

Healthy Food Resource Assessment

FOR SANTA CLARA COUNTY



public health law & policy
planning for healthy places



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Executive Summary

Access to healthy food is a critical prerequisite for health and obesity prevention. By providing convenient access to affordable, healthy, fresh, and culturally appropriate food, a community can promote health for all of its residents. Traditional retail outlets (such as grocery stores and restaurants) potentially provide access to healthy food, but communities are increasingly looking to innovative, lower-cost strategies that may be easier to start and more responsive to local needs and preferences. Such strategies, termed “Healthy Food Resources” (HFRs) in this report, include:

- **Farmers’ Markets** provide consumers the opportunity to maximize their food dollars, by supporting farms that employ sustainable and organic farming practices, grow regional and culturally specialties, minimize energy consumption by transportation and storage, and re-circulate dollars directly back into the local and regional economy.¹
- **Community-Supported Agriculture** initiatives bring consumers fresh local food through subscriptions or shares of the harvest from a particular farm or group of farms. Like farmers’ markets, CSAs offer similar ecological and economic development benefits with one additional feature: CSAs often deliver to neighborhood drop-off sites or directly to consumers’ home or workplace.
- **Community Gardens** allow residents to grow their own produce and share it with their family and neighborhoods, reducing household food costs, increasing “food literacy,” creating neighborhood green space for recreation, conservation, and beautification; and improving public safety by connecting neighbors and activating underutilized spaces.
- **School Gardens** provide children and youth with a hands-on classroom experience in nutrition, science, math, cultural studies, and the pleasure of growing food, and can foster life-long healthy eating habits.

As a source of fresh, healthy, locally grown food, HFRs are increasingly being promoted as important community features that can support public health, reduce environmental pollution, and promote economic vitality and self-sufficiency. However, not all communities in Santa Clara County have equal access to HFRs.

¹ Brown C and Miller S. “The Impacts of Local Markets: A Review of Research on Farmers Markets and Community Supported Agriculture (CSA).” *American Journal of Agricultural Economics*, 90: 1296-1302, 2008.

In this first-of-its kind study for Santa Clara County, Public Health Law & Policy (www.phlpnet.org) – in partnership with Design, Community & Environment (www.dceplanning.com), Conexions (www.conexions.org), and the University of California at Berkeley Department of Geography – explored HFR access among low-income households in Santa Clara County. Our report finds that low-income households face barriers to access when considering such factors as location, service, affordability, and policy. Such barriers contribute to public health inequities experienced by low-income communities and communities of color. Key findings include:

- **There are a number of low-income areas in Santa Clara County that lack walkable access to HFRs; these same areas have a higher concentration of unhealthy food outlets such as fast food and convenience stores.** The compounding effect creates a food environment where making a healthy food choice is difficult or impossible for low-income families. Maps accompanying this report provide countywide and city-by-city analysis of walkable access to HFRs.
- **While most farmers' markets in the county accept Senior Farmers' Market Nutrition Program (SFMNP) coupons and Women, Infants, and Children (WIC) coupons, less than half accept Electronic Benefits Transfer (EBT) cards through the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps).** Federal food assistance programs increase the purchasing power of low-income consumers and provide a revenue stream for local food enterprises. When markets don't accept EBT – even if they are located near low-income households – they may not be accessible to these consumers.
- CSAs have the potential to provide an accessible source of healthy food, especially for families without access to a private automobile, as farm products are delivered directly to the community. However, **a lack of convenient drop-off locations and requirements for upfront payment may put CSA memberships out of reach for many low-income families.**
- Long waitlists (on average, 46 people) prove the popularity of community gardens in Santa Clara County. **A significant barrier to access is simply not having the garden capacity to meet the demand of local residents.** Cities are missing opportunities for increasing and expanding community gardens through land use policy, development incentives, and public-private partnerships.
- **School gardens are largely informal programs led by a few teachers or parents, and rarely a schoolwide effort.** Typical barriers include limited funding, limited staff time, and pressure related to standardized test preparation.

The findings of this report lay a framework for policy change and investment to improve access to HFR's for the County's low-income residents, and for the community at large in order to improve community health, economic vitality, environmental sustainability, and equity. Key recommendations include:

- **Cities and the county should adopt land use policies through general plan updates and zoning amendments** that explicitly encourage HFRs by defining them as an allowed legal use, reducing barriers to establish new HFRs, and creating incentives for HFRs in low-income communities.
- **Increase access to farmers' markets and expand acceptance of federal food assistance**, in particular SNAP. Local land use and economic development policies can require and/or incentivize the acceptance of EBT at farmers' markets and encourage the markets to locate in low-income communities.
- **CSA public-private partnerships between farms and cities or other public entities, such as schools, could expand drop-off locations to transit-accessible locations or within low-income neighborhoods.** Additionally, outreach, engagement, and payment structures should consider the needs of low-income households and be tailored to meet them.
- **Expand access to community gardens through land use policies and regulations, public-private partnerships, and joint use policies** between cities and schools that open school gardens to community use and/or community gardens to school use. Additionally, consider expanding policies and programs to support entrepreneurial urban agriculture as an income source for low-income households.
- **School districts should consider establishing districtwide school garden policies and supporting the establishment of an online hub to share lesson plans.** Additionally, community-school partnerships (through joint use agreements or other mechanisms) could leverage additional resources for school gardens.
- **Communities with significant proportions of low-income households** (such as Gilroy, Cambell, San Jose, Santa Clara, Mountain View, and Sunnyvale, which are all more than 50 percent low-income) should especially consider how policies, programs, and partnerships could improve access to HFRs.

Introduction

Santa Clara County is home to a vibrant and growing local food movement. This movement connects Santa Clara County to communities around the Bay Area, to the fertile farmlands of California's Central Valley and Central Coast, and to local food communities around the country. With the White House planting a community garden and holding a farmers' market on the front lawn, there is clearly an unprecedented level of support for understanding where our food comes from, who grew it, and how it impacts our culture, our economy, and our environment.

Amidst this boom in urban agriculture, farmers' markets, and school gardens, it is important to ask: Who has access to these healthy food resources? Critics argue that the local food movement is elitist, that the price premiums commanded by smaller-scale production and sustainable agricultural methods put this food out of low-income consumers' reach. At the same time, low-income communities themselves are many of the entrepreneurs and innovators behind local food enterprises and community-based programs. Farmers' markets and urban agriculture are seen as low-overhead, easy-to-implement solutions to a lack of access to fresh, healthy food in neighborhoods where years of disinvestment by traditional grocery retail has left communities with few options beyond the neighborhood liquor store and fast food restaurants.

This assessment aims to provide a better understanding of this landscape in all 15 cities and the unincorporated area of Santa Clara County, using mapping, surveys, and policy analysis of four types of "healthy food resource" activities or enterprises: community gardens, school gardens, farmers' markets, and community supported agriculture. This report serves to:

- Provide baseline information about existing "healthy food resources" to the community and its residents.
- Identify access barriers or gaps (geographic, service, affordability, policy, or otherwise) to "healthy food resources" for low-income residents in Santa Clara County, and provide strategies for eliminating these barriers and gaps, including local policy recommendations.

Each of these resources can be seen as a component of a healthy, sustainable local food system. And the extent to which these food system components are accessible to, serve, and encourage participation by low-income communities is an important measure of equity within the food system.

Our goal was to build upon several previous studies that had been completed on specific healthy food resources in Santa Clara County and create a comprehensive assessment, filling in gaps in knowledge and identifying strategic areas for program and policy development. By specifically identifying

barriers and gaps, this project aims to arm advocates and stakeholders with information to create policies and programs that can improve community health, economic vitality, environmental sustainability, and equity.

What is a “Healthy Food Resource” (HFR)?

For a list of all HFRs included in our survey, see Appendix B: Survey Respondents.

This assessment uses the term *healthy food resource* (HFR) to refer to specific healthy, local food enterprises and activities: community gardens, school gardens, farmers’ markets, and community supported agriculture (CSAs). An HFR generally is a place where communities can acquire or grow fresh, local food. We do not propose that the HFRs identified here are the only way to access healthy local food in Santa Clara County, nor that this assessment is a complete picture of food access in the county. Rather, we have chosen these resources because of both their community-based nature as well as the opportunity they offer for improving access to healthy local foods.

Unlike grocery stores and restaurants, which are also important components of a community’s food landscape, HFRs are generally community-based enterprises (either for-profit or non-profit), and as such they require significant community support to be successful. HFRs are also notable for what they do *not* offer: the so-called “middle aisles” of the grocery store or the fast food window, which are chock full of high-calorie, low-nutrient processed foods.

Farmers’ Markets

Farmers’ markets are an example of a specific type of food retailing known as “direct marketing,” where producers sell directly to consumers, limiting the markup from distributors and retailers, and creating a direct connection between the people who grow food and those who eat it. Because farmers themselves sell at farmers’ markets, there is a practical limit to the distance that the food travels before reaching consumers, which generally conforms to the local foodshed.

The State of California provides a definition for a California certified farmers’ market, which requires markets to be (1) operated by a local government agency, one or more certified producers, or a non-profit organization; (2) certified by and operating in a location approved by the county agricultural commissioner; and (3) where farmers (or “producers”) sell directly to consumers agricultural products or processed products made from agricultural products the farmers grow themselves.² Farmers’ markets vary in the number of vendors who participate, and may range from the very small (1–2 farmers) to very large (dozens of farmers). They generally operate once per week, and may operate year-round or during the growing season.

² Cal. Food & Agric. Code § 47004(b); 3 C.C.R. § 1392.2.

Community Supported Agriculture (CSAs)

Community supported agriculture (CSAs) are another form of direct marketing, whereby individual farms or groups of farms sell “shares” of their products to individuals, and distribute products either to designated drop-off sites or to customers’ homes. CSAs allow farmers to spread some of the financial risk of the year’s harvest to shareholders, since membership fees guarantee income flows. CSAs also support direct farmer-consumer relationships, allowing farmers to capture 100 percent of the retail value of their products. Approximately 82 to 93 cents of every dollar spent on organics at grocery stores goes to middlemen, while farmers earn only 7 to 18 cents.³ Additionally, produce is fresh, local, seasonal and often grown with organic or pesticide-free, sustainable farming techniques.

Community Gardens

Community gardens, urban farms, and urban agriculture encompass a broad range of activities that relate to growing food within urban communities. Community gardens may be divided into plots that individual families cultivate, or they may be managed by a single organization that gardens the entire site. Some gardens primarily grow food for personal consumption, some for donation (to food pantries or senior centers, for example). Note that we do not include backyard gardens on private/residential properties in this definition, although growing at home for personal consumption can be an important source of local food.

School Gardens

School gardens are food-growing activities taking place on school grounds, utilized primarily by students, parents, teachers, and staff. School gardens may be integrated into classroom learning, or they may be primarily an after-school or summer school program. Importantly, school gardens are assumed to be less accessible to the surrounding community than a community garden, since presumably community members who aren’t parents of students or students themselves, without some other school affiliation, do not participate.

Understanding Access to HFRs in Santa Clara County

The term *access* encompasses a number of different factors, including location, cost, and cultural appropriateness. Access to healthy, affordable, and culturally appropriate food is a prerequisite for “food security,” which is defined by the U.S. Department of Agriculture as access by all people at all times to enough food for an active, healthy life. About one-third (33.5 percent) of adults in Santa Clara County whose incomes fall below 200 percent of the federal poverty line (about 105,000 individuals) live in “food insecure households,”

3 “Find Organics.” Om Organics. Available at: www.omorganics.org/page.php?pageid=63.

or households that cannot meet the requirements for food security due to lack of income or other access issues. Latinos in Santa Clara County have higher food insecurity (55.3 percent), whereas Asians have lower food insecurity (26.3 percent).⁴ At the same time, 55 percent of adults in Santa Clara County are overweight or obese,⁵ and 25 percent of middle and high school children are overweight.⁶ Clearly, healthy food access is a significant local issue and one that impacts many of the county's residents.

Each of the four HFRs discussed in this report is part of a community's food system, and part of the picture of local food access. As part of such a system, HFR's interact with each other as well as with other food retail outlets in communities. Research into how a community's food environment impacts public health outcomes points to the complexity of these interactions, and we do not yet have a robust field of studies that rate the relative importance or impact of access to different kinds of food resources (community gardens versus farmers' markets versus grocery stores) for different cultural or socioeconomic groups.

Given these limitations, this assessment attempts to measure barriers to or gaps in access through a few key ways:

- **Geographic:** For all of our HFRs, we assume that proximity will increase accessibility, especially if HFRs are within walking distance of low-income households (who may be more likely to be transit-dependent or not to have access to a private car). Walking distance is generally considered to be 1/4 to 1/2 mile.
- **Service:** The range of activities and programs associated with an HFR, specific populations targeted by the HFR's programming and management, and the frequency of operation are included here.
- **Affordability:** Where possible, we assess the cost or affordability of HFRs, including whether they accept or participate in federal food assistance programs such as Electronic Benefits Cards (EBT) for the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- **Policy:** Local land use and other policies (such as general plans, zoning, and consolidated plans) impact the location and size or scale of HFRs in a community. Supportive public policy is one way to support existing HFRs and incentivize new activities, and may be specifically targeted or prioritized for underserved communities.

4 2007 California Health Interview Survey (CHIS). Adults whose incomes are below 200 percent of the Federal Poverty Level (FPL) were interviewed on food insecurity and hunger status. Data about African Americans and Whites are not available due to statistical instability. Available at: www.chis.ucla.edu.

5 Santa Clara County Department of Public Health. 1997–2009 Behavioral Risk Factor Survey.

6 California Healthy Kids Survey. 1997–2008.

Assessment Findings

Overview of Healthy Food Resource Access

Mapping Access to HFRs

In order to better understand access to HFRs in Santa Clara County – especially for low-income households – we generated the following five map:

