinance requiring developers to dedicate 3 acres of open space for every 1,000 units of housing within a subdivision. To see Coachella's ordinance, visit: www.coachella.org/documentView.aspx?DID=748*

Seattle's Green Factor *program is a set of landscaping standards for new commercial and residential development that requires developers to meet a minimum "score" based on their inclusion of a host of green elements. Food cultivation is one of the elements. For more information on Seattle's Green Factor, visit: www.seattle.gov/dpd/permits/greenfactor/Overview/*

Cupertino, CA *has designated private recreational or community garden space as one of four optional elements that contribute to a subdivision's open space credit. For more information on Cupertino's open space requirements for subdivisions, see: www.amlegal.com/nxt/gateway.dll/California/cupertino/title19zoning?f=templates$fn=default.htm$3.0$vid=amlegal:cupertino_ca$anc=*

LEED for Neighborhood Design *is a set of independent performance standards created by the U.S. Green Building Council to evaluate the smart growth, green building, and new urbanism elements of new residential, commercial, or mixed-use development projects. In the 2009 rating system, local food production is counted as one (1) point towards the overall LEED score of a project, and neighborhood farms and gardens are one of three possible elements within the food production credit. LEED ND also offers specific density guidelines for community garden space per household. For more information on the LEED for Neighborhood Development rating system, visit: www.usgbc.org/DisplayPage.aspx?CMSPageID=148*

The ***California Tax Credit Allocation Committee (CTCAC)*** *recently designated community gardening as one of the 10 green elements that developers can use to comply with the* ***Low-Income Housing Tax Credit*** *program. For more information on CTCAC, visit: http://www.treasurer.ca.gov/ctcac/.*

Seattle's Priority Green Permitting (PGP) *program gives higher points to projects that demonstrate the capacity to "[p]roduce food on site, physically covering an area equivalent to 10% of site area." For more information on Seattle's PGP program, visit: www.seattle.gov/DPD/Permits/GreenPermitting/Overview/default.asp*

The city of ***Hinesburg, Vermont*** *has proposed density bonuses in residential, non-residential, and mixed use areas for development projects that provide important public spaces and infrastructure, including community gardens. Density bonuses of up to 100% of the district's base density restrictions are available to projects that offer the greatest public benefit.*

Jersey City, NJ *received a grant from the NJ Office of Smart Growth to plan and draft a municipal Transfer of Development Rights (TDR) ordinance. The proposed ordinance would protect community gardens and promote urban agriculture while encouraging development in higher-density pockets of the city. To learn more about the proposed ordinance, visit: www.cityofjerseycity.com/hedc.aspx?id=6876*

Development standards or *requirements* can be created via ordinances or project-specific agreements.

- As discussed above, Alameda can pass an ordinance to leverage the **Quimby Act** to require developers to dedicate a portion of their property to open space areas or dedicate fees for the use of parks and open space.

- **Green development standards** can also be created by city planning departments to require a certain amount of green space, or a certain number of green features, to be included in new development plans.

Development incentives for urban agriculture can take a range of forms in order to encourage developers to include green space in their proposed plans in exchange for benefits or assistance from the City. Specific incentive options include:

- **Tax credits** can be given to developers that include community gardens or rooftop gardens in their proposed projects.

- **Expedited permitting** is another way that the City can incentivize developers to include community garden or food growing space within their proposed projects.

Special Considerations

Ordinances and incentives are a useful long-term strategy to ensure that adequate space for urban gardens and farms will be created via future development. There are limitations to promoting urban agriculture through private development, however, as garden space can only be created when or where new projects happen. In the case of Alameda, half of the high potential opportunity sites identified in the Existing Conditions report were located in public parks, where such development cannot

take place. Furthermore, creating gardens as part of new development projects also means that existing residents will have to "compete" with new residents, employees, or consumers drawn to the neighborhood by new development for use of the gardens. Because resident surveys demonstrated substantial interest in more garden space for its existing population, this strategy should only be pursued in combination with other strategies that create gardens in lieu of other forms of development.

Additionally, development standards and incentives are one way to acquire land for community gardens and urban farms, but additional funding may be needed to develop gardens once the land is made available. See the Appendix A for funding for ongoing maintenance and operations.

Land Trusts

A number of cities have implemented the land trust model in order to protect and preserve land for urban agriculture. Land trusts are private non-profit entities that conserve land for particular uses by acquiring land or conservation easements, and sometimes by stewarding land for particular uses. In the case of urban agriculture, land trusts can purchase conservation easements that ensure long-term use of the land for community gardens regardless of changes in ownership. They can also purchase the land directly in order to protect the land for urban agriculture. Some land trusts are also involved in managing gardens and open spaces that are owned by another entity.

Land trusts are most useful when a city has a high number of vacant land parcels that are either privately owned or tax-delinquent. Because Alameda already owns several properties that have been identified as opportunity sites for urban agriculture, the formation of a land trust may not be necessary.

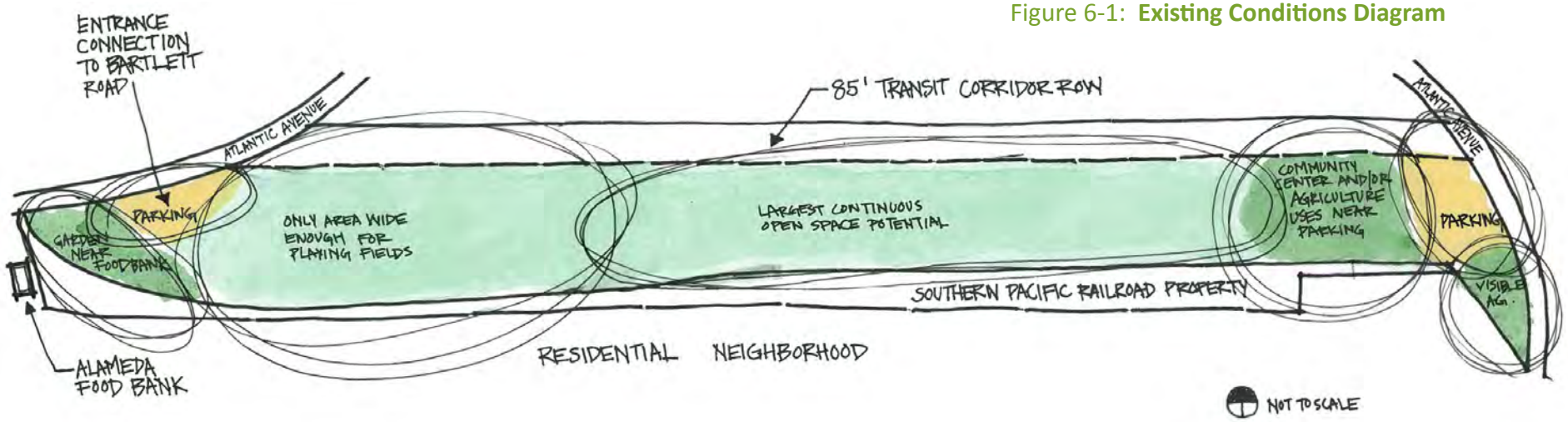
***NeighborSpace** in **Chicago, IL** is a city-funded non-profit entity that works as a land trust to purchase properties for use as community gardens. For more information on NeighborSpace, see: http://neighbor-space.org/main.htm*

***The Southside Community Land Trust (SCLT)** in **Providence, RI** acquired and owns five acres of land located on sites throughout the City for use by community gardeners and farmers. SCLT is also active in managing a network of gardens and promoting urban agricultural education throughout the City. For more information on SCLT, see: www.southsideclt.org*

***The Trust for Public Land (TPL)** purchased over 60 community gardens in **New York, NY** that were threatened with destruction by the City for private development projects. In recent years, TPL has helped train and launch community-based land trusts in Manhattan, the Bronx, and Brooklyn/Queens. TPL has transferred ownership of half of their gardens to local land trusts in MN and BX, and they expect to transfer the remaining gardens to the BK-QN land trust this year. For more information on the Trust for Public Land's community gardens program, see: www.tpl.org/what-we-do/where-we-work/new-york/community-gardens.html*

Chapter 6: Urban Agriculture For Alameda Belt Line Park

Figure 6-1: **Existing Conditions Diagram**



The former Alameda Belt Line Rail Yard is a narrow 22-acre City-owned property that is centrally located at the intersection of Constitution Way and Atlantic Avenue. The property is currently undeveloped, and has been identified by the City as a potential park site. The property is long and narrow, and bound by office development to the north and residential uses to the south. Interface with roads is limited to short segments on either short end of the long, rectangular property. In any future scenario, this land must leave a continuous strip of its property for the future siting of a railway.

Two concepts for incorporating urban agriculture into Belt Line Park site are described in this chapter. The concepts are based upon two probable scenarios for the future of the Park, one emphasizing passive uses and one that includes more active uses. The Parks Master Plan includes these two concepts as alternatives for Belt Line Park site. The agriculture features presented in this chapter consider and are located according to additional park uses that may also occur based on the Parks Master Plan. The concepts are intended to illustrate different options for agriculture at Belt Line Park site. It is anticipated that the final design for the park will incorporate features and ideas from both concepts.

The concepts provide a very general framework for the recreation and habitat areas of the park yet focus primarily on the agricultural features. Descriptions of the features included in both concepts, and planning-level cost estimates for each plan, are provided in this chapter. The concepts address the following components

- **Anchor with Urban Gardens or Farms.** In both concepts, urban farms and/or gardens anchor both ends of Belt Line Park site. This is a result of existing site constraints as well as input received at community meetings, as described below and diagramed in Figure 6-1.
- **The Belt Line Park site is a long, narrow park.** In fact, the park is even narrower than it appears, as there is an 85 foot wide easement for the Cross Alameda Trail Corridor to the north and the Southern Pacific Railroad owns the stretch of land between the park and residential neighborhood to the south. The Cross Alameda Trail Corridor is envisioned as including bike, pedestrian and rail routes. Given the park's shape, sports fields and multi-use fields can only be accommodated in the west-central portion of the park, as shown in Figure 6-1. Assuming that these uses are included in the future Belt Line Park site improvements; the land available for agricultural uses is located on either end of the park.
- **Incorporate Community Input.** The Alameda community was enthusiastic about incorporating agricultural uses into Belt Line Park site. Given the large size of Belt Line Park site, there is the potential to include a variety of agricultural uses while still allowing room for other uses.
- **Maximize Green Space.** In order to maximize the amount of unpaved green space, roads are kept to a minimum in both scenarios. To achieve this, parking lots are located close to roads. Agricultural uses are located near parking lots.

Due to the previous uses of the property by the Railroad, it is anticipated that soil contamination may pose challenges to farming regardless of where urban agriculture features are located on the property. It will be essential to test soil at Belt Line Park site for lead and other potential contaminants prior to planting. Intensive soil remediation efforts may be necessary, depending on the results of soil testing. It can be difficult to treat soils that contain with lead and other contaminants. As discussed in Chapter 4, Guidelines, the EPA provides guidance on soil remediation in *Brownfields and Urban Agriculture: Interim Guidelines for Safe Urban Agriculture*.

Passive Park Concept Plan

Dominant uses under the Passive Park Concept are habitat, open space, railway/trailway and agriculture, as shown in Figure 6-2. Active playing fields would not be included, with the exception of a multi-use field that could be used for a variety of purposes. Agricultural components include a small community garden located adjacent to the Alameda Food Bank, and a larger urban farm located on the other end of the Park. The Passive Park Concept is described in figures 6-2, 6-3, 6-4 and 6-5.

Community Garden (Figure 6-3)

The community garden located on the west portion of the Passive Park is described below and illustrated in Figure 6-3. The community garden is approximately a 1/2 acre and is located on the west end of the property, adjacent to the Alameda Food Bank. The garden shares a parking lot with the park, and is buffered from the park area by a 1/2 acre orchard that is anticipated to be managed in conjunction with the garden. Features of the community garden include:

- **Non-Vehicular Access.** The garden includes two entrances, one located at the parking lot and the other along the south side of the garden directly across from the Alameda Food Bank.
- **Vehicular Access.** A vehicular access road connects the garden to the proposed parking lot, facilitating the drop-off/pick-up of materials (such as soil) and allowing for emergency access.
- **Garden Plots.** The garden is shown as including 60 plots, each 50 square feet in size.
- **Gathering Areas.** One large gathering area, approximately 600 square feet, is included near the parking lot and along the main path. Smaller gathering areas are distributed throughout the garden, ranging in size from 50 square feet to 200 square feet.

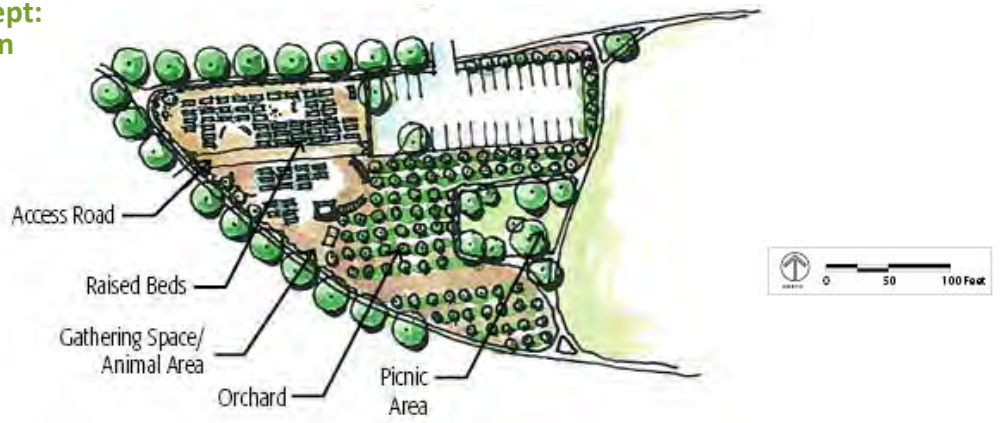
Figure 6-2: **Passive Park Concept Plan**

1-acre
Community Garden
- Connects to shared parking area
- Connects to Alameda Food Bank
- Orchard buffers between park and garden
- Shared Parking for park and garden
(See Figure 6.3)

2.5 acre
Community Farm
- U-pick orchard provides agricultural aesthetic and street frontage
- Park and Education Center visible from street frontage
(See Figure 6.4)

- **Potential Animal Area.** In the event that managers and participants of the community garden decide to incorporate beehives or chicken coops into the garden, the remote gathering area near the southwest corner could accommodate such uses.
- **Compost Areas.** There are two composting areas within the community garden, approximately 100 square feet.
- **Perimeter Buffer.** A vegetated buffer is provided around the community garden, along the fencing.