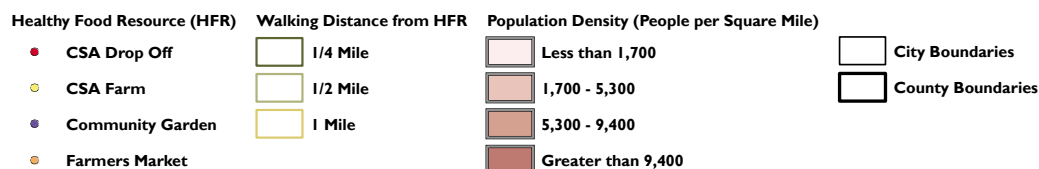
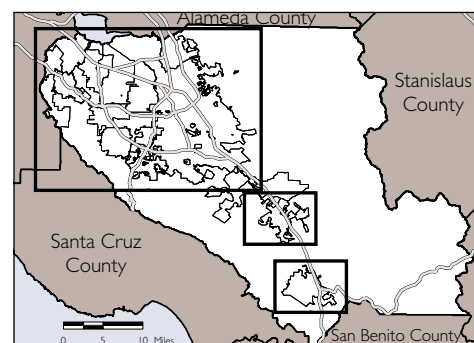
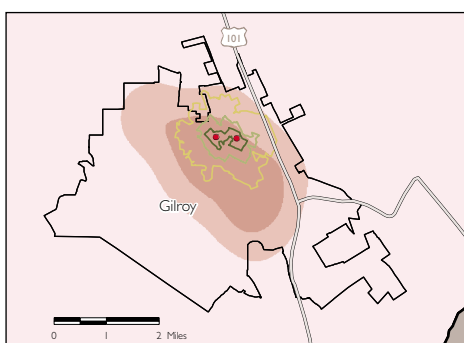
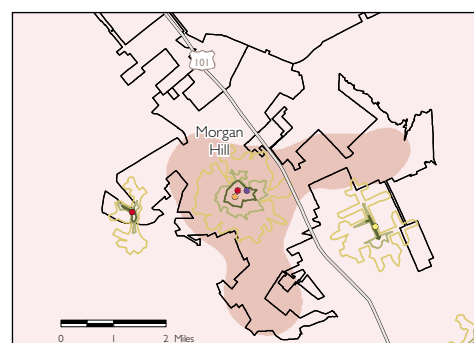
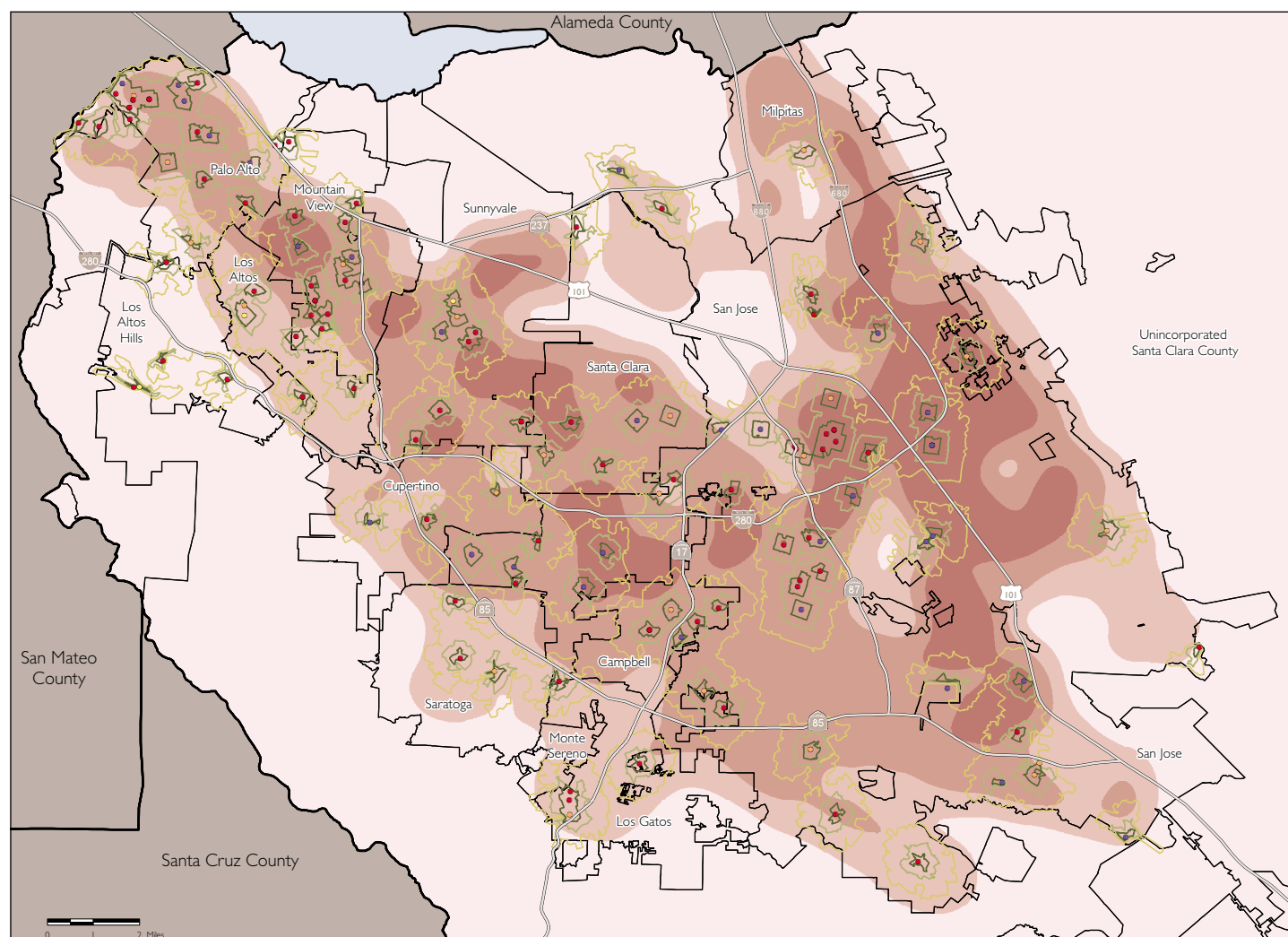
- Access and Population Density: Farmers' Market, CSA, and Community Garden
- Access and Low-Income Households: Farmers' Market, CSA, and Community Garden
- Access and Low-Income Households: Schools and School Gardens
- Overall Density of Healthy Food Resources
- Retail Food Environment Index (RFEI)

While we only present countywide maps in this report, a set of three maps exploring these factors for each city in Santa Clara County is available online at www.healthtrust.org/foodaccess.)

Access and Population Density

Map 1 shows “walking distances” from HFRs laid over population density in order to depict geographic access (or barriers to access) to HFRs relative to population density. (Note that school gardens are not included in this map, since we assume school gardens are not generally available for community use and we treat them separately.) Walking distances are generally assumed to be between $\frac{1}{4}$ to $\frac{1}{2}$ mile. While there are several areas of good alignment between population density and location of HFRs, such as in Palo Alto, there are notable gaps in walkable access for many low-income neighborhoods throughout the county, including in areas east of the 101 in San Jose, and pockets within Sunnyvale and Campbell.

Map 1: Access and Population Density
Farmers' Market, CSA, and Community Garden



Access and Low-Income Households

Map 2 depicts walking distances from HFRs in relation to low-income household density. The same trends visible in the population density analysis appear when looking at access to HFRs and density of low-income households. While a few areas within the county show good walkable access by low-income households (such as Palo Alto and Mountain View), places in Campbell, Santa Clara, Sunnyvale, and the areas east of the 101 in San Jose are experiencing significant gaps in walkable access to HFRs.

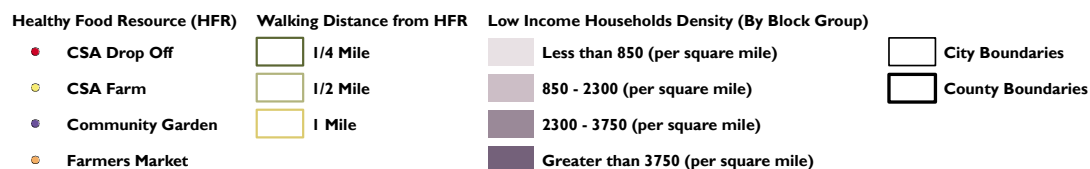
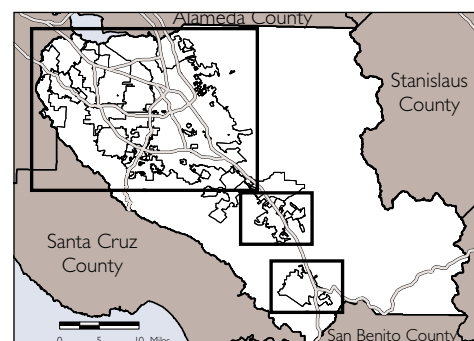
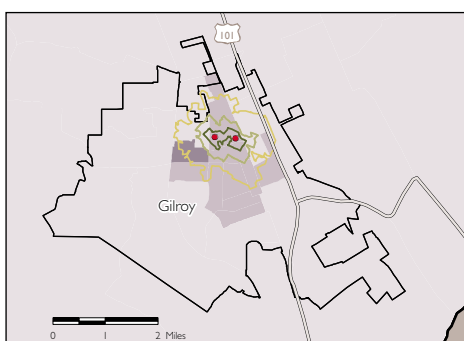
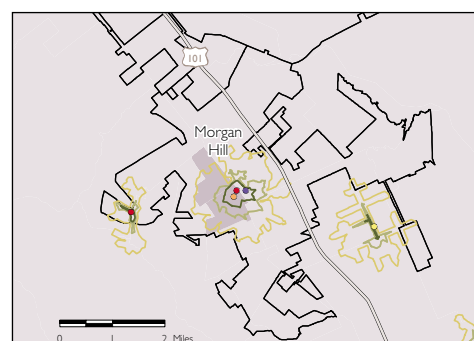
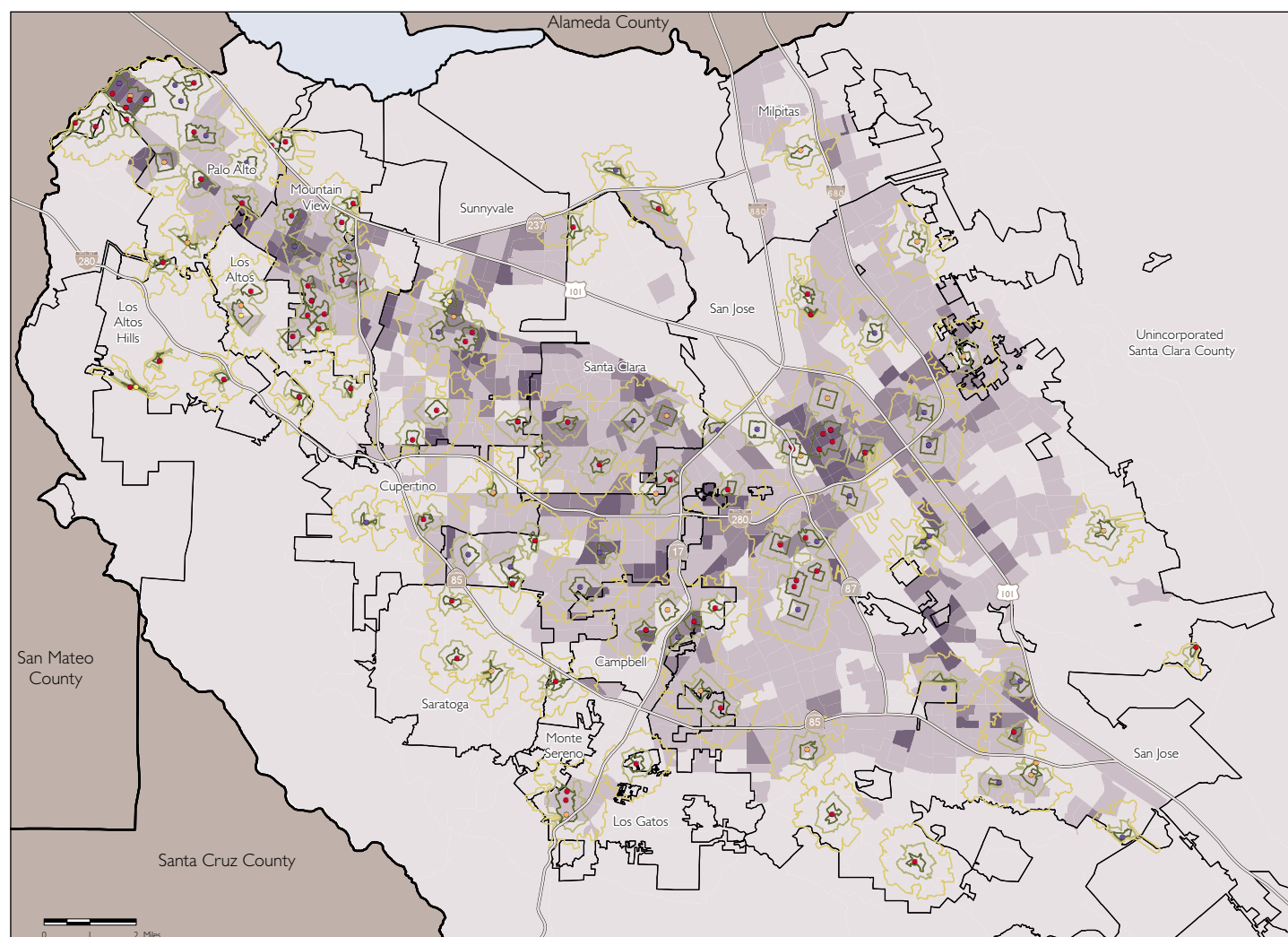
Table 1 (below) supplements this map with city-by-city analysis of the percent of low-income households within walking distance to HFRs. For example, in San Jose, only 15 percent of low-income households are within ½ mile of an HFR, while in Palo Alto, 50 percent are within ½ mile.

Table 1: Low-Income Households Within Walking Distance of a CSA site, Farmers' Market or Community Garden

City	Within ¼ Mile		Within ½ Mile		Within 1 Mile		Outside 1 Mile		Community Profile		
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Total Low Income Households	Total Households	Percent Low Income
Campbell	1,003	11%	2,801	31%	6,507	73%	2,448	27%	8,954	16,337	55%
Cupertino	117	2%	621	9%	4,450	63%	2,644	37%	7,094	18,958	37%
Gilroy	216	3%	707	10%	2,529	37%	4,335	63%	6,863	10,924	63%
Los Altos	213	7%	603	20%	1,928	63%	1,110	37%	3,037	10,591	29%
Los Altos Hills	7	1%	22	4%	150	27%	412	73%	561	2,604	22%
Los Gatos	256	6%	742	16%	2,547	55%	2,092	45%	4,638	11,596	40%
Milpitas	7	0%	44	1%	752	10%	6,532	90%	7,284	16,962	43%
Monte Sereno	1	0%	4	1%	99	28%	250	72%	349	1,142	31%
Morgan Hill	175	5%	455	12%	1,522	39%	2,337	61%	3,859	7,996	48%
Mountain View	1,833	11%	6,037	37%	13,196	81%	3,086	19%	16,283	30,533	53%
Palo Alto	2,404	22%	5,458	50%	9,927	91%	1,008	9%	10,935	25,813	42%
San Jose	5,807	4%	21,598	15%	70,129	48%	76,431	52%	146,560	270,558	54%
Santa Clara	1,043	5%	3,972	19%	13,589	66%	6,915	34%	20,504	37,884	54%
Santa Clara County (Unincorporated)	214	1%	1,502	8%	6,747	35%	12,601	65%	19,348	41,945	46%
Saratoga	66	3%	246	10%	1,053	42%	1,429	58%	2,482	10,016	25%
Sunnyvale	943	4%	3,621	14%	11,715	44%	14,747	56%	26,463	52,566	50%
Total	12,820	4%	48,433	17%	146,840	51%	138,376	49%	285,215	566,425	50%

Note: Walking distances to CSAs, farmers' markets, and community gardens are based on walking distances along the street network. Low-income household statistics represent households making \$75,000 or less annually as indicated in the 2000 Census. Distribution of households is assumed to be even throughout each block group.

Map 2: Access and Low-Income Households
Farmers' Market, CSA, and Community Garden



Schools and School Gardens

Map 3 shows low-income household density and walking distances from schools. Here, the trends in low-income access gaps are even more pronounced. In many communities, schools with gardens are not located in areas most accessible to low-income households.