Figure 6-3:
Passive Park Concept: Community Garden (1 Acre)



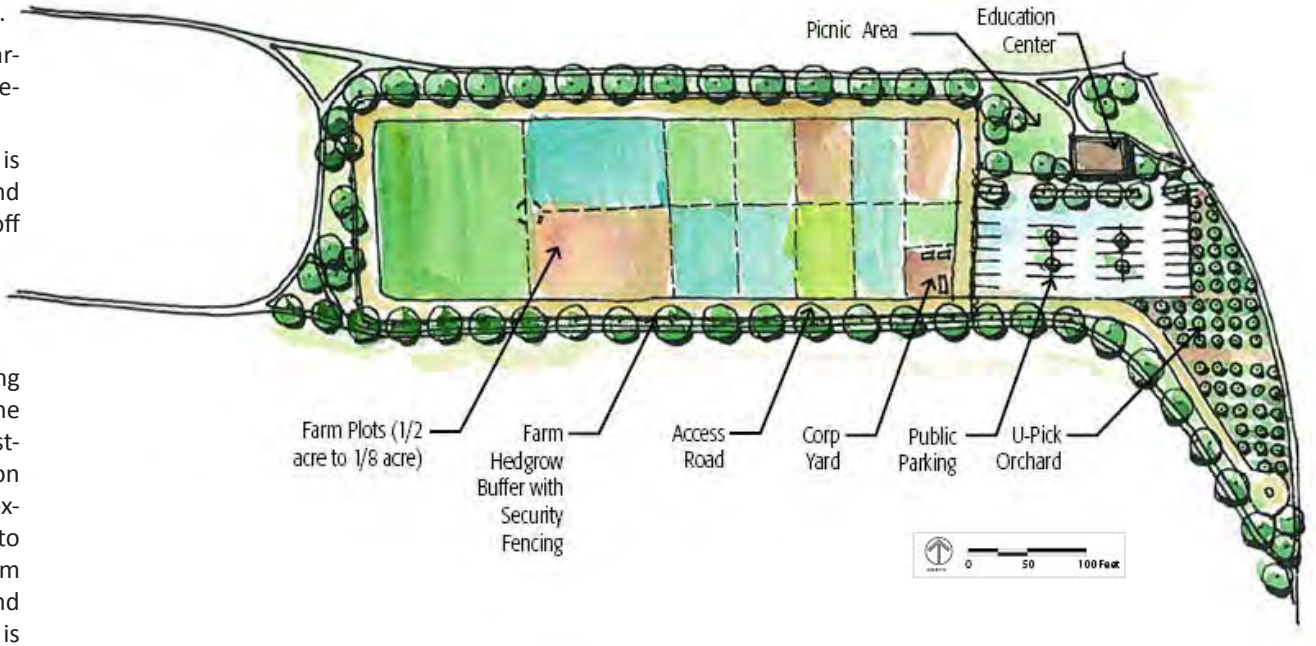
- **Orchard Buffer.** The garden is buffered from park uses to the east by a 1/2 acre orchard. The orchard enhances the community garden, and provides a picturesque setting for the picnic area to the east.
- **Fencing.** Fencing surrounds the community garden, with an access gate located at the start of vehicle access off the proposed parking lot.
- **Storage Areas**. A 100 square foot storage shed is located adjacent to the largest gathering area, and near the vehicular access to provide easy drop off of materials and tools.

Urban Farm (Figure 6-4)

The Passive Park Concept minimizes roads by having farms and community gardens near each end of the park. The urban farm is 2 ½ acres, located on the eastern side of the property near the proposed education center and park. The urban farm location allows for expansion westward into the park, as the adjacent land to the west of the farm is open. The farm is visible from the education center, and is buffered by vegetation and security fencing along the street edges. A U-pick area is incorporated as part of the farm. Features of the urban farm include:

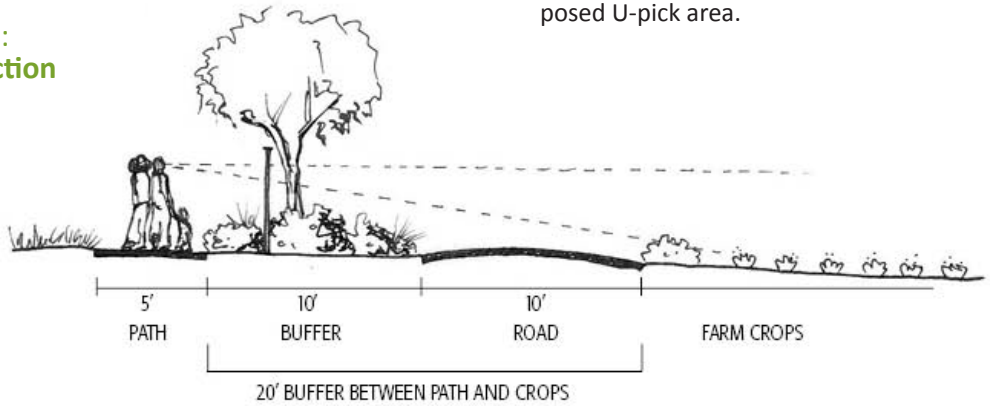
- **Education Center and Picnic Park.** A proposed education center is located adjacent to the urban farm, as well as a picnic park for public use.
- **U-Pick farm.** A 1/2 acre U-pick orchard area is located adjacent to the urban farm plots and the parking lot.
- **Entrance.** The entrance to the farm is located at the end of the eastern access road off of Atlantic Avenue.
- **Corporation Yard.** The corporation yard includes shared equipment storage and bathroom facilities.
- **Farm Roads.** A vehicular access road runs the perimeter of the urban farm, providing vehicle access to all farm plots.

Figure 6-4: **Passive Park Concept: Urban Farm (2.5 Acres)**



- **Farm Plots.** Farm plots range in size from a 1/2 acre to 1/8 acre.
- **Perimeter Buffers/Hedgerows.** A vegetated buffer is planted along the perimeter of the entire farm for security and to limit visibility. The buffer protects the farm from surrounding roads as well as protects the residential areas from noise and activities associated with agriculture. The buffer also separates public paths and the individual farmer plots, as shown in Figure 6-5.
- **Fencing.** Fencing surrounds the urban farm, with access gates located at the start of vehicle access off the proposed parking lot as well as to the proposed U-pick area.

Figure 6-5:
Buffer Section



Active Park Concept Plan

This scenario includes several sports fields and abutting railway, addressing the need for sports fields identified by the Parks Master Plan 2012. Agricultural plays a smaller role in this scenario, and is limited to two community gardens. One garden is associated with Alameda Food Bank and the other is connected to a proposed community center.

- Because the community gardens include similar features as the community garden described above, the descriptions of each garden below focus on the layout, design, and unique characteristics of each garden.
- The Active Park Concept is illustrated in Figures 6-6, 6-7 and 6-8.

Western Community Garden (Figure 6-7)

The western garden is a 1/4 acre in size, or half the size of the community garden shown for the Passive Park. This community garden also includes an orchard, but is located along the road. The garden area is nestled between the orchard and the park, with direct access to the parking lot and Alameda Food Bank.

Eastern Community Garden (Figure 6-8)

The eastern garden is located in close proximity to the Community Center. A pedestrian path links the Community Center to the garden, and a dedicated-parking lot for 15 cars serves the garden. Accessible beds are placed near the entrance to the garden and adjacent to the large gathering space. A main vehicular access path runs down the center of the garden. A vegetated buffer surrounds the garden, along the perimeter fencing.

Planning-level Cost Estimate

Cost estimates are summarized in table 6-1 below, and shown in detail in the appendix. Cost estimates provided are for capital costs for installation, and are based on prevailing-wage, contractor-installations. Volunteer-installations can lower construction costs. The cost estimates are intended for planning purposes only. The Active Park Concept agriculture components total approximately $500,000. This cost includes both community gardens with orchards. The Passive Park Concept agriculture components total approximately $940,000. This cost includes both the community garden with orchard and the urban farm with the U-pick orchard. For the community gardens, raised beds are assumed in the construction costs. It is approximately $30,000 less per acre for in-ground beds than raised beds.

Implementation

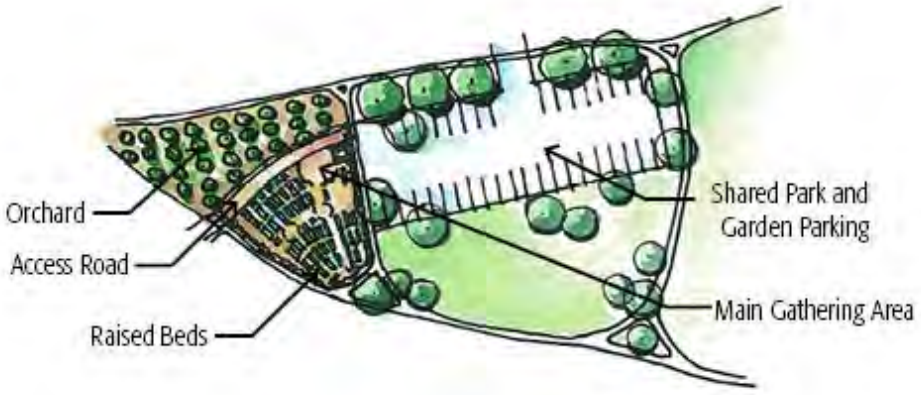
The establishment of community gardens and/or a community farm at Alameda Belt Line Rail Yard would ideally be developed at the same time or soon after the development of key park features, such as trails, staging areas, and restrooms.

A critical step towards development of Belt Line Park will be to select one concept to guide the development of the Park. The final concept should identify which areas of the Park will be dedicated to agriculture, and consider including areas where agricultural uses could expand if desired in the future. The design of the park, including trails and rail system and agricultural features, will need to be refined.

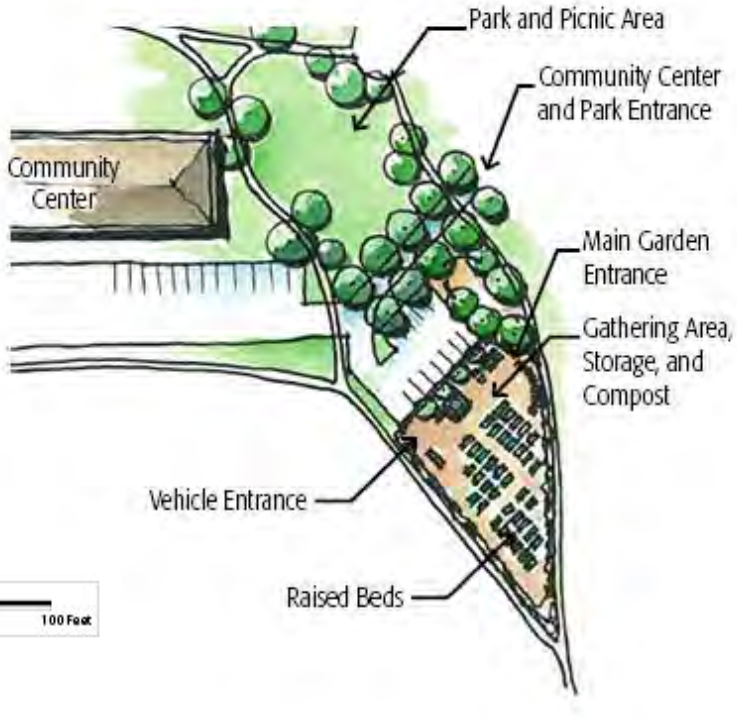
Once garden and farm features have been determined, soils should be tested and amended or remediated as necessary to provide a healthy growing medium; operating models for gardens and/or farm must be determined; and funding must be acquired. Depending on the operating model selected, it may be necessary to prepare a Request for Proposals (RFP) for entities or individuals interesting in managing the garden or farm and develop lease agreements for farm plots. Refer to Chapter 4, Guidelines, for further information on operating models and Chapter 5, Funding and Financing Models and Resources, for discussion of funding sources.

Figure 6-6: **Active Park Concept**

Figure 6-7 and 6-8:
Active Park Concept: Community Gardens



Western Community Garden (1/4 Acre)



Eastern Community Garden (1 Acre)

Table 6-1: **Cost Estimate Summary**

Facility	Description/Assumptions	Approx. Construction Cost	
		Passive	Active
Community Garden	Grading, soil prep, utility connections, decomposed granite pathways, pedestrian entrances, vehicular access, perimeter fencing, seating, trees (orchard and shade), irrigation, raised beds, trash/compost bins, portable toilet, and storage	$260,000 (1 acre)	$500,000 (2 acre)
Urban Farm	Grading, soil prep, utility connections, decomposed granite pathways, pedestrian entrances, vehicular access, perimeter fencing, seating, shade trees, U-pick orchard, irrigation, corporation yard, trash/ compost bins, portable toilet, education center, and picnic park	$630,000 (3 acre)	n/a
Total		**$890,000**	**$500,000**

Chapter 7: Urban Agriculture at Alameda Point

The former base of the Naval Air Station-Alameda was closed in 1997, creating a 918 acre Alameda Point redevelopment site, which occupies the western portion of the island. The City of Alameda is engaged in a community planning process for the redevelopment of Alameda Point.

Although specific entitlements do not yet exist, consistent with the approved 1996 Community Reuse Plan (Reuse Plan), it is anticipated that Alameda Point will include a range of uses, including residential, retail, campus-style industrial development, mixed-use, and parks. Some initial concepts envision a linear park as connecting through the development from Hornet Field to the south to the current location of Ploughshares Nursery to the north. This potential location is shown in Figure 7-1.

Preliminary concepts assume that the linear park or greenway would be approximately 100 feet wide, and include wider areas of 250 feet wide every several blocks to provide more substantial park space. The linear park could extend through commercial, retail, mixed-use, and residential areas, and create excellent opportunities for incorporating urban agriculture into the future fabric of Alameda Point.

This chapter identifies a guiding vision for the integration of urban agriculture into the greenway as a key component, focusing on the residential segments of the greenway. Two conceptual plans demonstrate how this vision can be realized at Alameda Point. The concepts described in this Chapter are not intended as site-specific plans, but rather are intended to inform the planning process for the future of Alameda Point. While the concepts focus on the residential segments of the linear park, many of the ideas discussed are relevant to any portion of the linear park.

Figure 7-1: **Potential Location of Linear Park**

Conceptual Framework for Incorporating Agriculture

This Plan envisions the linear park as one continuous greenway that is rich with diverse recreational and agricultural features. Three key concepts knit the lengthy greenway together while allowing for diverse and dynamic activities to enliven the park. These concepts include a multi-modal circulation system, orchard buffers, and alternating agricultural and recreational features. These concepts are described below and illustrated in Figure 7-2.