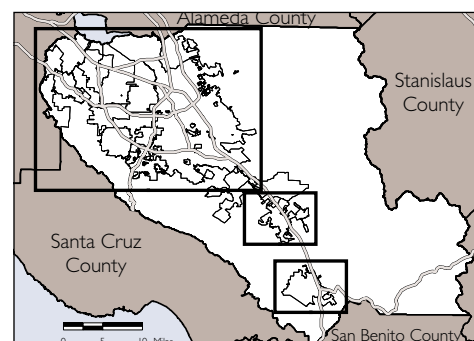
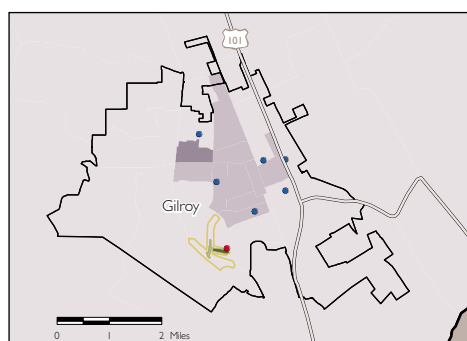
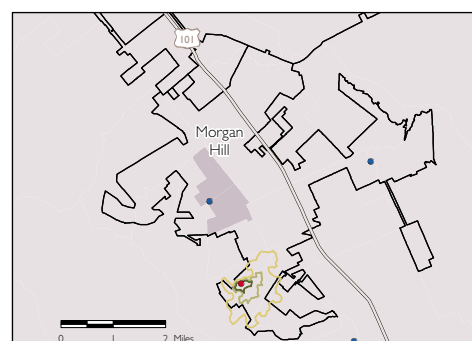
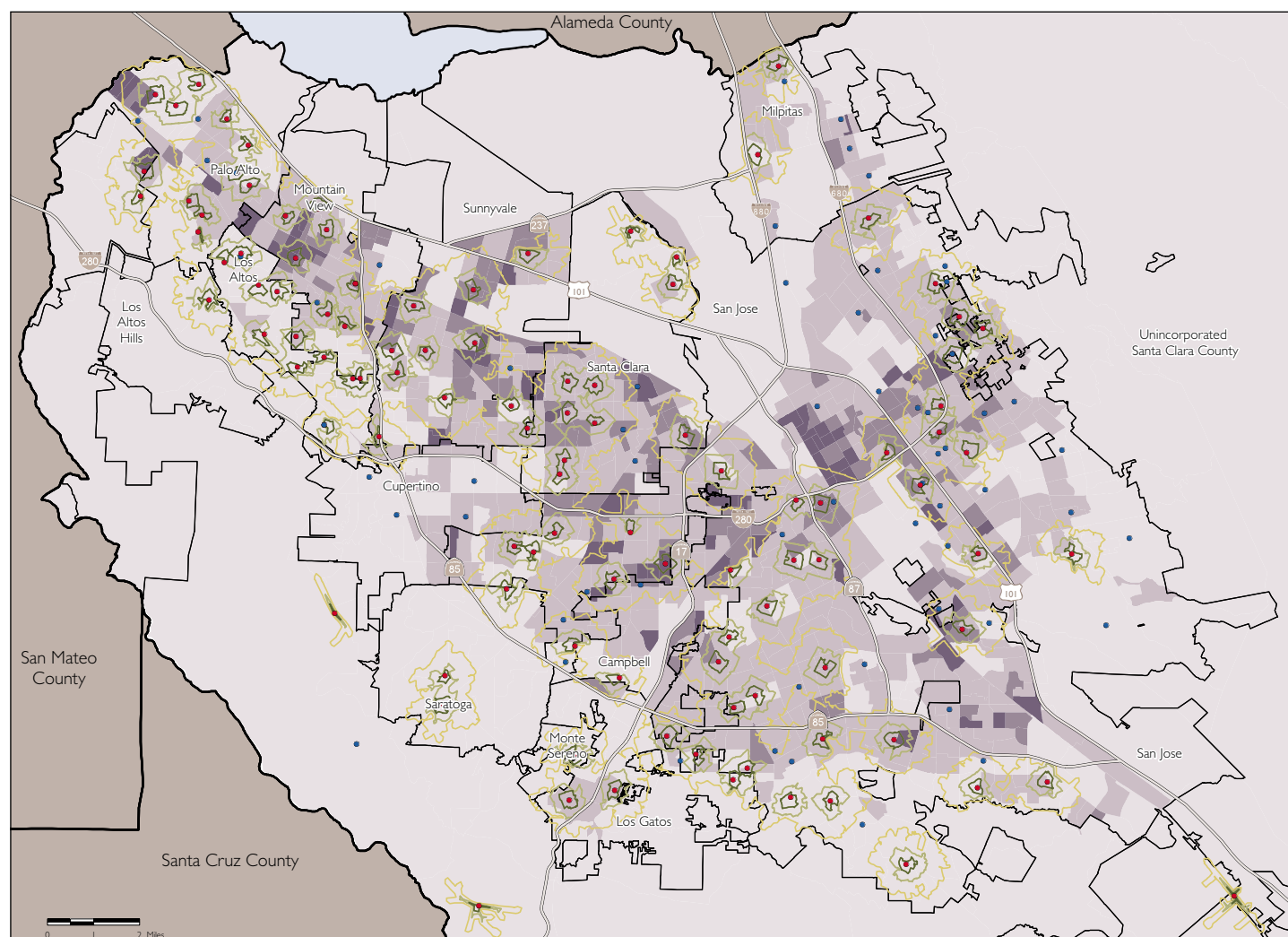
Table 2 (below) supplements this map with a city-by-city analysis.

Table 2: Low-Income Households Within Walking Distance of a School Garden

City	Within ¼ Mile		Within ½ Mile		Within 1 Mile		Outside 1 Mile		Community Profile		
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Total Low Income Households	Total Households	Percent Low Income
Campbell	130	1%	560	6%	3,233	36%	5,721	64%	8,954	16,337	55%
Cupertino	4	0%	106	1%	1,038	15%	6,056	85%	7,094	18,958	37%
Gilroy	2	0%	12	0%	86	1%	6,777	99%	6,863	10,924	63%
Los Altos	236	8%	992	33%	2,807	92%	231	8%	3,037	10,591	29%
Los Altos Hills	7	1%	27	5%	123	22%	439	78%	561	2,604	22%
Los Gatos	276	6%	1,138	25%	3,350	72%	1,288	28%	4,638	11,596	40%
Milpitas	198	3%	747	10%	2,197	30%	5,087	70%	7,284	16,962	43%
Monte Sereno	28	8%	72	21%	237	68%	111	32%	349	1,142	31%
Morgan Hill	20	1%	84	2%	309	8%	3,550	92%	3,859	7,996	48%
Mountain View	1,084	7%	4,346	27%	13,401	82%	2,882	18%	16,283	30,533	53%
Palo Alto	773	7%	3,218	29%	9,309	85%	1,626	15%	10,935	25,813	42%
San Jose	4,371	3%	18,254	12%	66,047	45%	80,513	55%	146,560	270,558	54%
Santa Clara	1,035	5%	4,555	22%	13,103	64%	7,401	36%	20,504	37,884	54%
Santa Clara County (Unincorporated)	576	3%	2,128	11%	6,334	33%	13,014	67%	19,348	41,945	46%
Saratoga	29	1%	164	7%	826	33%	1,657	67%	2,482	10,016	25%
Sunnyvale	1,130	4%	5,011	19%	19,067	72%	7,396	28%	26,463	52,566	50%
Total	9,899	3%	41,416	15%	141,465	50%	143,750	50%	285,215	566,425	50%

Note: The school gardens included in this study are based on a survey of schools that were likely to have gardens, and not a complete survey of all schools within Santa Clara County. Walking distances to school gardens are based on walking distances along the street network. Low-income household statistics represent households making \$75,000 or less annually as indicated in the 2000 Census. Distribution of households is assumed to be even throughout each block group.

Map 3: Access and Low-Income Households
Schools and School Gardens



Garden

- School Garden
- School Surveyed without a Garden

Walking Distance from School Garden

- 1/4 Mile
- 1/2 Mile
- 1 Mile

Low Income Households Density (By Block Group)

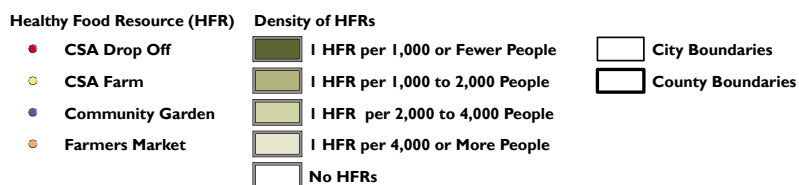
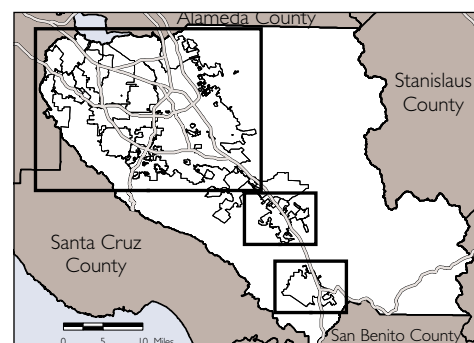
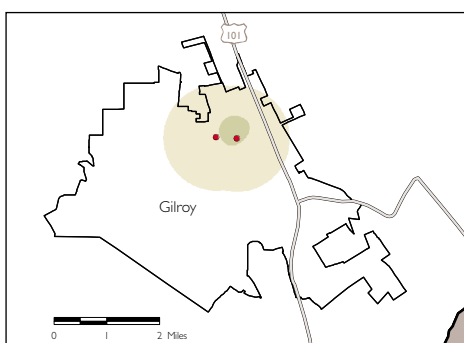
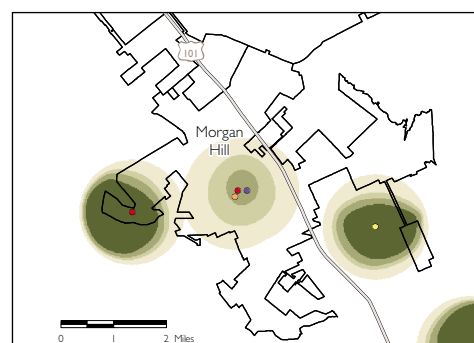
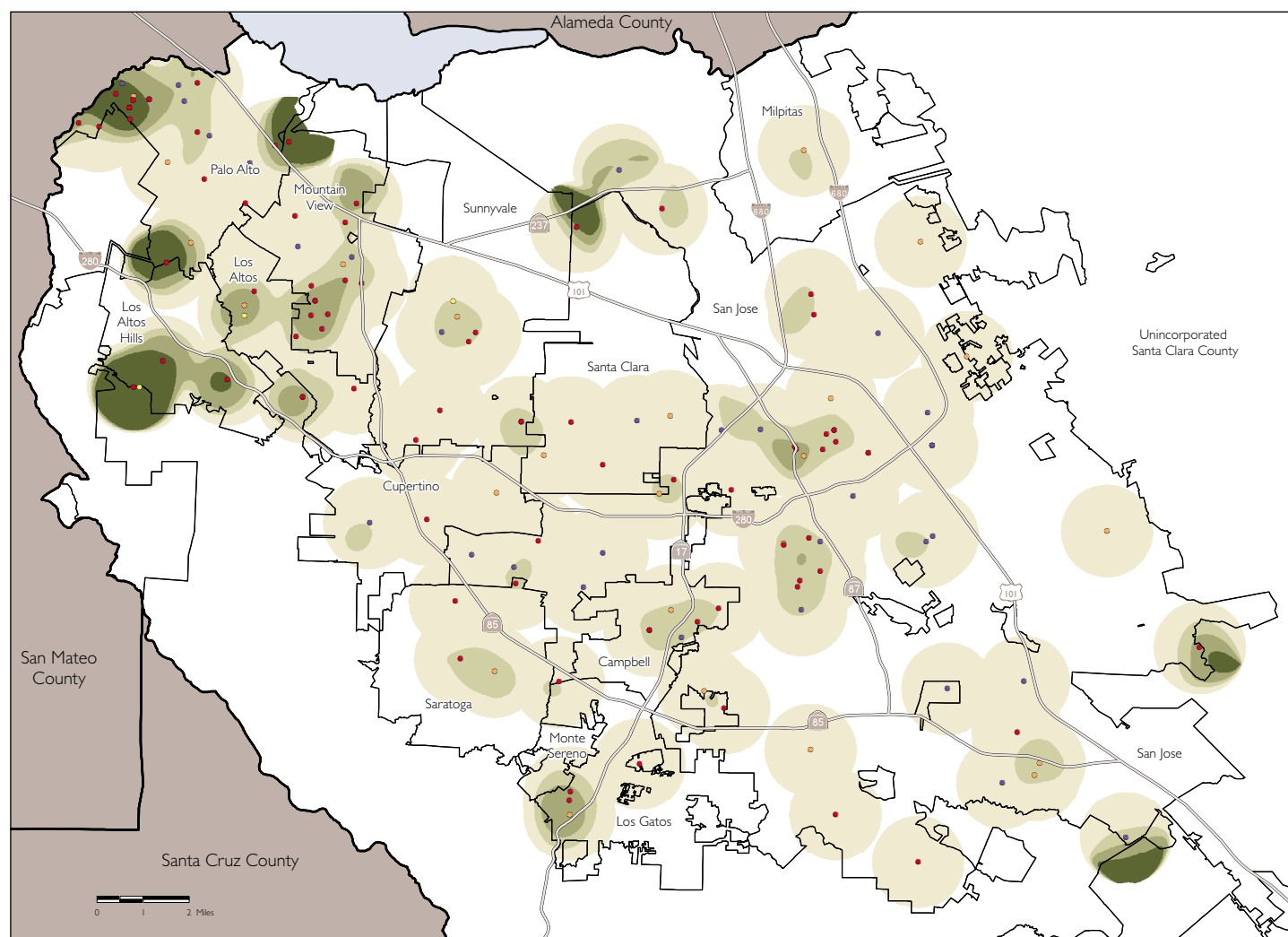
- Less than 850 (per square mile)
- 850 - 2300 (per square mile)
- 2300 - 3750 (per square mile)
- Greater than 3750 (per square mile)

- City Boundaries
- County Boundaries

Overall Density of Healthy Food Resources

Map 4 shows the number of HFRs per person in the county. This density varies from as few as one HFR per 4,000 or more people to one HFR per 1,000 or fewer people. This map shows areas of the county where there are generally more HFRs per capita, either because population is relatively low or because the number of HFRs is high. While we cannot say what the specific health impacts may be of living in neighborhoods in Santa Clara County with a greater density of HFRs, it may be true that increased density and increased options for acquiring or growing healthy food is an important component of access.

Map 4: Overall Density of Healthy Food Resources



Retail Food Environment Index (RFEI)

Map 5 shows the RFEI using data on retail type and location from the California Nutrition Network.⁷ While early research on the health impacts of the food environment focused on so-called “food deserts” – neighborhoods or communities where healthy food outlets like grocery stores are non-existent or rare⁸ – current studies are finding that “food balance” may be a better model. Food balance (or RFEI) studies look at not only access to healthy food outlets in a community but also access to unhealthy outlets, and especially the relative ease of access between these two.⁹ In other words, it matters not just whether you have a grocery store or farmers’ market in your neighborhood, but also whether you have many more fast food, convenience, and liquor stores relative to each healthy food outlet. Here, we have calculated a RFEI using the following model:

$$\frac{\left(\text{Fast Food Density} + \text{Convenience Store Density} \right)}{\left(\text{Grocery Store Density} + \text{Produce Market Density} + \text{Farmers' Market Density} \right)}$$

This report is not a food balance study, although we have included a map of the Retail Food Environment Index for Santa Clara County as a way of qualifying our findings. The relationship of the RFEI map to the other maps addressing access shows a stark geographic trend. In neighborhoods with higher (worse) RFEI scores, there are also generally fewer HFRs. HFRs are not filling the gaps in neighborhoods with poor access to grocery stores; instead, poor access to HFRs is compounded with poor access to healthy food outlets overall. This is especially troubling given the potential for associated diet-related health risks that are accompanied by poor access.

Overall Gaps and Needs

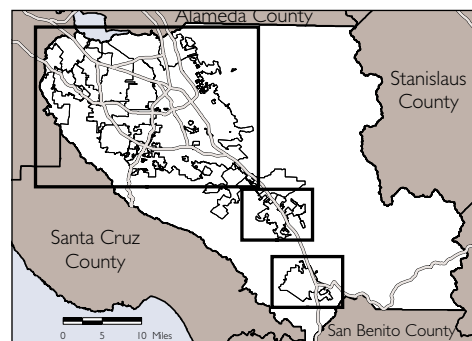
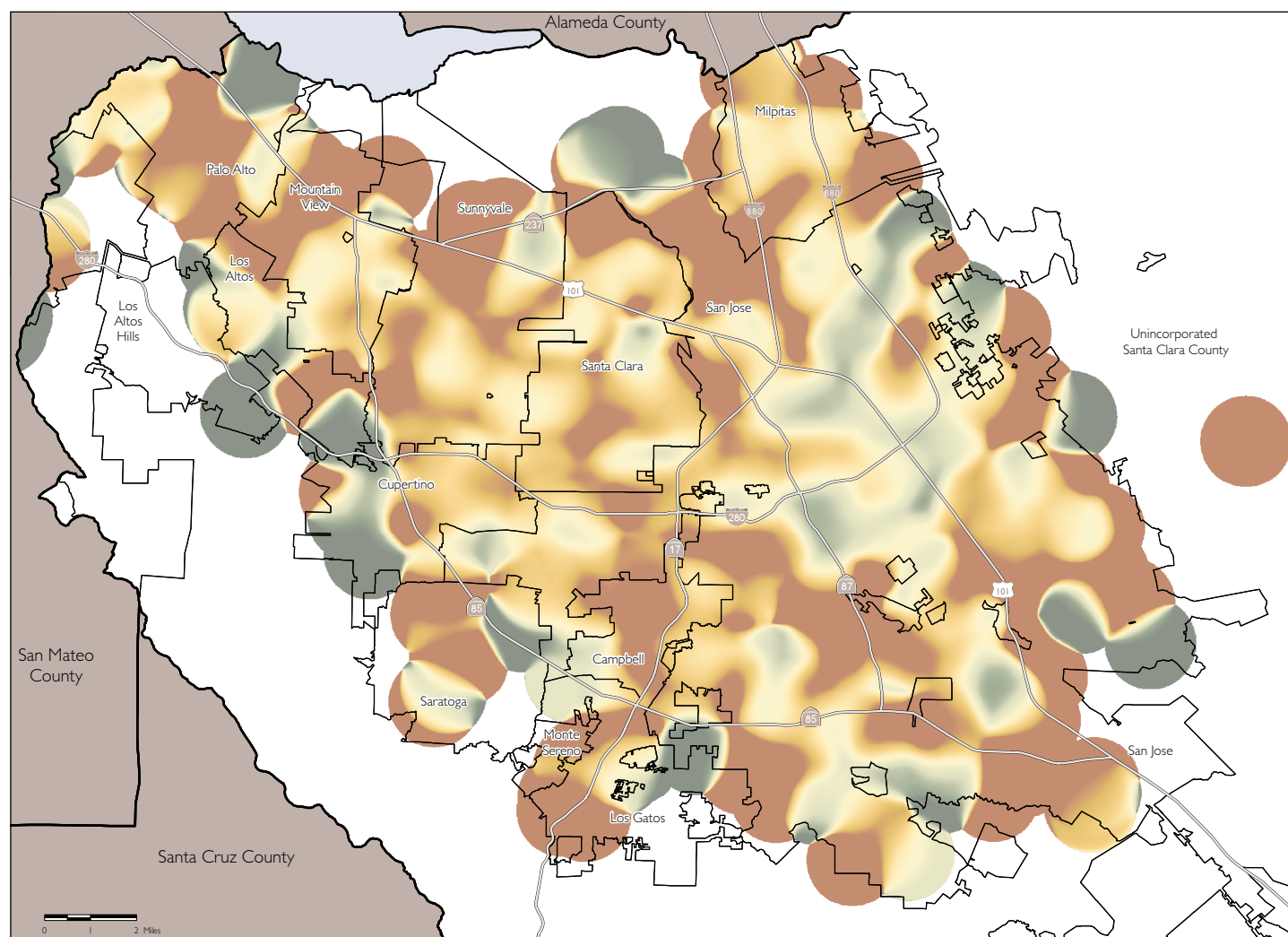
Based on our analysis, communities within Santa Clara County do not have equal walkable access to HFRs. Decisions about the location of HFRs have not necessarily been well aligned with improving access for the most underserved residents. Local planners, city officials, and others should consider how policies that require and incentivize HFRs could specifically target low-income and high-density areas with low walking access to HFRs plus unbalanced food environments overall (see the discussion of RFEI above). In particular, upcoming opportunities to plan at a community-wide scale (such as general

⁷ California Department of Public Health, Network for a Healthy California. Available at: www.cnnngis.org.

⁸ Shaffer A. *The Persistence of L.A.’s Grocery Gap: The Need for a New Food Policy and Approach to Market Development*. Center for Food and Justice. May 2002. Available at: http://departments.oxy.edu/uepi/publications/the_persistence_of.htm.

⁹ California Center for Public Health Advocacy. *Searching for Healthy Food: The Food Landscape in California Cities and Counties*. January 2007. Available at: www.publichealthadvocacy.org/RFEI/expanded%20methods.pdf.

Map 5: Retail Food Environment Index (RFEI)



plans, specific plans, or master plans) should take into account these disparities and prioritize investment accordingly.

Cities that have a high proportion of low-income households overall and a low percentage of households with access to an HFR within ½ mile (such as Gilroy, Campbell, San Jose, Santa Clara, Mountain View, and Sunnyvale, which are all more than 50 percent low-income, with less than 20 percent of low-income households located within ½ mile of an HFR) should especially consider how policies, programs, and partnerships could improve access to HFRs.

Local Policies and HFRs

Local land use policies, such as general plans and zoning, play an important role in creating access to HFRs. Land use policies impact where certain uses locate within a community, and the relative regulatory ease with which they can be established (e.g., permitting and conditional use requirements). Land use policies can also provide protections to those uses in the face of development pressures.

General plans, which are required by California law for all cities and counties, set a broad policy vision for development in a community.¹⁰ All development decisions must conform to the comprehensive plan, and implementing mechanisms, like zoning, must be consistent with its policies. Zoning ordinances divide a city or county into separate districts with different land use regulations within each district. Simply stated, zoning determines what can and cannot be built, and what activities can and cannot take place, on the parcels of land throughout a community.¹¹ Generally, if a type of use of land is not defined and permitted in a zoning code, it is considered illegal (even if the type of use does not appear at all in the code). A zoning law that establishes HFRs as *allowed uses* in the areas the community selects can eliminate the need for special permits and provides clarity about potential sites for new HFRs. It can also help to protect HFR activities in the allowed use area.

Other government plans, such as Consolidated Plans (required for administering Community Development Block Grants), can also support HFRs by allocating resources or prioritizing activities in certain locations within the community.

In addition to local policies, some communities offer other kinds of public support for HFRs. For example, the City of San Jose Department of Parks, Recreation and Neighborhood Services coordinates an extensive community garden program.

¹⁰ California Gov't. Code § 65300.

¹¹ For more information on general plans and zoning and how they can be used to promote health, see PHLP's toolkit *General Plans and Zoning: A Toolkit on Land Use and Health*. Available at: www.phlpnet.org/healthy-planning/products/general-plans-and-zoning. See also, *How to Create and Implement Healthy General Plans*. Available at: www.phlpnet.org/healthy-planning/create_implement_gp.

HFR Policy Scan

We conducted a scan of local policies and other programs or initiatives from cities in Santa Clara County and the unincorporated county that mention HFRs. Note that because CSAs were rarely identified in policies, we used policies related to agriculture as a proxy, since presumably they would impact the viability of local farming efforts. (For information on how this policy scan was conducted, see Appendix A: Methodology).

Policies were analyzed and categorized using the following criteria:

+	Supportive Policy	Allows, encourages, incentivizes, or supports this HFR activity
o	Neutral Policy	Mentions HFR but does not provide any specific supports or barriers
-	Policy Barrier	Requirements or restrictions that inhibit HFR activities

Policies that encourage healthy food resources might incentivize these resources by reducing fees. Policies that discourage healthy food resources may limit or charge fees for healthy food resource activities. Neutral policies may include language that defines a healthy food resource but does not encourage or discourage use. Some cities have policies that fall into multiple categories, annotated here as “/”.

Table 3: Assessing Local Policies

	Farmers' Markets			Local Food/Agriculture			Community Gardens			School Gardens		
	General Plan	Zoning	Other	General Plan	Zoning	Other	General Plan	Zoning	Other	General Plan	Zoning	Other
Campbell	+						+/o		+			
Cupertino				+			+	+/-				+
Gilroy			+	+	+/o		+	+	+	+		+
Los Altos												+
Los Altos Hills												
Los Gatos		+			+	+			+/-			
Milpitas		+/o					o	+	+/-			
Monte Sereno												
Morgan Hill	+	+		+				+/o				
Mountain View						+	o	+	+			
Palo Alto		+/o			+	+	+	+/-	+			
San Jose			+				+		+			
Santa Clara	+			+			+					
Santa Clara County (Unincorporated)	+	+/o	+	+		+			+			+
Saratoga			+			+	o					
Sunnyvale	o				-		+					

Table 3 shows the distribution of HFR-related policies across cities and the county. A few key findings should be noted:

- Recently adopted plans were more likely to include HFRs than older plans.
- A few cities use their plans to acknowledge the links between farmers markets and local economies, healthy local food, cultural/community heritage activities.
- Many general plans support HFRs by saying “provide opportunities for community gardens, farmers’ markets, etc,” but do not set specific goals or standards for access to HFRs.
- Cities most directly promoted HFRs by saying that they are permitted uses in certain zones. It was less common to see special incentives or reduced requirements (e.g., not having to pay a weighing fee, allowing larger signage).
- The Martial Cottle Park Master Plan/State Park General Plan¹² was especially noteworthy in identifying community partners that could help increase the feasibility of HFR activities.
- Only three cities mentioned school gardens (likely due to the division between school districts and other forms of government). Only one city (Gilroy) mentioned school gardens in its general plan.
- Barriers to HFRs included limiting the lot area allowed for growing produce, charging or increasing fees for HFRs, and excluding HFRs from development incentives.

For a compendium of local policies from cities in Santa Clara County and the unincorporated county that mention HFRs, see

www.healthtrust.org/foodaccess.

Policy Recommendations

There are a number of benefits to adopting land use policies that support HFRs:

- **Increase and protect HFRs:** Ensure they are legal and allowed uses, and reduce barriers or incentivize establishing new HFRs.
- **Optimize location:** Identify priority areas within a community for developing HFRs (for example, farmers’ markets could be targeted to a town center, near schools or transit stops, or on public land such as parks).
- **Increase access for low-income residents:** Create a comprehensive vision for how HFRs can serve the community; prioritize resources and incentivize development in underserved communities, or communities that currently lack walkable access to HFRs.

Santa Clara County could capitalize on these benefits and expand its support for HFRs by considering the following in local policy development:

¹² Available at: www.sccgov.org/portal/site/parks/parkschp?path=%2Fv7%2FParks%20and%20Recreation%2C%20Department%20of%20%28DEP%29%2FPlanning%20and%20Development%2FMartial%20Cottle%20Park%20Master%20Plan.

- **Ensure land use plans and policies reflect local HFR promotion efforts.** Many communities have recreation departments and sustainability programs that reference the benefits of HFRs, but do not necessarily reflect this in their land use plans. Collaboration between planning and community development and these sectors should be encouraged, and land use policies should be updated to support the community's efforts.
- **Strengthen policies by including specific implementation steps.** Communities should consider establishing goals/standards for HFR access, identifying action steps for achieving these goals, and naming implementation partners, such as: *Ensure that underserved areas are prioritized for the development of new farmers' markets; work with Economic Development, Public Health and local farmers' market associations to establish new markets.*
- **Use incentives to eliminate access gaps in low-income communities.** Prioritize locations and resources for new HFRs in low-income communities, and consider developing policies that expand affordability and access in other ways (such as reduced/eliminated permit fees if a farmers' market accepted WIC and EBT, or requirements to accept food assistance programs). Land use policies can also incentivize or require farmers' markets to accept federal food assistance programs. In San Francisco, for example, farmers' market vendors are required to accept coupons, vouchers, and EBT.¹³

Specific policy recommendations for individual HFRs are provided in the sections addressing that resource.

PHLP has model general plan/comprehensive plan and zoning policies for farmers' markets and community gardens, including implementation ideas:

- Establishing Land Use Protections for Farmers' Markets:
www.nplanonline.org/nplan/products/establishing-land-use-protections-farmers-markets.
 - Establishing Land Use Protections for Community Gardens:
www.nplanonline.org/nplan/products/establishing-land-use-protections-community-gardens.
-

¹³ San Francisco, Cal., Administrative Code § 9A.15 (2009).

Farmers' Markets

Impact of Access

On average, more than 1,000 shoppers visit each of the 27 Santa Clara County farmers' market surveyed here each market day.¹⁴ Shopping at a farmers' market is one way for consumers to maximize their food dollars, by supporting farms that employ sustainable and organic farming practices, grow regional and culturally specialties, minimize energy consumption by transportation and storage, and re-circulate dollars directly back into the local and regional economy.¹⁵ Farmers' markets improve access to locally grown fresh produce by bringing local farmers and their produce directly to communities.¹⁶

Farmers' markets introduce customers to new types of locally grown fruits and vegetables as well as new methods of preparation, creating positive attitudes toward produce preparation and consumption.¹⁷ Consumers have the opportunity to make connections with producers, and gain a better understanding of local food production.¹⁸ Beyond providing consumers with a deeper knowledge of local foods, the consumer/producer connection motivates many consumers to support local farmers by shopping at farmers' markets.¹⁹

Data on the specific impact of Santa Clara County farmers' markets is not available for all the markets profiled here. However, a study of shoppers at markets managed by the Pacific Coast Farmers Market Association (which operates 11 markets in Santa Clara County, as well as other markets throughout the Bay Area) found²⁰ that farmers' markets are a substantial source of healthy food – shoppers buy approximately half of their produce at farmers' markets – and 50.5% of shoppers with incomes under \$35,000 say organic is more important than cost. (High-income shoppers find cost less important compared to organic: 67.6% say organic is more important than cost.)

Cost and Affordability

The Pacific Coast Farmers' Market Association survey asked respondents about cost and spending habits at farmers' markets:²¹

¹⁴ Sixteen of the 27 markets we surveyed provided data about average number of customers. Average number of customers shown is the average per market day in peak season. Market contacts indicated that there is variation in the number of customers by season throughout the year.

¹⁵ Brown C and Miller S. "The Impacts of Local Markets: A Review of Research on Farmers Markets and Community Supported Agriculture (CSA)." *American Journal of Agricultural Economics*, 90: 1296-1302, 2008.

¹⁶ Holben D. "Farmers' Markets: Fertile Ground for Optimizing Health." *JADA*, 110: 364-365, 2010.

¹⁷ McCormack L, Laska M, Larson N, and Story M. "Review of the Nutritional Implications of Farmers' Markets and Community Gardens: A Call for Evaluation and Research Efforts." *JADA*, 110: 339-408, 2010.

¹⁸ Holben D. "Farmers' Markets: Fertile Ground for Optimizing Health." *JADA*, 110: 364-365, 2010.

¹⁹ *Id.*

²⁰ "Two-Year Study Explores Advertising Impacts and Reveals Buying Habits of Farmers' Market Shoppers." *Market Thymes*. 2009. Available at: www.pcfma.com/pdf/FMPP2009.pdf.

²¹ *Id.*

- Farmers' market consumers were willing to pay an extra 19 cents per dollar for farmers' market produce, compared with produce from a grocery store. Consumers would pay an additional 22 cents per dollar if farmers' market produce was locally grown. Even the cost-conscious consumers would pay an additional 14 cents per dollar for locally grown farmers' market produce.
- Farmers' markets have a positive economic impact on the surrounding community: 61.7% of farmers' market shoppers spent additional money at local businesses during a farmers' market trip (an average of \$18.78).

The survey also assessed the demographics of farmers' market shoppers compared with the demographics of the community at large:

- White and higher-income shoppers were overrepresented at farmers' markets, while lower-income, minority shoppers were underrepresented.
- Low-income households earning less than \$25,000 per year spent substantially less money at farmers' markets than high-income households earning greater than \$200,000 per year (\$21.39 vs. \$41.51 per trip, respectively), implying that income is a barrier to purchasing produce at a farmers' market.

Presumably shoppers who are not willing to pay higher prices for farmers' market produce are less likely to attend a farmers' market, and less likely to be sampled in the survey. However, it may be an incorrect assumption that shopping at farmers' markets is more expensive than shopping in a conventional grocery store. A series of studies from the Seattle area found that products at farmers' markets were consistently less expensive than the same products in grocery stores.²²

Whether or not they are more expensive than conventional retailers, farmers' markets will remain largely inaccessible to low-income shoppers as long as they do not accept federal food assistance programs. These financial assistance programs, often in the form of coupons, increase access to locally grown produce among low-income households. The Farmers' Market Nutrition Program (FMNP) for women enrolled in the Special Supplemental Nutrition Program for Women Infants and Children (WIC), and the USDA Senior Farmers' Market Nutrition Program (SFMNP) are two federally sponsored programs that provide farmers' market coupons for low-income households.²³

Financial assistance programs increase not only access to but also consumption of fresh produce. Families who receive these benefits eat more fruits and vegetables after receiving farmers' market coupons, and more than those who do not receive coupons. More often than not, coupon recipients spend their own money at farmers' markets, further increasing the intake of locally grown

²² Neighborhood Farmers Market Alliance. *Are the Farmers Markets Really More Expensive?* Available at: www.seattlefarmersmarkets.org/ripe-n-ready/are-the-farmers-markets-really-more-expensive.

²³ McCormack L, Laska M, Larson N, and Story M. "Review of the Nutritional Implications of Farmers' Markets and Community Gardens: A Call for Evaluation and Research Efforts." *JADA*, 110: 339-408, 2010.

produce and contributing to the local economy. Additionally, recipients continue to shop at farmers' markets after coupon programs expire.²⁴ Farmers' market incentives have valuable outcomes for low-income communities, including introducing low-income consumers to a variety of locally grown produce, increasing consumption of produce, and improving the local economy.