Multi-Modal Circulation

The circulation network for the linear park is envisioned as including the following components:

- A 12-foot-wide multi-use path meanders along the west edge of the linear park, with crossings at planned intersections.
- Sidewalks and parkways are provided along all east-west streets.
- Class I or Class II bike lane travels north- south, parallel to greenway.
- Pedestrian paths provide internal connections and access from adjacent residential uses.

Orchard Buffers

Orchards line the eastern edge of the linear park throughout residential areas. Within narrow blocks, the orchard provides an aesthetically pleasing buffer between the linear park and the adjacent residential development. This provides a transition between public and private uses, and creates a sense of privacy for residents. On wide blocks, the orchard provides a buffer for the linear park from the major street corridor to the east.

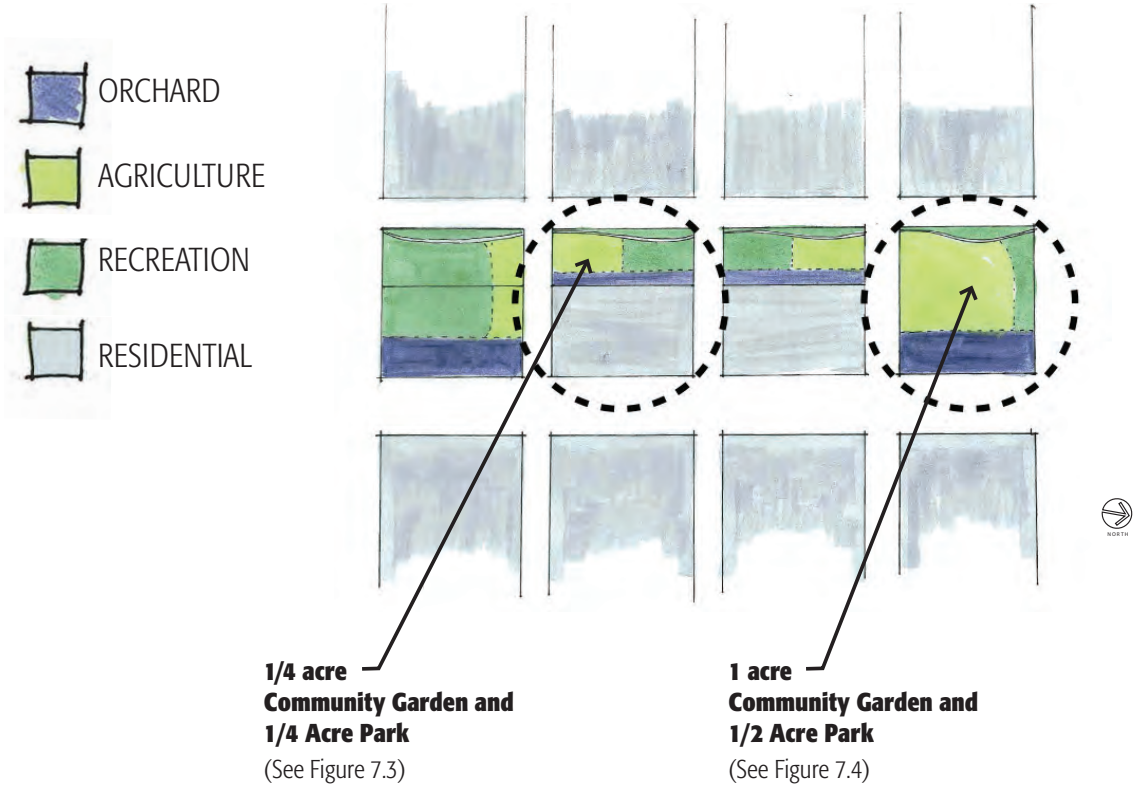
The orchard would be a minimum of two trees deep in all locations. The type of trees planted in the orchard may vary from block to block; building the unique character of each park segment while contributing to the overarching character of the linear park.

Orchard buffers may be incorporated throughout the linear park to contribute to the overall character of the linear park. However, the location and density of orchards may vary in segments where visual connections between the linear park and adjacent uses are desired, such as in retail and mixed-use areas.

Alternating Agriculture and Recreational Features

Not including the area dedicated to sidewalks, parkways, and the multi-use path, approximately 1/3 of an acre of parkland within the narrow blocks and 1 acre on wide blocks are available for other uses. Each block is envisioned as including both agricultural and recreational features. Uses should be organized so that each east-west street that crosses through the linear park is flanked on either side by a similar use, as shown in Figure 7-2. While narrow parks may be divided somewhat evenly between park and agricultural uses, wide blocks should alternate between park-emphasis and agriculture-emphasis. This organization of use areas will contribute to the development of unique streetscapes, facilitate wayfinding, and bring continuity to the overall experience of the linear park. Furthermore, this organization will allow for strong connections between residential development and both park and agricultural uses.

Figure 7-2: **Alameda Point Concept Diagram**



Given the small scale of each individual block and the intensity of surrounding uses, community gardens are the most feasible urban agriculture feature in residential segments of the linear park. Small urban farms may be explored in commercial areas of the linear park. A wide diversity of recreational features is possible and desirable along the linear park. Recreational uses may include plazas, play structures, picnic areas, bocce and horseshoe courts, basketball courts, dog parks, urban habitat gardens, and other uses with limited size requirements.

Concept Plan

The guiding vision described above could be expressed in a variety of ways throughout the linear park. The conceptual plans described in this section represent possible manifestations of this vision for the narrow and wide blocks on the linear greenway. As discussed above, both of the concepts are intended for the residential portion of the greenway.