Service Gaps

The accessibility of farmers' markets is not only a function of their location. Other considerations include how many months of the year markets operate ("seasonality") and the size of markets. A market that only operates during the summer and fall is certainly a less regular source of healthy food than one that operates year-round. Larger markets, with more vendors and more variety, presumably also increase the amount of healthy food available to shoppers. Our survey of Santa Clara County farmers' markets found that:

- **Over 60 percent of markets operate throughout the year.** About 30 percent are year-round, with another 33 percent running 11 months of the year (typically, taking off the month of January). The remaining markets conform more closely to the major growing season, and run primarily during the spring, summer, and early fall.
- **Markets offer a large number of vendors.** The average number of vendors was 34, although this includes at least one "mini market" (the number of vendors across all survey respondents ranged from 4 to 90).²⁵

Other Barriers for Low-Income Families

One of the primary barriers to farmers' markets for low-income families is certainly cost. As indicated by the respondents to the Pacific Coast Farmers' Market survey, many shoppers at markets are willing to pay a price premium for qualities they associate with market produce: freshness, sustainable or organic growing practices, locally grown, and a direct relationship with producers.²⁶ However, low-income families are the least able to pay price premiums for food, and may find that shopping at farmers' markets is out of their budget.

While we were not able to directly survey the cost of food at farmers' markets (or the relative cost of food at farmers' markets compared with food in other retail outlets in Santa Clara County), we were able to assess an important indicator of affordability: whether markets accept federal food assistance programs. In addition to the two programs mentioned previously – the Farmers' Market Nutrition Program (FMNP) for women enrolled in the

²⁴ *Id.*

²⁵ The number of vendors shown is the peak season number. As with average number of customers, there is seasonal variation throughout the year.

²⁶ "Two-Year Study Explores Advertising Impacts and Reveals Buying Habits of Farmers' Market Shoppers." *Market Thymes*. 2009. Available at: www.pcfma.com/pdf/FMPP2009.pdf.

Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and the USDA Senior Farmers' Market Nutrition Program (SFMNP) – farmers' markets can also accept Electronic Benefits Cards (EBT) for the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps). Each of these programs provides additional purchasing power to low-income families or individuals and can greatly increase the affordability of food at farmers' markets. Our survey found the following:

- **81 percent of markets accept SFMNP coupons and WIC coupons; only 41 percent accept EBT.** While SFMNP and WIC coupons are more widely accepted, only Pacific Coast Farmers' Market Association (PCFMA) markets accept Electronic Benefit Transfer (EBT). Market managers reported perceiving little demand for EBT in Santa Clara County and technological or overhead constraints to accepting EBT. EBT requires that markets have the ability to scan a credit card and deduct payment with either a wired or wireless card reader. Additionally, markets must allow shoppers to electronically redeem food stamps for "scrip" (reusable tokens that can be made from hard-to-counterfeit wood or plastic) at a central location and use them for purchases at any market merchant.
- **Only one market is organic-only.** Almost all markets surveyed offered a mix of certified organic and non-certified produce. Offering a mix of produce could make markets more affordable if the costs of organic growing methods and certification increase the costs of food for consumers.
- **About 40 percent donate to food banks.** If markets donate leftover or unsold food to food banks, this improves access to healthy local produce for those Santa Clara County residents least able to afford food. During 2009, the Second Harvest Food Bank serving both Santa Clara and San Mateo Counties served an average of 236,000 people per month, the majority of whom are seniors and low-income families with children.²⁷ While we were unable to assess barriers to donation, this may be an area of future exploration for farmers' market/anti-hunger community partnerships.

Another important factor to accessibility is the cultural appropriateness of farmers' markets offerings, including the types of products sold, the demographics and ethnic background of vendors, and the organization of the market itself (such as product placement, market size and format, and activities and cultural events offered). Unfortunately, this topic was outside the scope of this assessment. However, we acknowledge that as a community-based food resource, farmers' markets will not be successful in serving low-income customers unless they respond to their cultural needs and shopping preferences.

²⁷ Second Harvest Food Bank of San Mateo and Santa Clara Counties. *Food Bank Facts*. Available at: www.shfb.org/aboutus.

Local Policy Review

Our policy review of land use and other local policies impacting farmers' markets found a general paucity of language. Only one-quarter of communities include policies about farmers' markets in their general plans, and another 30 percent had developed zoning regulations for farmers' markets. Only Morgan Hill and Santa Clara County (Unincorporated) had both general plan and zoning language (see Table 4 below).

Table 4: Local Policies for Farmers' Markets

	Farmers Markets		
	General Plan	Zoning	Other
Campbell	+		
Cupertino			
Gilroy			+
Los Altos			
Los Altos Hills			
Los Gatos		+	
Milpitas		+/o	
Monte Sereno			
Morgan Hill	+	+	
Mountain View			
Palo Alto		+/o	
San Jose			+
Santa Clara	+		
Santa Clara County (Unincorporated)	+	+/o	+
Saratoga			+
Sunnyvale	o		

At the same time, we found public support with regard to the actual location of farmers' markets within communities. Almost two-thirds (63 percent) of farmers' markets are located on public land, while 37 percent are held on private land.

Recommendations

Communities within Santa Clara County could take a few key steps to improve access to farmers' markets for low-income residents:

- **Expand acceptance of federal food assistance programs at farmers' markets.** Farmers' market managers expressed concerns about the challenges associated with accepting federal food assistance programs (especially EBT) at farmers' markets. Public agencies and community groups should consider developing technical assistance or support

programs that make acceptance easier. For example, a local community group or agency could assist markets in applying for free EBT machines and transaction services – currently offered by the California Department of Social Services (DSS).²⁸ A “wired” EBT machine requires electricity and a telephone connection (landline or cellular), but new technology is also making wireless, battery-operated EBT terminals available. Generally, DSS provides wireless EBT machines to farmers’ markets that are located in a low-income area and average at least \$100 in food stamp sales per month. However, EBT machine requests are evaluated on a case-by-case basis and may take other factors into account. In addition, communities could develop incentive policies, such as reduced/eliminated permit fees if a farmers’ market accepts federal food assistance programs.

- **Consider requiring markets to accept federal food assistance programs.** Some communities are adopting zoning ordinances that require farmers’ markets to accept federal food assistance programs as a condition of operation.²⁹ By setting an even playing field and requiring all farmers’ markets in a community to accept federal food assistance, affordability and access for low-income households is greatly increased. This strategy may be most effective when combined with support through technical assistance or other incentives as described above.
- **Promote farmers’ markets that respond to the cultural and shopping patterns of low-income households.** Cost and location are not the only barriers to use of farmers’ markets by low-income households. Cities should consider conducting market studies and/or surveys to understand the cultural and shopping preferences of low-income households, and encourage the development of community-based markets that respond to these preferences.
- **Develop specific land use policies and regulations that protect and incentivize farmers’ markets.** Communities should include farmers’ markets as they update their general plans, and consider how market location could contribute to maximum community benefits and fill in “gaps” in access to healthy foods. In addition, zoning regulations should be developed that provide clear guidelines on operating standards for markets while removing barriers to operation (allowing markets as an accessory use in specific zones, streamlining permits, etc.).

²⁸ See California Department of Social Services’ Electronic Benefit Transfer Project, Farmers’ Market Information. Available at: www.ebtproject.ca.gov/farmers.aspx.

²⁹ San Francisco has adopted such a requirement. See San Francisco, Cal., Administrative Code § 9A.15 (2009).

Community Supported Agriculture (CSAs)

Impact of Access

CSAs have the potential to provide access to fresh, affordable, locally grown fruits and vegetables to consumers of a variety of income levels, while also increasing household consumption of fruits and vegetables. Approximately 5,925 member households³⁰ participate in the 22 community-supported agriculture (CSA) initiatives serving Santa Clara County³¹ that provided information about membership in our survey. CSAs did not generally keep more detailed demographic information about their customers, such as median income, making generalizations about CSA members difficult.

Despite the growing popularity of the CSA model, there is limited research on the impact CSAs have on their members. Of the research that has been done, it is clear that CSAs increase members' access to fresh fruits and vegetables.³² CSA members often express that they eat a greater variety and quantity of produce as a result of joining a CSA.³³ In a study of four CSA programs, 74 percent and 54 percent of CSA members reported that they'd increased the variety and quantity of produce they consumed, respectively.³⁴ CSA members also report that they shop less for food and adopt healthier eating habits.³⁵ Finally, CSA members agree that the produce they receive is of higher quality and freshness than produce available at local grocery stores.³⁶

Cost and Affordability

Produce from CSAs is generally less expensive than produce from local grocery stores.^{37,38} For households without automobiles – especially low-income and elderly households – CSAs can increase access to locally grown produce by delivering to a local drop-off point, or even right to your doorstep. However, participation in CSAs is not necessarily distributed evenly among income groups. In many cases, CSA members are well-educated middle-class families.³⁹

30 The number of members is the total number of members in the CSA; the number of Santa Clara County resident members was not readily available.

31 Either located in or deliver to Santa Clara County.

32 Brown C and Miller S. "The Impacts of Local Markets: A Review of Research on Farmers Markets and Community Supported Agriculture (CSA)." *American Journal of Agricultural Economics*, 90: 1296-1302, 2008.

33 *Id.*

34 *Id.*

35 *Id.*

36 *Id.*

37 *Id.*

38 Cooley and Lass. Consumer Benefits from Community Supported Agriculture Membership. *Review of Agricultural Economics*, 20(1): 227-237, 1998.

39 Goland C. "Community Supported Agriculture, Food Consumption Patterns, and Member Commitment." *Culture and Agriculture*, 24(1): 14-25, 2002.

Service Gaps

The types of food available from a CSA and its seasonality affects the extent to which CSAs are able to serve as a regular source of healthy foods for Santa Clara County residents. Our survey found that the most widely available category of foods from CSAs was produce (fruits and vegetables), followed by eggs and dairy:

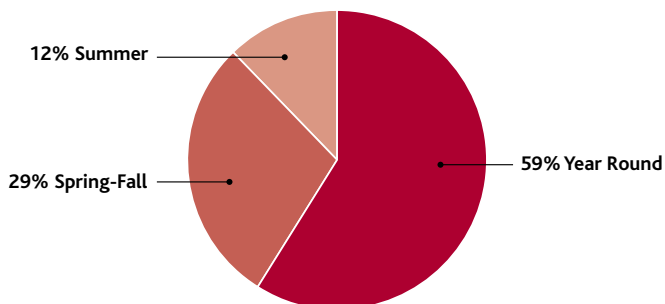
Table 5: Types of Food Offered by CSAs

Fruit	Vegetables	Nuts	Meat	Eggs / Dairy
84%	84%	16%	28%	40%

Like all the HFRs profiled in this study (with perhaps the exception of farmers' markets), CSAs do not offer a full range of foods that a typical household would purchase (such as bread or other staples), so they are not likely to serve as a household's only food source. However, they may be an excellent source of affordable produce. Increasing access to produce in particular is an important public health issue, since over 60 percent of adults and children in Santa Clara County do not consume the recommended five or more servings a day of fruits and vegetables.⁴⁰

We also found that while almost 60 percent of CSAs operate year-round, the remaining 40 percent operate on a seasonal basis:

CSA Seasonality



Given what amounts to gaps in access during certain times of the year (especially non-growing season months), CSAs may not be able to serve as a year-round source of healthy food. However, they may still offer an important source of affordable, local produce.

⁴⁰ California Health Interview Survey, 2007.

Other Barriers for Low-Income Families

While CSAs offer a number of potential advantages as a source of healthy food for low-income consumers, including a distribution model that uses neighborhood sites or delivers directly to the home, one potentially significant barrier is subscription costs. Most CSAs charge a subscription rate per box of produce, with boxes delivered on a weekly basis. Our survey found that comparing costs across CSAs was extremely difficult, partly because there is no standard amount of produce that comes in a box, and partly because the way CSAs charge their customers varies. Most require an upfront payment for weekly deliveries, with the number of weeks covered by the subscription varying in addition to the subscription cost. Some CSAs offer different-size boxes for different subscription rates, or special add-ons to a basic box (such as eggs or extra fruit). Given all this variation, we found:

- **The average CSA subscription cost per week is about \$26.** This is likely the upper end of affordability for a low-income household, given that SNAP benefits amount to about \$3 per day per person.
- **CSA payments are generally a lump sum up front, not per week.** This benefits farmers by giving them a large influx of capital at the beginning of the growing season (or when members renew for annual CSAs), which they can then use to invest in seeds, equipment, and labor. However, it is challenging for low-income households who may not have the ability to pay a large sum up front, even if the per-week cost of the produce is lower than typical grocery prices.

CSAs that specifically serve low-income customers often offer weekly payment options, a range of subscription levels, and accept EBT/SNAP as a form of payment. For example, the People's Grocery "Grub Box" CSA, which serves West Oakland, accepts EBT and offers two subscription rates: \$12 per week for a West Oakland resident and \$24 per week for a "Sponsorship Box." The higher sponsorship subscription rate helps offset the costs for a low-income family.

Importantly, CSA programs like the Grub Box also consider the ethnic and cultural preferences of the communities they serve. The CSA model creates a close relationship between the farm and the consumer and the opportunity for low-income customers to purchase affordable produce that matches their food-buying preferences; however, without specific marketing and outreach to these communities, the opportunity may be lost.

Local Policy Review

Because few of the policies we looked at explicitly mentioned CSAs, we used policies referencing local agriculture as a proxy, since local agriculture is a prerequisite for a CSA. However, we acknowledge that there is an important difference between planning for agricultural activities and planning for CSAs (including drop-off sites, and tapping into the potential of urban areas to serve

as a marketplace for local agricultural products). With regard to local agricultural promotion, we found that many communities missed the opportunity to focus on local food production and improving access to healthy, local food. Morgan Hill and Gilroy were notable exceptions, having adopted innovative policy statements about local agriculture, including its contribution to the local economy and agritourism.

Table 6: Local Policies for CSAs

	Local Food/Agriculture		
	General Plan	Zoning	Other
Campbell			
Cupertino	+	+	
Gilroy	+	+/o	
Los Altos			
Los Altos Hills			
Los Gatos		+	+
Milpitas			
Monte Sereno			
Morgan Hill	+		
Mountain View			+
Palo Alto		+	+
San Jose			
Santa Clara	+		
Santa Clara County (Unincorporated)	+		+
Saratoga			+
Sunnyvale		-	

Recommendations

Communities within Santa Clara County could take a few key steps to improve access to CSAs for low-income residents:

- **Identify public/private partnership opportunities to expand CSA access for low-income households.** Opportunities could include assistance accepting EBT, conducting community surveys and market studies that identify customer preferences for products and viable price-points, serving as a broker or clearinghouse on customer and market data for local farmers who want to start or expand a CSA, and encouraging agriculture/urban agriculture on public land to be used for a CSA targeting underserved communities.
- **Include policies specific to CSAs in land use plans and policies.** This could include not only identifying areas of the community that will be prioritized for local agriculture, but also highlighting the importance of

local agriculture in healthy food access. In addition, plans could identify priority CSA drop-off locations that are transit-accessible and within walking distance of low-income residents.

Community Gardens

Impact of Access

Community gardens give community members the opportunity to grow their own produce. Community gardens are frequently located in urban communities, where private outdoor gardening space and access to locally grown food is limited.⁴¹ Our survey identified 28 active community gardens in Santa Clara County,⁴² and of the gardens surveyed, 24 provided membership figures. Altogether, an estimated 1,250 community residents participate in community gardens.⁴³

Especially in such underserved neighborhoods, community gardens can improve access to fresh fruits and vegetables. Participants in a study of San Jose community garden listed their top five reasons for gardening (most important first):⁴⁴

- I enjoy gardening as a hobby.
- I can share my vegetables with others.
- I feel healthier when I eat my own produce.
- I can feel proud of my garden.
- I garden to relieve stress.
- I need the physical exercise (primarily Americans).
- I save money by growing my own food (primarily immigrants)⁴⁵

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.⁴⁶ In addition to healthy eating benefits, community gardens provide a venue for community-building and physical activity. San Jose community gardeners reported the following health benefits from participating in gardening:⁴⁷

- **Psycho/Social:** Employed respondents reported gardening to relieve stress more frequently than retired respondents (significant among American-born respondents only)

41 McCormack L, Laska M, Larson N, and Story M. "Review of the Nutritional Implications of Farmers' Markets and Community Gardens: A Call for Evaluation and Research Efforts." *JADA*, 110: 339-408, 2010.