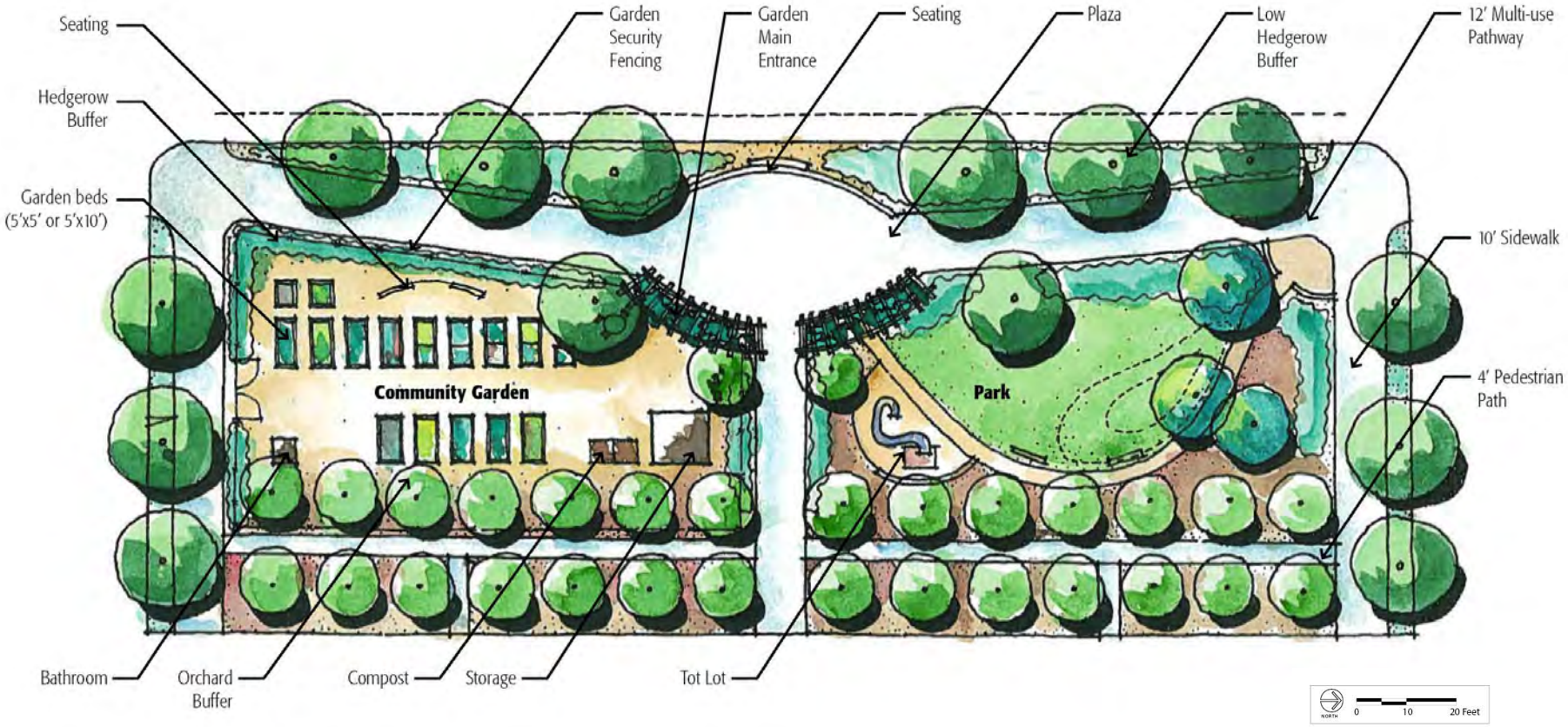
Narrow Block Concept Plan

The conceptual plan for the narrow block in the residential segment includes a small community garden and a small park area, shown in Figure 7-3. A multi-use trail runs along the west side of the block. Pedestrian paths connect the residential uses to the west with the multi-use path as well as the park and community garden areas. A narrow orchard creates a buffer between the residential uses and the more public park and garden areas.

The main entrance to the community garden is centrally located off of a gathering plaza. An additional entrance is provided for vehicles, and a clear path between the two entrance points serves as a gathering space and would allow for emergency/work vehicles to cross the site when necessary. Community garden features include:

- Pedestrian entrance
- Vehicular access
- Raised beds (16)
- One large gathering area near the entrance
- Several small gathering areas
- Compost area
- Perimeter planting and fencing
- Portable toilet

Figure 7-3: **Alameda Point Narrow Block Concept Plan**



Wide Block Concept Plan

The wide blocks of the linear greenway shown in Figure 7-4 are bound on all sides by roads. The conceptual plan for this block includes approximately 1 acre of community garden and a 1/2 acre of other park uses. A plaza on the southwest corner of the site serves as the grand entrance to the community garden as well as a potential location for a small farmers' market. The plaza is located adjacent to a 12-car parking lot which serves the garden and park areas, and would facilitate farmers markets and similar events. The parking lot is smaller than would typically be recommended for a community garden of this size, but many of those visiting the park and gardens are anticipated to live within close walking distance and therefore would not require parking. Access into the community garden is provided from the parking lot for emergency/work vehicles.

The eastern side of the block is planted in an orchard, consistent with other residential segments of the linear park. A break in the orchard provides a window from the street into the garden. A small plaza and a secondary garden entrance are located within this break.
Features included within the community garden include:

- Two pedestrian entrances
- Vehicular access
- Raised beds (60)
- One centralized large-group gathering
- Several small gathering areas
- Potential site for beehives or chicken coop
- Compost area
- Perimeter planting and fencing
- Portable toilet

Figure 7-4: **Alameda Point Wide Block Concept Plan**

Planning-level Cost Estimate

The conceptual plan described above demonstrates the integration of agricultural and recreational features along the Alameda Point linear park. Because the recreational features are integral to the conceptual plans, cost estimates for the plans include costs for both recreational and agricultural features. Cost estimates are summarized in table 7-1. Cost estimates provided in this section are for capital costs for installation, and are based on prevailing-wage, contractor-installations. Volunteer-installations can lower construction costs. The cost estimates are intended for planning purposes only. The Narrow Block park and urban agriculture components total approximately $200,000. The Wide Block park and urban agriculture components total approximately $445,000. For the community gardens, raised beds are assumed in the construction costs. It is approximately $30,000 less per acre for in-ground beds than raised beds.

Implementation

The concepts presented in this chapter will contribute to the planning process for Alameda Point, although the specific concepts may not be incorporated in the final redevelopment plans. However, the redevelopment of Alameda Point will determine the schedule for the design and development of the open space features, which could include a linear park or other features that can incorporate agricultural elements.

The community gardens described in this chapter are intentionally located adjacent to residential development, and therefore would ideally be developed as a public amenity in conjunction with residential development at Alameda Point. As with most community gardens, first steps towards implementation should include identifying an operating model, assessing site conditions, testing soil and conducting any remediation necessary. Potential funding sources for community gardens at Alameda Point should be considered in conjunction with funding for other public amenities, and may include developer-funded projects. Please refer to Chapter 5, Funding and Financing Models and Resources, for additional information on funding sources.

Table 7-1: **Cost Estimate Summary**

Facility	Description/Assumptions	Approx. Construction Cost	
		Narrow	Wide
Community Garden	Grading, soil prep, utility connections, decomposed granite pathways, pedestrian entrances, vehicular access, perimeter fencing, seating, trees (orchard and shade), irrigation, raised beds, trash/compost bins, portable toilet, storage	$90,000 (1/4 acre)	$255,000 (1 acre)
Other Park Use	Grading, soil prep, utility connections, concrete walks, parking, planting, trees, irrigation, shade structures, seating, trash bins	$110,000 (1/4 acre)	$190,000 (1/2 acre)
Total		**$200,000**	**$445,000**

Appendix A: Annotated Funding Sources for Urban Agriculture

A. Appendix A – Annotated Funding Sources for Urban Agriculture

A number of private and public funding sources are available to support the expansion of urban agriculture in Alameda. Funding opportunities in this appendix are organized by project type and source, in order of grant deadline. While several grants have specific deadlines, a few of the sources listed are online websites that regularly post funding opportunities for urban agriculture. These should be checked for ongoing grant announcements throughout the year. A list of additional resources for starting and managing community gardens are included at the end of this document.

*Indicates grant opportunities for which governments are eligible to apply as primary applicant.

B. Funds for Community Gardens and Urban Farm Projects

Public Funding Sources

USDA – Community Food Projects Competitive Grants Program
www.csrees.usda.gov/fo/communityfoodprojects.cfm
Deadline: *Application closed. Check back for next round.*

- For non-profit orgs with experience in community gardening and agriculture or job training related to business development for community food projects. Awards cannot exceed $125,000 for community food projects, $25,000 for planning projects, and $500,000 for training and capacity building projects. 3 year max grant period. Applicants must secure dollar-for-dollar matching funds.

*USDA – Beginning Farmer and Rancher Competitive Grants Program
www.nifa.usda.gov/fo/beginningfarmerandrancher.cfm
Deadline: *Application closed. Check back for next round.*

- Funds for training, education, outreach, and technical assistance initiatives for new farmers for up to 3 yrs. Funds have been used to support urban agriculture projects in previous years (ex: NYC Farm School). Requires 25% matching funds or equivalent in-kind support from non-federal sources. Priority goes to partnerships that include community based organizations and NGO's.