42 We identified and surveyed three additional gardens: one garden in San Jose has closed (Alviso) and two other gardens are planned but not yet operating (Martial Cottle and Morgan Hill Community Garden).

43 Garden membership for City of San Jose community gardens was estimated based on the number of plots per garden. Exact membership numbers were not available.

44 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>.

45 American- and immigrant-born gardeners did not differ greatly in perceptions of garden benefits.

46 Lee SH, *supra* note 44.

47 *Id.*

- **Psycho/Social:** Many non-English speaking immigrants felt more connected to their birth country through community gardens (63%)
- **Physical Health:** Retired respondents reported gardening for physical exercise more frequently than employed respondents (64% vs. 28%, respectively)

Cost and Affordability

Community gardens can also provide an affordable source of fruits and vegetables. Community gardens in low-income neighborhoods are particularly valuable, as they increase access to healthy food while decreasing household food dollars spent. Locally, gardeners in San Jose confirmed these general findings, stating that the produce grown in community gardens helps to reduce household expenses.⁴⁸ Reported cost savings varied based on country of origin:⁴⁹ Laotian immigrant residents were most likely to report gardening to save money by growing their own food (75 percent vs. 39 percent Mexican, 20 percent Vietnamese, and 17 percent Italian immigrants).

Service Gaps

Many of the community gardens in Santa Clara County are well established; the average garden has been in operation for 20 years. In fact, the oldest garden was founded well before the recent boom in urban agriculture: Main Community Garden, in Palo Alto, started in 1970. (Of the 26 gardens that provided information on the year they were founded, only four were started in the last five years.) Presumably the long track record of many gardens indicates a successful relationship with the communities they serve and the ability to attract resources for management or programming.

One potential service gap for gardens related to the diversity of food items grown. **All of the gardens surveyed reported only growing fruits and vegetables** (other options were nuts, meat, eggs, dairy, and/or honey). Given recent growing interest in urban farming, including backyard chickens, bees, and other livestock, this finding was surprising.

Another gap is the availability of programming and classes offered by gardens. **Only 33 percent of respondent gardens (9 of 27) have some kind of programming associated with their garden** (ranked in order of frequency):

- School district/school related program (such as class visits) (5 gardens)
- Gardening courses (composting, flowers) (3)
- Composting courses (2)
- Open house sales
- Seeds from master gardeners

⁴⁸ *Id.*

⁴⁹ Lee SH, *supra* note 44.

- Tours of the garden
- Veggie tastings
- 4H club activities

While we did not ask gardens about barriers to offering more or more varied programming, this issue should be explored more. Garden activities like classes and veggie tastings build connections between the garden and the surrounding community and could encourage new or potential gardeners to participate and to bring community garden-acquired skills into their own backyards.

When asked whether the garden grows any culturally relevant foods or specifically targets certain demographic groups, most gardens were not able to provide this info. **Community gardens generally did not collect demographic information about their members**, although garden managers indicated a “high percent Latino” at three gardens, one garden with a “large Bosnian community,” and another with “large Russian and Mandarin-speaking communities.”

We found that most gardens had minimal membership requirements, and conversely did not target specific underserved populations. Membership requirements were generally only that gardeners be adult residents⁵⁰ of the city where the garden was located. However, one garden (Mountain View Senior Center) had a requirement that members be over 55 years of age, and another (Wilson School Garden), located at an adult education facility, was only available to enrolled students.

Other Barriers for Low-Income Families

One of the biggest barriers to access for anyone, low-income or otherwise, is the long waiting list for many gardens. **The average wait list for space in a community garden was 46 people**, and only one garden reported that they did not have a wait list (Midtown Garden in Palo Alto). There is clearly currently more demand for space in community gardens than there are gardens.

With regard to membership costs, 25 of the gardens surveyed reported having an annual fee. Most based this fee on the size of the plot (i.e., a price per square foot), so annual membership fees vary. Using an average plot size of 300 square feet,⁵¹ annual average fees came out to just over \$55. Many gardens specified that membership fees were used to pay for water. None of the gardens indicated that low-income residents could qualify for a reduction or waiver of membership fees.

We also asked about how gardeners were using the produce grown in community gardens, beyond personal consumption. **Only one garden**

⁵⁰ 18 years or older.

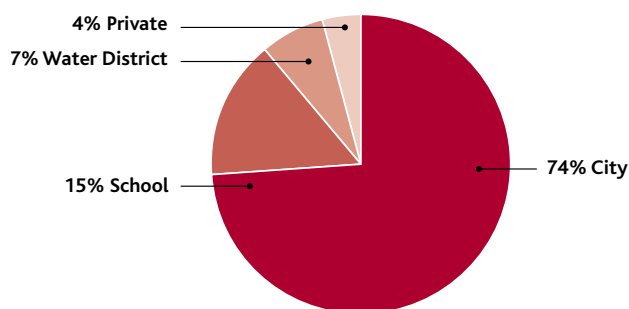
⁵¹ 300 square feet was given as a typical plot size in San Jose's community gardens.

surveyed allows sales of produce (Sunnyvale Community Garden). Community gardens have the potential to do more than offset a household's grocery budget; they are also increasingly seen as an opportunity for low-income and immigrant communities to gain entrepreneurial skills and earn and income by selling the produce they grow. *Urban agriculture* is an umbrella term used to describe both traditional community gardens as well as more intensive, larger-scale, and for-profit gardening.

At the same time, **many gardens (76 percent of respondents) encourage the donation of produce grown onsite**. Produce donation expands the impact of community gardens by creating access to fresh produce for community members who do not necessarily have a garden plot.

Finally, we were interested in looking at the type of land where community gardens were located (see chart below). Our findings show that public land provides a home for community gardens: only 4 percent of community gardens are located on private land. If public land is available to community gardens rent-free, this can lower operating costs, which in turn results in more affordable access for residents.

Community Garden Location by Land Type



Local Policy Review

Cities and the unincorporated county have addressed community gardens in their local policies in different ways. Some cities specifically commit to seeking out new community garden sites, while others contain no mention of community gardens. In comparing community garden policies across Santa Clara County, we found the following:

Table 7: Local Policies for Community Gardens

	Community Gardens		
	General Plan	Zoning	Other
Campbell	+/o		+
Cupertino	+	+/-	
Gilroy	+	+	+
Los Altos			
Los Altos Hills			
Los Gatos			+/-
Milpitas	o	+	+/-
Monte Sereno			
Morgan Hill		+/o	
Mountain View	o	+	+
Palo Alto	+	+/-	+
San Jose	+		+
Santa Clara	+		
Santa Clara County (Unincorporated)			+
Saratoga	o		
Sunnyvale	+		

- **A few cities are using their development requirements to incentivize and fund community gardens.** Morgan Hill and Cupertino's codes specifically state that community gardens can count toward a development's required open space, and Mountain View allows park and recreation development fees to be used to build or maintain community gardens.
- **Garden coordinators in cities can raise the profile of community gardens and increase accessibility for residents.** Cities with garden coordinators (such as Palo Alto and San Jose) usually had more gardens overall, as well as communications materials such as a website for the public to access information or apply for a plot.
- **Few cities took the opportunity to plan for the development of new gardens:** We found a lack of policies that define gardens as an allowed and encouraged use, or specified areas of the city where community garden development would be prioritized. A notable exception was Palo Alto's

general plan, which states, “Seek potential new sites for ... community gardens that encourage and support pedestrian and bicycle travel and person-to-person contact, particularly in neighborhoods that lack these amenities.” Not only does Palo Alto plan to develop new community garden sites, but it acknowledges the relationship between community gardens, social interaction, and physical health. Palo Alto also plans to target areas of the city with limited access to community gardens.

Recommendations

Communities within Santa Clara County could take a few key steps to improve access to community gardens for low-income residents:

- **Ensure land use plans and policies reflect local community garden promotion efforts.** Consider using the planning process to identify potential and priority locations for new community gardens (e.g., through the general plan or a specific urban agriculture master plan). Update zoning codes to define community gardens as an allowed use and incentivize new gardens, particularly in low-income and underserved areas.
- **Develop policies that expand urban food growing opportunities.** Communities should consider developing policies that go beyond the traditional community garden model and incorporate growing food for sale as well as a broader diversity of food produced (including policies for urban chickens, bees, etc.). For example, Cleveland⁵² and Kansas City, Mo.,⁵³ recently passed zoning ordinances that allow for market gardens within areas of the city. Low-income communities especially stand to benefit from policies that tie access to a broad range of healthy food and opportunities for economic and entrepreneurial development.
- **Strengthen policies by differentiating between *urban* agriculture and *rural* agriculture.** Agriculture as written into currently general plans is likely referring to large-scale agriculture, but it would be helpful to differentiate these activities, given that they may be located in different areas of the community and have different scales/impact.

⁵² Chapter 336 – Urban Garden District.

⁵³ Ordinance Number 100299

School Gardens

Impact of Access

School gardens provide students with opportunities to apply textbook knowledge to hands-on experiences, get active outdoors, and learn about health and nutrition by growing their own food. Many schools now successfully engage children in growing, harvesting, and preparing produce in school gardens.

We surveyed a sample of 191 schools in Santa Clara County. Of these, 112 *did* have gardens, 72 did not, and 7 schools did not respond to tell us whether or not they had gardens. Of the 112 school with gardens, 50 schools (45%) responded to our survey, and 7 schools (6%) responded to a similar survey conducted by another organization (these were used to identify school garden points in our maps, but not used in data analysis), and 55 schools (49%) did not respond to our survey.

While specific demographic information about students was not available, we found that approximately 30 percent of school gardens were located at Title 1 Schools (meaning that at least 40 percent of students are enrolled in the free- and reduced-lunch program for the entire school year).

Garden instructors often recognize the educational and health benefits of integrating school curricula and school garden activities, and observe the enthusiasm of students in participating in garden programs. Students with access to garden programs show improved knowledge, attitudes, and behaviors towards fruits, vegetables, and gardening.⁵⁴ Positive experiences with school gardens develop long-lasting skills, self-efficacy and increased preference for local, organic fruits and vegetables.⁵⁵

Students with hands-on experience in school gardens have shown greater knowledge of (and preference for) fruits and vegetables than students who receive nutrition education alone. Many garden programs translate to increased fruit and vegetable intake among students involved in the garden.⁵⁶ School gardens provide students with an exciting opportunity to engage in growing their own food, while gaining an appreciation for time and work involved in the growing process, which may result in an enduring preference for fruits and vegetables.

54 Robinson-O'Brien R, Story M, and Heim S. "Impact of Garden Based Youth Nutrition Intervention Programs: A Review." *JADA*, 109: 273–280, 2009.

55 *Id.*

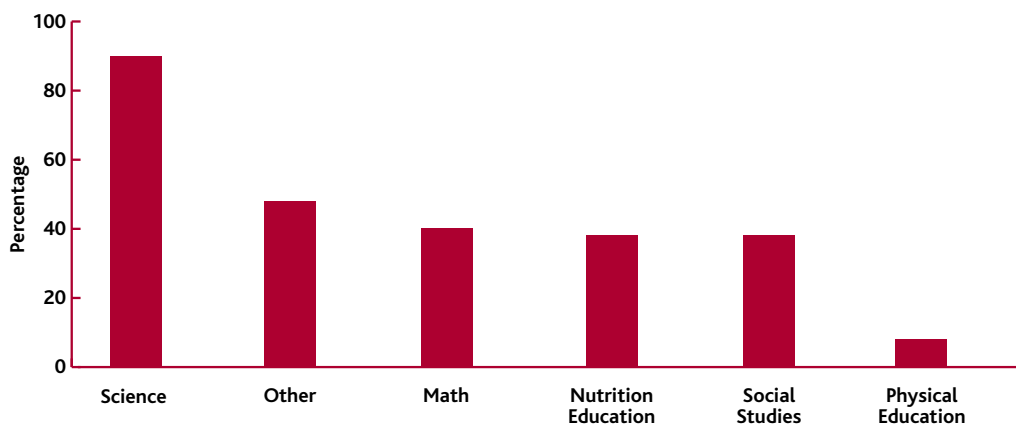
56 *Id.*

Service Gaps

Our survey was conducted with the person most responsible for coordinating the school garden, which was typically a teacher. While respondents were generally enthusiastic about the benefits of school gardens for students, many of the teachers faced significant challenges maintaining their gardens and sustaining school garden programs. Common challenges included:

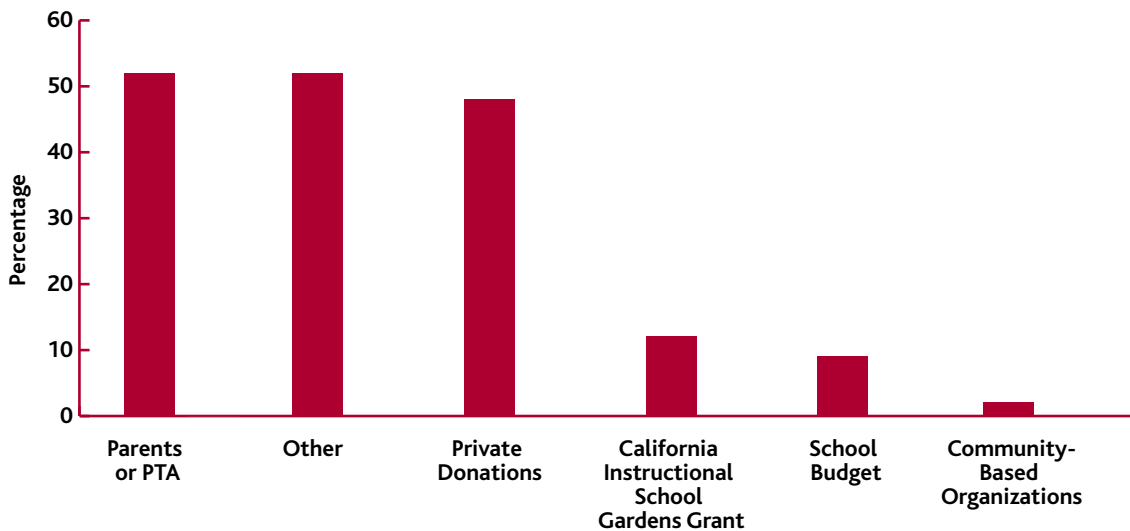
- **Schools/school districts rarely had plans or agreements that support school gardens.** Only two schools reported having an organizational plan for school gardens with the school or district. Without official support at that level, gardens had to seek out new funding each year and rely on already overburdened teachers to organize and advocate for garden programs.
- **District and school leadership support can remove important barriers.** Principals and school districts were able to promote or hinder school garden programs. Without their support, many schools struggled to expand their gardens. In some cases, schools had to pay a fee to the school district landscaper to perform maintenance on the school garden area that could have been done for free by the garden coordinator and the students involved.
- **School gardens were rarely a schoolwide effort.** Often only one or two classrooms engaged in school garden programs. Teachers or parents were often operating these classroom-level gardens with small stipends from parent-teacher associations, donations from local nurseries, and in many cases, money out of their own pockets. Without long-term financial support, expanding garden programs to other classrooms, and sustaining existing programs is a challenge.
- **Gardens are integrated into the school curricula where possible.** Many respondents (81 percent) noted that the gardens were integrated into school curricula, with the most common subjects being science and math. “Other” responses included language arts, literacy, and foreign languages (such as Spanish).

Chart 3: Educational Programs Offered in School Gardens



- **Parents and private donations are an important source of school garden funding.** Other funding sources included grants from San Jose’s “Go Green Schools” program, the Living Classroom program, and philanthropic and corporate foundations.

School Garden Funding Sources



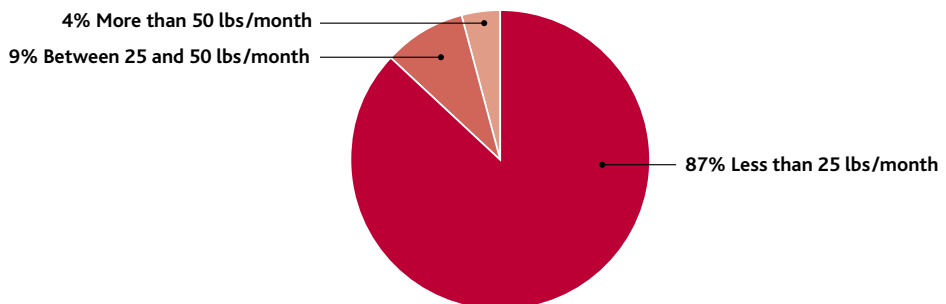
- **Gardens receive limited funding for programming and maintenance.** The majority of school gardens surveyed (82 percent) received less than \$1,000 per year, and only 5 percent received more than \$5,000 per year.
- **Teachers and parents are the primary providers of programming and maintenance.** Teachers provided staffing in 80 percent of gardens and maintenance in 60 percent; parents provided staffing and maintenance in 60 percent of gardens. Students themselves also were reported to help with maintenance in 40 percent of gardens. Other groups, such as staff or administration, played significantly smaller roles.
- **Lack of schoolwide integration impacts school garden sustainability.** In many schools that previously had school gardens, gardens were abandoned when a teacher who spearheaded the program left the school.
- **Lack of time was a major barrier to increasing garden activities.** Some of these teachers noted that they would like to expand their school garden activities but cannot find the time. Teachers also noted that other teachers were hesitant to bring their classrooms to the garden because of time constraints. California State Content Standards require that students are taught specific content, leaving little time for activities that don’t contribute to these requirements. Many of the teachers that coordinated school gardens have been able to integrate Content Standards into their garden lesson plans.

- **Volunteer time was also limited.** Volunteer parents found it hard to have the time to organize garden activities, as many had full-time jobs and families to care for.
- **Produce was rarely used in school lunch programs.** In only three schools did food grown in the garden see its way to lunch trays. School garden coordinators cited reasons such as not growing a large enough quantity of food, not having the kitchen equipment needed in the cafeteria to prepare the food grown in the garden, and simply not considering that the food grown in the garden could make its way into the school lunch program.
- **School gardens are generally growing only fruits and vegetables, and the total produce grown is limited.** Almost all the gardens are growing vegetables; a few (4 percent) are growing flowers only. The scale of production was also very small – over 87 percent of school gardens are producing less than 25 pounds of food per month; only a little over 4 percent produce more than 50 pounds of food per month.

Table 8: Types of Food Grown in School Gardens

	Percent	Number
Vegetables	96%	45
Fruit	66%	31
Herbs	19%	9
Flowers	17%	8
Nuts	2%	1
Honey	2%	1
Other	2%	1
Meat	0%	0
Dairy	0%	0

Quantity of Produce Grown in School Gardens



- **Harvest season does not coincide with the school year.** Produce was often left to wilt if teachers did not commit their own time to harvesting and distributing. Some teachers invited students' families and households

from neighboring schools to come and pick the produce. One teacher in a low-income school volunteered her time over the summer and managed students in the garden, providing them with both a summertime activity and food for their families.

- **Community members could be more involved.** Schools rarely involved community members beyond students' families. Engaging interested community members in school gardens could help overcome barriers such as limited time and resources.

Other Barriers for Low-Income Families

Low-income households generally have less access to outdoor space to grow food than wealthier households, as well as less healthy food retail in their neighborhoods. School gardens serving low-income families have an important role to play: they can introduce students to food cultivation in a way that might not otherwise be available to them. But schools in low-income communities face barriers to developing and sustaining school gardens. These barriers were often the same barriers faced by other schools, exacerbated in a low-income setting.

- **Money:** Schools in low-income neighborhoods are likely to receive less money from parent and community donations, meaning that there is less funding for extra programming and activities such as school gardens. Also, businesses in low-income neighborhoods may not have the economic capacity to donate goods to a school garden such as soil, seeds, wood, garden tools, and plants.
- **Preparing students for standardized tests:** For schools in low-income neighborhoods, test preparation was even more critical because of lower passing rates. Any time perceived to be spent away from the classroom was not positively perceived.
- **Volunteers:** Low-income families may already be overburdened with long workweeks to make ends meet. Finding parents to run a garden may be a challenge.

Local Policy Review

School gardens are in a bit of a separate category from the rest of our HFRs, due to their nature as institutions serving only a segment of a community – its children (and their families). School policy is also a bit of a separate category, since city policy (such as general plans and zoning codes) doesn't apply to schools, and districts have their own policymaking process. Opportunities for collaborative policymaking do exist, such as joint use agreements between the city and school district, and we looked for both district-specific policies as well as examples of collaborative approaches.

Table 9: Local Policies for School Gardens

	School Gardens		
	General Plan	Zoning	Other
Campbell			
Cupertino			+
Gilroy	+		
Los Altos			+
Los Altos Hills			
Los Gatos			
Milpitas			+
Monte Sereno			
Morgan Hill			
Mountain View			
Palo Alto			
San Jose			
Santa Clara			
Santa Clara County (Unincorporated)			
Saratoga			
Sunnyvale			

Generally, we were not able to find many school district or city policy examples that encouraged school gardens. One stand-out example, however, is the joint use agreement between the City of Milpitas and the Milpitas Unified School District for a community garden on school property.⁵⁷ The Milpitas School District made 1.2 acres of open space at Weller Elementary School available to the City to build the Cesar Chavez Community Garden, with the City accepting all maintenance, liability, and insurance costs. In this partnership, the community gets access to a new resource for engaging residents in growing their own healthy food, and the school has a new facility that can introduce students and their families to food cultivation without further taxing teachers' limited time and resources. By filling in garden gaps, community gardens throughout the county have the potential to also serve as gardening opportunities for classrooms.

57 Available at: www.ci.milpitas.ca.gov/_pdfs/council/2010/030210/item_09.pdf.

Recommendations

Teachers and parents involved in school gardens were extremely enthusiastic about the positive impact gardens have on students. However, they also recognize there is still room for improvement in terms of sustaining and expanding school gardens. Communities within Santa Clara County could take a few key steps to improve access to school gardens for low-income residents:

- **Establish districtwide policies or agreements** that support ongoing funding and programming for school gardens. The benefits of districtwide support could include joint fundraising from public, philanthropic, and private sources (such as local nurseries and chain garden stores) for funding and materials that can serve the whole district, as well as centralizing a point of contact for school garden lesson plans and other resources.
- **Support city/school partnerships.** Develop district-wide joint use agreements that allow school gardens to be used by the community and community gardens to be used by schools, and prioritize new gardens in underserved neighborhoods. These programs give students the opportunity to interactively engage in garden activities when schools do not provide garden space, as well as increase access to healthy food and involvement in healthy food growing for children that otherwise would not have access. Opportunities to share resources and facilities could greatly enhance the impact and sustainability of both school and community gardens.
- **Create an online hub for Santa Clara County school gardens.** Parents and teachers alike would like to have access to a forum to share lesson plans, resulting in improved school garden programs that incorporate, rather than take time away from, California State Content Standards. Other resources that garden coordinators asked for included tips and instructions for building garden structures, tips for planting schedules, maintaining crops, etc.
- **Make school season harvest season.** As a component of increasing capacity, distribute planting guides and lesson plans that allow schools to plant and choose crops that harvest during the school year so that students can truly reap the benefits.
- **Involve community-based organizations in school gardens.** Schools can partner with community-based organizations to help coordinate community activities, classes, or food bank donations. For example, at one school a local Girl Scout troop distributed produce harvested over the summer to needy families in the community. Schools might also consider partnering with senior citizen centers.
- **Involve community members in school gardens.** One school held weekend events where community members were taught how to mulch. Students can work to put together garden lessons for community members as a classroom activity. This can help improve both students' and community members' gardening self-efficacy, and could even serve as a garden fundraiser.

Appendix A: Assessment Methodology

Appendix A explains the methodology behind the Healthy Food Resource Assessment for Santa Clara County, providing more information about the Study Area, Surveys, Mapping, and Policy Scan.

ESRI online geocoding service in ArcGIS is referenced throughout this section. GIS (http://en.wikipedia.org/wiki/Geographic_information_system) is a geographic information system software (produced by ESRI) that can be used for spatial analysis of data.

A list of data sources that were reviewed to identify the presence of HFRs can be provided upon request by contacting hwooten@phlpnet.org.

Study Area

For each of our assessment methods, we looked at all 15 cities within Santa Clara County as well as the unincorporated county:

- Campbell
- Cupertino
- Gilroy
- Los Altos
- Los Altos Hills
- Los Gatos
- Milpitas
- Monte Sereno
- Morgan Hill
- Mountain View
- Palo Alto
- San Jose
- Santa Clara
- Santa Clara County (unincorporated)
- Saratoga
- Sunnyvale

Surveys

During this phase Design, Community & Environment (DC&E), a comprehensive planning and design consulting firm, conducted primary data collection to build a database of Healthy Food Resources (HFR) for the county to be used in the analysis. In order to identify the HFRs in the county to be surveyed, DC&E drew from a wide variety of data sources, including: (a) an extensive keyword search and web based review of possible data sources; (b) websites, reports and firsthand knowledge from the project advisory team; (c) relevant professional associations such as the American Community Garden Association and the Pacific Coast Farmers' Market Association; (d) the California Nutrition Network (CNN); and (e) the Local Harvest database.

The questions included on each of the four survey forms were developed under the guidance of the project advisory team. The survey questions focused on obtaining location information for each HFR as well as identifying programmatic, geographic, and policy-related barriers to accessing these resources. All surveys were conducted by phone with the exception of the schools surveys, which were conducted either by phone or a web-based survey.

Farmers' Markets

DC&E created a list of farmers' markets and locations from the Pacific Coast Farmers' Market Association, the California Nutrition Network, Local Harvest and other sources. DC&E conducted phone surveys of each farmers' market to confirm the details gathered from secondary sources (e.g., websites) as well as to gather any necessary additional information. Surveys were conducted by telephone and email between March 3 and April 6, 2010. With the exception of Full Circle Farm Stand, all markets participated in the survey. Addresses for each farmers market were geocoded using the ESRI online geocoding service in ArcGIS.

Community-Supported Agriculture (CSA)

Where possible, we identified existing sources of information regarding the location and characteristics of all four types of HFRs. Organizations like Local Harvest, which compiles information regarding CSAs and farmers' markets throughout the county, provided an invaluable foundation for this assessment. Local Harvest provided a preliminary database to DC&E that contained all CSA farm locations and drop-off points within Santa Clara County. Local Harvest selected all farms within 50 miles of the center of the county. In some cases farms may be located farther than 50 miles from the center of the county and still deliver within the county. In instances where drop-off points for farms were not known, these points could not be mapped.

To supplement the preliminary database provided by Local Harvest, DC&E conducted phone surveys of all the CSAs provided in our preliminary database of CSAs which was compiled from sources other than Local Harvest. These phone surveys allowed us to confirm and supplement the information provided by Local Harvest.

CSA farm and drop-off locations were identified either by coordinates provided by Local Harvest, or by using ESRI's online geocoding service in ArcGIS. In some cases, farms did not provide drop-off location addresses, but only a zip code. In these cases, Local Harvest provided the coordinates for that drop-off point located at the centroid, or geographic center, of that zip code.

Community Gardens

DC&E created a list of community gardens within the county by contacting all the cities within the county and surveying their gardens, and supplemented this list by reviewing other data sources identified by partners or during our web-based review. Subsequently, surveys were conducted by telephone and email between March 4 and April 6, 2010. No response was received from Palo Alto or the Charles Street Garden (associated with Full Circle Farms CSA); however, information shown for these four gardens was taken from the respective websites. Addresses were geocoded using the ESRI online geocoding service in ArcGIS.

School Gardens

Due to budgetary constraints, DC&E surveyed a subset of schools within the county. The list of schools to be included in the survey was compiled based on the following criteria:

- Schools that were awarded a California Instructional School Garden Program Grant in 2006. These grants were not all distributed to the awarded schools due to funding cuts. However, DC&E assumed that if a school applied for this grant, it may have already had a garden or had plans to start one.
- Schools that were found to have a garden in a survey conducted by Conexions in 2005.

DC&E also contacted all the school districts in the county to help identify gardens within each district. Many districts were not able to confirm which schools had gardens, but often a superintendent, maintenance worker, or nutrition department staff could identify schools that definitely did or did not have gardens.

DC&E worked with Betsy Purner, a student at Santa Clara University who was surveying school gardens in the county, and added the schools she had surveyed to the list.

The schools on this list were contacted and surveyed either by phone or via a web-based version of the survey. All school addresses were geocoded using the ESRI online geocoding service in ArcGIS.

Mapping

DC&E used the database of HFRs compiled in the previous phase of the project to conduct a series of spatial analyses, producing a series of county- and citywide maps for this report as a result. The methodologies used for these analyses are described in detail below.

Access

The HFR access maps display both population density and “walking distances” from HFRs in order to depict geographic access (or barriers to access) to HFRs relative to population density.

Walking Distances from HFRs ($\frac{1}{4}$, $\frac{1}{2}$ and 1 Mile). Walking distances from HFRs were calculated using the street network (as opposed to “as the crow flies”). The updated (2009) street network data provided by the U.S. Census was used as the foundation for our analysis of walking distance. DC&E converted the street network shapefile to an ArcGIS network dataset and created network buffers of $\frac{1}{4}$ mile, $\frac{1}{2}$ mile, and 1 mile using the “Service Area” function in the Network Analyst extension in ArcGIS.

Population Density. The population density grid shown in these maps was generated from the 2000 U.S. Census. DC&E calculated the centroid of each census block in the county, and converted the census block polygons into points. DC&E then calculated the population density using a kernel density function with a search radius of one mile and a 50-foot grid resolution. The resulting GIS layer represents the population density of people per square mile.

Density of Healthy Food Resource (per 1,000 or more people)

The density maps show the number of HFRs per person in the county. DC&E built a GIS layer that displays the density of HFRs within the county using a kernel density function with a search radius of one mile and a 50-foot grid resolution. The same process described above was used for the population density grid. This HFR density grid was divided by the population density grid (see above) to create a layer that shows HFR density normalized by population.

Access for Low-Income Households

The low-income access maps show low-income population density and walking distances from HFRs in order to depict the spatial distribution of HFRs in relation to low-income household density.

Walking Distances from HFRs. Described above.

Low-Income Household Density. The low-income household density layer is based on the 2000 U.S. Census data. Low-income households were defined by the Santa Clara County Housing Element, which states that a “low-income” household has an income of less than 80 percent of the annual median income (AMI), or \$84,400.⁵⁸ Since the closest income category as quantified by the U.S. Census was less than \$75,000, DC&E has defined low-income households as households with an annual income of less than \$75,000 for the purposes of this project. DC&E divided the number of low-income households for each census block by the area of the census block to get low-income household density.

Retail Food Environment Index (RFEI)

RFEI map uses data on retail type and location from the California Nutrition Network.⁵⁹ The final RFEI data incorporates density grids generated from the following sources:

- **Fast Food.** The fast food database was downloaded from the California Nutrition Network website. Addresses were geocoded using the ESRI online geocoding service in an ArcGIS environment.

⁵⁸ Santa Clara County. *Santa Clara County Housing Element Update: 2009–2014*. p. 3.

⁵⁹ California Department of Public Health, Network for a Healthy California. Available at: www.cnnngis.org.

- **Convenience Stores.** The convenience store database was downloaded from the California Nutrition Network website. Addresses were geocoded using the ESRI online geocoding service in ArcGIS.
- **Grocery Stores.** The grocery store database was downloaded from the California Nutrition Network website. Addresses were geocoded using the ESRI online geocoding service in ArcGIS.
- **Produce Markets.** The produce market database was downloaded from the California Nutrition Network website. Addresses were geocoded using the ESRI online geocoding service in ArcGIS.
- **Farmers' Markets.** DC&E used the farmers' market database developed as part of this project.

Each of these point files was then used to create a density grid using the same process as the HFR and population density grids. DC&E used the Map Algebra tools within the Spatial Analyst extension in ArcGIS to combine the five raster grids into the final RFEI grid using the following equation:

$$\frac{\left(\begin{array}{c} \text{Fast} \\ \text{Food} \\ \text{Density} \end{array} + \begin{array}{c} \text{Convenience} \\ \text{Store} \\ \text{Density} \end{array} \right)}{\left(\begin{array}{c} \text{Grocery} \\ \text{Store} \\ \text{Density} \end{array} + \begin{array}{c} \text{Produce} \\ \text{Market} \\ \text{Density} \end{array} + \begin{array}{c} \text{Farmers'} \\ \text{Market} \\ \text{Density} \end{array} \right)}$$

School Gardens

Walking distances from School Gardens. DC&E created the network buffers around school gardens using the same process as the network buffers for HFRs described above.