*HUD (U.S. Department of Housing and Urban Development) Grant Programs
http://portal.hud.gov/hudportal/HUD?src=/program_offices/administration/grants/fundsavail

- Eligible activities funded through HUD include: Economic Development, Land Acquisition, Site Preparation and Assessment, Demolition and Clearance of Property/Remediation, Acquisition and Construction of Public Facilities, and Rehabilitation of Public Real Property.

*Community Development Block Grants (CDBG)
http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/entitlement
Deadline: TBD (Alameda is already a designated "Entitlement Community").

*USDA - Farmers Market Promotion and Education Grants
http://www.ams.usda.gov/AMSv1.0/fmpp
Deadline: *Application closed. Check back for next round.*

*HUD (U.S. Dept of Housing and Urban Development) – Brownfields Economic Development Initiative
http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/BEDI
Deadline: *Application closed. Check back for next round.*

- Applicants must be participating in Section 108 loan program (listed above). BEDI funds are intended to enhance the viability of brownfields economic development projects by enhancing security of Section 108 loans. Eligible uses include: land write-downs, site remediation costs, funding reserves, over-collateralizing Section 108 loans, and financing businesses at below market interest rates.

*EPA (U.S. Environmental Protection Agency) Brownfields Program
http://www.epa.gov/swerosps/bf/applicat.htm
Deadline: Feb 10, 2012. *Check back for next round.*

- Offers funding for brownfields assessment, project planning, and cleanup activities.

Proposition 84 - Statewide Park Program
http://www.parks.ca.gov/?Page_id=26025
Deadline: *Application closed. Check back for next round.*

- Prop 84, passed in 2006, allocated $5.4 billion in general obligation bonds to fund safe drinking water, water quality and water supply, flood control, natural resource protection, and parks improvement projects throughout the state. $368 million of the Prop 84 funds have been dedicated to the Statewide Park Program, which funds new parks and green spaces in underserved communities.

Private Funding Sources

National Environmental Education Foundation (NEEF) – Every Day Grants
http://www.neefusa.org/grants/every_day_grants.htm
Deadline: *Application closed. Check back for next round.*

- Non-profit volunteer "Friends" organizations are eligible to apply for funds to support land stewardship, improvement, and responsible use of public lands. Two rounds each year (Fall and Spring). Grantees must have a 2-year relationship with a public land site and propose a project that

will strengthen the capacity of the organization to serve the public land site or sites. **25 awards of up to $5,000 each**. Funds cannot be used for land acquisition, landscaping, scholarships, giveaways, or food.

The Fruit Tree Planting Foundation (FTPF) – Communities Take Root Grant Program
www.communitiestakeroot.com
Deadline: *Application closed. Check back for next round.*
Planting orchards across the country in a collaborative program called *Communities Take Root* (CTR). Through this exciting program, communities compete in a nation-wide vote to win a complete community orchard. We are now inviting applications for 2012. **The first 100 qualified applicants will be in the running to win a free orchard,** including orchard design, arborist expertise, and a fun community planting event. Orchard recipients also receive a free workshop on planting, pruning and tree care.

Welch's Harvest Grants
http://www.scholastic.com/harvest/pdfs/learnmore.pdf
Deadline: *Application closed. Check back for next round.*

- Any school, home school association, religious educational center, or Head Start center can apply for a "Garden Package" including tools, seeds, and educational materials. **Five $1,000 garden packages and 95 $500 packages will** be awarded.

Mantis Awards for Community and Youth Gardens
www.kidsgardening.org/grants/2012-mantis-awards-community-and-youth-gardens
Deadline: March 1, 2012

- In-kind awards for non-profit garden programs that enhance quality of life in local communities. Applicants must already be operating a gardening program. 25 programs will each receive a Mantis Tiller/Cultivator with border/edger and kickstand, and their choice of gas-powered 2-cycle engine or electric motor. **Total value: $349**.

Grant and RFP Listings/Resources

American Community Garden Association
www.communitygarden.org/learn/resources/funding-opportunities.php

National Gardening Association
www.kidsgardening.org/grants-and-awards

C. Funds for School Gardens and Youth Garden Projects

With the rising popularity of school and educational gardens, a large number of small grants from private foundations exist to help communities start or improve school and youth education gardens.

Private Funding Sources

Pureology – Go Green USA's Green School Makeover Competition
http://pureology.com/greenschools/entermyschool/rules
Deadline: *Application closed. Check back for next round.*

- Focused on promoting the design, building, renovation, or operation of K-12 schools in an ecological and resource-efficient manner to reduce environmental impact, save money, and improve student health and performance. Individual essay contest to propose "green improvements" to any public, private, or charter K-12 school. Open to individuals at least 18 yrs old. Grand prize is a "green makeover" of applicant's school (equivalent to **$65,000 in labor and equipment costs**). **Four additional finalists receive $2,500 each** for green school projects. Check for new cycle.

General Mills Foundation – Champions for Healthy Kids Awards
http://www.generalmills.com/en/Responsibility/community_engagement/Grants/Champions_for_healthy_kids.aspx
Deadline: *Application closed. Check back for next round.*

- Partnership program with the American Dietetic Association. Applicants must be non-profits working to improve physical fitness and nutrition among youth. **50 grants awarded of $10,000 each**. Past projects funded include community garden education programs.

Toyota Foundation – Tapestry Grants for Science Teachers
http://www.nsta.org/pd/tapestry/
Deadline: *Application closed. Check back for next round.*

- Grants available for teachers to implement innovative, community-based science projects in environmental science, physical science, and integrating literacy and science. **Awards of up to $10,000.** Past projects funded include urban farming activities.

Toshiba America Foundation – K-12 grants for science and math classrooms
http://www.toshiba.com/taf/about.jsp
Deadline: Oct 1 for K-5 grants, rolling deadline for 6-12 grants of < $5,000, Feb 1 and Aug 1 for grants of > $5,000

- Funds materials and resources needed to make science and math classrooms more engaging and innovative for students. Past projects funded include a number of hands-on environmental science projects including beekeeping, maple syrup production, and investigating local sources of pollution.

Captain Planet Foundation
http://captainplanetfoundation.org/apply-for-grants/
Deadline: Tri-annual deadlines: May 31, September 30, January 15.

- For schools and non-profit organizations with budgets of less than $3 million to implement active, hands-on environmental education projects. Grants are intended to promote environmental education within schools and to inspire youth and community service through environmental stewardship. Priority given to projects with at least 50% matching funds or in-kind support. **Max funding is $2,500.**

Lowe's Toolbox for Education – School Improvement Grants
www.toolboxforeducation.com/index.html
Deadline: Feb 17, 2012 (or whenever 1500 applications have been submitted). *Check back for next round.*

- For public K-12 schools or non-profit parent groups to implement facility enhancement and landscaping/clean-up projects. Priority given to projects that address basic needs, involve parents, and build community. **1000 awards of between $2,000 and $5,000 available**. Limited awards of $50,000 to $100,000 available. Projects must be completed within one year of receiving grant. Limit of one grant per school.

Whole Foods – Whole Kids Foundation School Garden Grant
http://wholekidsfoundation.org/gardengrants-application.php
Deadline: *Application closed. Check back for next round.*

- For non-profit organizations and non-profit K-12 schools to assist with development or maintenance of school garden projects at any stage of planning, development, construction, or operation. Priority given to limited-resource communities and projects with strong buy-in from local stakeholders. **Awards of up to $2,000 available**, with limit of one grant per school.

Western Growers' Association — School Garden Grants
www.wga.com/default.php?id=138
Deadline: June 1, 2010. Bi-annual deadlines (Nov 1 and June 1).

- For schools, youth groups, community centers, and non-profit orgs in AZ and CA that support gardening projects with youth ages 0 -18. Gardens must be primarily fruit and vegetables. **Up to $1,500 available** for supplies (wood, nails, soil, fertilizer, raised bed kits, irrigation, garden tools, etc.) and additional resources.

California Fertilizer Foundation – School Garden Grant Program
www.calfertilizer.org/grant.htm
Deadline: Jan 15 and June 15 annually. *Check website for latest grant updates.*

- Annual grant program for public or private K-12 schools throughout CA to use for implementation or continuation of in or out-of-school garden programs. **24 grants available for $1,200 each**, with an additional $1,500 in progress report grants available to winning schools.

Project Learning Tree - GreenWorks! Green Schools Grant
www.plt.org/applyforagrant
Deadline: *Application closed. Check back for next round.*

- Service-learning community action program for schools to awaken students' sense of responsibility toward their communities and the environment. Past projects have included outdoor classrooms. **Maximum award of $1,000 per school.** Projects must be completed within one year and involve service-learning, student voice, and community partnerships. Applicants must have secured at least 50% matching funds or in-kind donations and have attended a Project Learning Tree workshop.

National Environmental Education Fund – Student Planet Connect Grants
http://www.neefusa.org/grants/pc_grants.htm
Deadline: *Application closed. Check back for next round.*

- Student grant program to implement community or school-based wildlife and habitat conservation projects. Previous projects have included garden development and enhancement projects. Available to students ages 14 – 19 yrs old who are currently enrolled in a high school, a member of Planet Connect, available for summer internship program, and have not applied for this grant within the last 2 years. **Winners receive $500** to carry out project **plus $500 internship stipend** at the end of the summer.

Annie's Garden Grants
http://www.annies.com/grants
Deadline: Feb 29, 2012. *Check back for next round.*

- For schools and non-profit organizations to use for educational gardens that connect children to "real food." Funds can only be used to purchase seeds and supplies. **Fifteen $500 grants are available**.

Muhammed Ali Center Peace Garden Grants
www.kidsgardening.org/grants/muhammad-ali-center-peace-garden-grant-0
Deadline: *Application closed. Check back for next round.*

- For schools or non-profit organizations to implement youth garden programs focused on peace and hunger awareness. Applicants must plan to garden in 2012 with at least 15 youth between 3 and 18 yrs old and have a student body of at least 50% eligible for reduced or free school lunches. Priority given to programs that demonstrate a focus on peace studies, nutrition, and hunger issues. **50 awards of $400** in **garden supplies and $100 for plants** are available.

Lorrie Otto Seeds for Education Grant Program
www.for-wild.org/seedmony.htm
Deadline: October 15 (Annual grant program).

- **$100 - $500 grants available** for K-12 schools and non-school learning centers for use in projects that develop or enhance appreciation of nature using native plants. Funds can only be used for purchase of seeds and plants. Successful grants are eligible for discounts at SFE native-plant-nursery partners.

Grant and RFP Listings/Resources

National Gardening Association Kids Gardening program – Grants and Fundraising Page
www.kidsgardening.org/grants-and-awards

California School Garden Network – Grants and Fundraising Page
www.csgn.org/page.php?id=30

GardenABC's – Student Contests and Scholarships
www.gardenabcs.com/Student_Contests.html

California Foundation for Agriculture in the Classroom – Grants Page
www.cfaitc.org/grants/

D. In-Kind Donation Programs for Garden Projects

Farmer's Garden by Vlasic – Farm to School Program
www.kidsgardening.org/grants/farmers-garden-vlasic-0
Deadline: *Application closed. Check back for next round.*

- For schools who participate in the Kids Gardening Association School Garden Registry. 35 schools will be selected to receive **$1,000 Farm to School Project Kit**, including seed starting kit, plant beds, garden tools, and composter.

Subaru - Healthy Sprouts
www.kidsgardening.org/grants/2011-subaru-healthy-sprouts-award
Deadline: *Application closed. Check back for next round.*

- Schools or organizations planning to garden in 2012 with at least 15 children between the ages of 3 and 18 can apply. Priority given to projects that emphasize education on environmental, nutrition and hunger issues. **50 awards of $500 gift certificate** to Gardening with Kids catalog + garden curriculum.

Jamba Juice – It's All About the Fruits and Veggies Grant Program
www.kidsgardening.org/grants/its-all-about-fruit-and-veggies
Deadline: Feb 15, 2012. *Check back for next round.*

- For schools, community groups, and non-profit orgs who garden with at least 15 students ages 3 – 18 yrs old. Schools must be located within a 50 mile radius of a Jamba Juice store. Priority will be given to plans that promote nutrition education, incorporate fruit and vegetable activities into curriculum, and demonstrated ability to sustain program over multiple years. 20 grant recipients will be awarded with **$150 for soil and plant purchases and $350 in gardening supplies** and a curriculum guide.

The National Gardening Association and Home Depot - 2012 Youth Garden Grants Program
www.kidsgardening.org/grants/2012-youth-garden-grants-1/
Deadline: *Application closed. Check back for next round.*

- For school and community orgs to implement child-centered garden programs. Priority given to projects that emphasize educational and curricular integration, nutrition or plant-to-food connections, environmental education, entrepreneurship, and leadership development/community service. **Five awards of $1,000 gift card** and **95 awards of $500 gift card** to The Home Depot will be distributed, along with educational materials. Garden projects must involve at least 15 children between 3 and 18 yrs old.

America The Beautiful Fund
www.america-the-beautiful.org/free_seeds/index.php
Deadline: Ongoing.

- "Free Seed" program. Shipping and handling not covered.

E. Funds for Urban Agriculture Planning Efforts

*Sustainable Communities Regional Planning Grant
http://www07.grants.gov/search/search.do;jsessionid=LdWJTGFpvZ78JGpCfQ1dFLpsmljtg1RGFDrgm4QZcJJh2vpJMqp2!1527577127?oppId=120554&mode=VIEW
Deadline: *Application closed. Check back for next round.*

- Funds metropolitan and regional planning efforts that address equity and inclusion, climate change, public health, and environmental concerns and incorporate non-traditional partnerships.

F. Funds for Senior/Elder Food Access Projects

*AARP Foundation — Sustainable Solutions to Hunger Innovation Grants Program
www.aarp.org/hungergrants.
Deadline: *Application closed. Check back for next round.*

- Invited applicants only.

G. Additional Funding Resources

Catalogue of Domestic Federal Assistance
https://www.cfda.gov

Federal Government Grants Listing
www.grants.gov

US Department of Health and Human Services (HHS)– Grants Page
http://dhhs.gov/asfr/ogapa/aboutog/grantsnet.html

The Foundation Center
http://foundationcenter.org/

APPENDIX A

ChangeLab Solutions
Law & policy innovation for the common good.

2201 Broadway, Suite 502
Oakland, CA 94612
Tel: 510-302-3380

THE PLANNING CENTER DC&E

1625 Shattuck Avenue, Suite 300
Berkeley, California 94709
Tel: 510 848 3815
Fax: 510 848 4315