Low-Income Household Density. Described above.

Tables of Low-Income Households within Walking Distance(s) of HFR

DC&E generated the number of low-income households within walking distances of HFRs, and school gardens using the network buffers described above. DC&E calculated the percentage of the resulting polygons' area of the original Census Block Groups by calculating area and dividing by the Block Group Area. Low-income household numbers were multiplied by the percentage area in order to approximate the number of low-income households in each polygon. This number of low-income households was summarized for each city and for each network buffer using a pivot table in Excel.

Policy Scan

In order to identify city and county policies referring to HFRs, we first searched the websites of each city and Santa Clara County for the most recent zoning ordinances and general plans. In some cases, a draft general plan was available; in this case we used the draft general plan under the assumption that more recent policies will best represent the city or county's encouragement (or discouragement) of healthy food resources. Once zoning ordinances and general plans were identified, we searched for the terms *farm*, *market*, *garden*, *food*, and *agriculture*. These terms were selected because they would encompass the range of HFRs that we sought to find (farmers' markets, community gardens, school gardens, community supported agriculture, and any other language related to local food). For example, the term *garden* would lead us to the term *community garden*, as well as any potential iteration of community garden, such as *a garden used to grow food*.

We also acknowledge that other departments may have policies or initiatives that involve local food procurement. For example, some city parks and recreation department coordinate community gardens. To address this, we expanded our search for healthy food resources. We searched the terms above on the city websites, and conducted a web search that joined our search terms for healthy food resources and the city or county name.

After terms were identified, we located the relevant policy language, as well as where the policy language was located within the text. Next, we sorted policies into categories. First, we identified the type of HFR referred to: *farmers' markets*, *community gardens*, *school gardens*, and *local food*. Within each healthy food resource, we organized policies first by city or county, and then by the type of policy: *general plan*, *zoning ordinance*, *other – public policies* (for example, consolidated plans, local area plans and joint use agreements) and *other – public initiatives* (for example, community garden programs, school garden programs, and city websites that encourage consumers to purchase local food).

Appendix B: Survey Respondents

Community Gardens

City	Garden Name	Garden Location	Survey Complete	Notes
Campbell	Campbell Community Garden	615 Campbell Technology Parkway	✓	
Cupertino	McClellan Ranch Park Community garden plots	22221 McClellan Road	✓	
Morgan Hill	Morgan Hill Community Garden	17295 butterfield blvd	✓	
Mountain View	Mountain View Senior Center	Escuela / Crisanto corner	✓	
Mountain View	Willowgate Community Garden	Andsbury Ave / Central	✓	
Palo Alto	Edith Johnson Garden	200 Waverly Street		Information from website
Palo Alto	Eleanor Pardee Garden	1201 Channing Avenue		Information from website
Palo Alto	Main Community Garden	1313 Newell Street		Information from website
Palo Alto	Mitown Garden	2699 Middlefield		Information from website
San Jose	Alviso	N. 1st & Tony P. Santos	✓	
San Jose	Berryessa	Commodore & Cape Colony Dr.	✓	
San Jose	Bestor Art Park	S. Six and Bestor	✓	
San Jose	Calabazas	Blaney & Danridge	✓	
San Jose	Cornucopia	S. King & Story	✓	
San Jose	Coyote Creek	Tully at Galveston	✓	
San Jose	Discovery	Branham at Discovery	✓	
San Jose	El Jardin	S. King & Story	✓	
San Jose	Green Thumb	Rhoda & Roewill	✓	
San Jose	Guadalupe	Walnut at Asbury	✓	
San Jose	Hamline	Hamline & Sherwood	✓	
San Jose	Jesse Frey	Alma & Belmont	✓	
San Jose	La Colina	Allegan Circle	✓	
San Jose	Laguna Seca	Manresa & Bayliss	✓	
San Jose	Latimer	Latimer & Hamilton Ave.	✓	
San Jose	Martial Cottle Community Garden	5285 Snell Avenue	✓	
San Jose	Mayfair	Kammerer and Sunset	✓	
San Jose	Nuestra Tierra	Tully & La Ragione	✓	
San Jose	Rainbow Center Community Garden (Rainbow Dr & Johnson Ave)	Rainbow Dr & Johnson Ave	✓	
San Jose	Wallenberg	Curtner & Cottle	✓	
Santa Clara	Wilson School	Benton Street / Scott	✓	
Sunnyvale	Sunnyvale Community Garden / Charles Street Gardens	433 Charles Street		Information from website

Farmers' Market

City	Farmers' Market Name	Farmers' Market Location	Survey Complete	Notes
Campbell	Campbell Certified Farmers' Market	South 1st St East / Campbell Ave	✓	
Cupertino	Cupertino Square Certified Farmers' Market (Vallco Fashion Park)	Stevens Creek Blvd / North Wolfe Rd	✓	
Los Altos	Los Altos Certified Farmers' Market	State St / 2nd St	✓	
Los Gatos	Los Gatos Certified Farmers' Market	Montebello Way / Broadway	✓	
Milpitas	Milpitas Certified Farmers' Market	525 Los Coches Street	✓	
Morgan Hill	Morgan Hill Certified Farmers' Market	East 3rd St / Depot St	✓	
Mountain View	Mountain View Certified Farmers' Market	600 W. Evelyn Ave.	✓	
Palo Alto	Palo Alto Community Farm Shop	250 Hamilton Avenue	✓	
Palo Alto	Palo Alto Downtown Certified Farmers' Market	Hamilton Ave / Gilman St	✓	
Palo Alto	South Palo Alto Certified Farmers' Market (California Ave Farmers' Market)	South California Ave / El Camino Real	✓	
Palo Alto	VA Palo Alto Health Care Market	3801 Miranda Ave.	✓	
San Jose	Alum Rock Certified Farmers' Market	57 North White Rd	✓	
San Jose	Berryessa Certified Farmers' Market	1376 Piedmont Road	✓	
San Jose	Blossom Hill Certified Farmers' Market	1375 Blossom Hill Rd	✓	
San Jose	Cambrian Park Certified Farmers' Market	Camden / Union Ave.	✓	
San Jose	Evergreen Certified Farmers' Market	Ruby Ave / Classico Ave	✓	
San Jose	Kaiser San Jose Certified Farmers' Market	270 International Blvd	✓	
San Jose	San Jose Downtown Certified Farmers' Market	Santa Clara St / John St	✓	
San Jose	San Jose Japantown Certified Farmers' Market	750 Jackson St	✓	
San Jose	San Jose Willow Glen Certified Farmers' Market	Willow / Lincoln Ave	✓	
San Jose	Santa Teresa Certified Farmers' Market	Santa Teresa Blvd / Camino Verde Dr	✓	
San Jose	Santana Row Certified Farmers' Market	Stevens Creek Blvd / N. Winchester Blvd	✓	
Santa Clara	Kaiser Santa Clara Certified Farmers' Market	710 Lawrence Expressway	✓	
Santa Clara	Santa Clara Certified Farmers' Market	Jackson St / Homestead St	✓	
Saratoga	Saratoga Certified Farmers' Market	Fruitvale Ave / Allendale Ave	✓	
Sunnyvale	Full Circle Farm Farm Stand	1055 Dunford Way		Unable to reach market manager for survey
Sunnyvale	Sunnyvale Certified Farmers' Market	199 West Evelyn Ave	✓	

Community Supported Agriculture (CSA)

County	City	CSA Name	CSA Website	Survey Complete	Notes
Contra Costa	Brentwood	Frog Hollow Farm	www.froghollow.com/csa	✓	
Marin	Point Reyes Station	Marin Sun Farms Meat Club CSA	www.marinsunfarms.com/about/contact.html www.marinsunfarms.com/about/contact.html	✓	
San Benito	San Juan Bautista	Morris Grassfed Beef	www.morrisgrassfed.com	✓	
San Francisco	San Francisco	Eating with the Seasons	www.eatwiththeseasons.com	✓	
San Francisco	San Francisco	Greenhearts Family Farm CSA	www.greenheartsfamilyfarm.com	✓	
San Francisco	San Francisco	Organic-Now	www.organic-now.net	✓	
San Mateo	Pescadero	Blue House Farm	www.bluehouseorganicfarm.com	✓	
San Mateo	Pescadero	Ladybug Farm	www.groups.yahoo.com/group/LadybugFarm		Unable to reach CSA
San Mateo	Pescadero	Pie Ranch	www.pieranch.org		Unable to reach CSA
Santa Clara	East Palo Alto	Happy Quail Farms	www.happyquailfarms.com		Unable to reach CSA
Santa Clara	Los Altos Hills	Hidden Villa Farm & Wilderness	www.hiddenvilla.org	✓	
Santa Clara	Morgan Hill	George Ciala Farms			Unable to reach CSA
Santa Clara	San Jose	Ledesma Family Farms/ Splendor Salad	www.chikomekoatl.org		Unable to reach CSA
Santa Clara	San Martin	Windsor Family Farm	www.windsorfamilyfarm.com	✓	
Santa Clara	Sunnyvale	Full Circle Farm	www.fullcirclesunnyvale.org	✓	
Santa Clara	Sunnyvale	Mellow's Nursery & Farms			Unable to reach CSA
Santa Clara		CSA MVLA		✓	
Santa Cruz	Aptos	Blue Moon Organics	www.blumoonorganicsfarm.com	✓	
Santa Cruz	Aptos	Tomatero Farm	www.tomaterofarm.com		Unable to reach CSA
Santa Cruz	Santa Cruz	Freewheelin' Farm	www.freewheelinfarm.com	✓	
Santa Cruz	Santa Cruz	Shumei Santa Cruz Farm		✓	
Santa Cruz	Watsonville	Live Earth Farm	www.liveearthfarm.net	✓	
Santa Cruz	Watsonville	Mariquita Farm	www.twosmallfarms.com	✓	
Shasta	Montgomery Creek	Cidre Loche	www.cidreloche.com	✓	
Yolo	Capay	Farm Fresh To You	www.farmfresh toyou.com	✓	
Yolo	Guinda	Capay Valley Farm Shop	www.capayvalleyfarmshop.com	✓	
Yolo	Guinda	Full Belly Farm	www.fullbellyfarm.com	✓	
		Planet Organics (Produce delivery)	www.planetorganics.com	✓	

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
Campbell	Campbell Union Elementary School District	Capri School	Yes		Unable to reach garden contact
Campbell	Campbell Union Elementary School District	Castlemont School	Yes	✓	
Campbell	Campbell Union Elementary School District	Rosemary School	No		
Campbell	Campbell Union High School District	Westmont High School	No		
Cupertino	Cupertino Union School District	CB Eaton Elementary School	Yes	✓	
Cupertino	Cupertino Union School District	Lincoln (Abraham) Elementary School	Yes	✓	
Cupertino	Cupertino Union School District	LP Collins Elementary School	No		Unable to reach garden contact
Cupertino	Cupertino Union School District	Stevens Creek Elementary	No		
Cupertino	Santa Clara County Office of Education	Walden West Outdoor School	No		
Gilroy	Gilroy Unified School District	Ascencion Solarsano Middle School	No		
Gilroy	Gilroy Unified School District	Brownell Middle School			Unable to reach garden contact
Gilroy	Gilroy Unified School District	El Roble School	No		
Gilroy	Gilroy Unified School District	Eliot Elementary School	No		
Gilroy	Gilroy Unified School District	Gilroy Community Day School	No		
Gilroy	Gilroy Unified School District	Gilroy Unifed State Preschool	No		
Gilroy	Gilroy Unified School District	Kelley (Rod) School	No		
Gilroy	Gilroy Unified School District	Las Animas Elementary	Yes	✓	
Gilroy	Gilroy Unified School District	Luigi Aprea Fundamental School	No		
Los Altos	Cupertino Union School District	Montclair Elementary School	Yes	✓	
Los Altos	Cupertino Union School District	Muir (John) Elementary School	No		
Los Altos	Los Altos Elementary School District	Almond School	Yes	✓	
Los Altos	Los Altos Elementary School District	Blach Intermediate School	Yes		Incomplete
Los Altos	Los Altos Elementary School District	Bullis Charter School	No		
Los Altos	Los Altos Elementary School District	Covington School	Yes	✓	
Los Altos	Los Altos Elementary School District	Egan Intermediate School	Yes		Unable to reach garden contact
Los Altos	Los Altos Elementary School District	Gardner Bullis School	Yes	✓	
Los Altos	Los Altos Elementary School District	Loyola School	Yes	✓	
Los Altos	Los Altos Elementary School District	Oak Avenue School	Yes	✓	

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
Los Altos	Los Altos Elementary School District	Santa Rita School	Yes	✓	
Los Altos	Mountain View -Los Altos Union	Los Altos High School	Yes		Unable to reach garden contact
Los Gatos	Lakeside Joint School District	Lakeside School	Yes		Unable to reach garden contact
Los Gatos	Loma Prieta Joint Union School District	Loma Prieta School	Yes		Unable to reach garden contact
Los Gatos	Los Gatos Union School District	Daves Avenue School	Yes	✓	
Los Gatos	Los Gatos Union School District	Lexington School	Yes		Unable to reach garden contact
Los Gatos	Los Gatos Union School District	Mulberry School	Yes		Unable to reach garden contact
Los Gatos	Los Gatos Union School District	Van Meter (Louise) School	Yes	✓	
Los Gatos	Union Elementary School District	Alta Vista Elementary	No		
Milpitas	Milpitas Unified School District	Burnett (William) School	Yes	✓	
Milpitas	Milpitas Unified School District	Pomeroy (Marshall) School	Yes	✓	
Milpitas	Milpitas Unified School District	Rose (Alexander) Elementary	No		
Milpitas	Milpitas Unified School District	Sinnott (John) School	Yes	✓	
Milpitas	Milpitas Unified School District	Spangler (Anthony) School	Yes	✓	
Milpitas	Milpitas Unified School District	Weller (Joseph) School	Yes	✓	
Milpitas	Milpitas Unified School District	Zanker (Pearl) School	Yes	✓	
Morgan Hill	Charter School of Morgan Hill	Charter School of Morgan Hill	Yes		Unable to reach garden contact
Morgan Hill	Morgan Hill Unified School District	Jackson Elementary	No		
Morgan Hill	Morgan Hill Unified School District	Paradise Valley/Machado School	Yes		Incomplete
Morgan Hill	Morgan Hill Unified School District	Walsh (P. A.) Elementary	No		
Mountain View	Los Altos Elementary School District	Springer School	Yes	✓	
Mountain View	Mountain View -Los Altos Union	Mountain View High School	Yes	✓	
Mountain View	Mountain View Whisman School District	Bubb Elementary School	Yes		Incomplete
Mountain View	Mountain View Whisman School District	Castro (Mariano) School	Yes	✓	
Mountain View	Mountain View Whisman School District	Crittenden Middle School	Yes	✓	
Mountain View	Mountain View Whisman School District	Edith Landels Elementary School	Yes	✓	

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
Mountain View	Mountain View Whisman School District	Frank L. Huff Elementary School	Yes		Incomplete
Mountain View	Mountain View Whisman School District	Graham Middle School	No		
Mountain View	Mountain View Whisman School District	Landels (Edith) School	Yes		Incomplete
Mountain View	Mountain View Whisman School District	Monta Loma Elementary School	Yes		Incomplete
Mountain View	Mountain View Whisman School District	Slater (Kenneth N.) School	No		
Mountain View	Mountain View Whisman School District	Stevenson School	Yes		Incomplete
Palo Alto	Palo Alto Unified School District	Addison School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Barron Park School	Yes		Incomplete
Palo Alto	Palo Alto Unified School District	Briones (Juana) School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Duveneck School	Yes	✓	
Palo Alto	Palo Alto Unified School District	El Carmelo School	No		
Palo Alto	Palo Alto Unified School District	Fairmeadow School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Hays (Walter) School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Henry M. Gunn High School	Yes		Unable to reach garden contact
Palo Alto	Palo Alto Unified School District	Hoover (Herbert) School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Jane Lathrop Stanford Middle School	No		
Palo Alto	Palo Alto Unified School District	Jordan Middle School	No		
Palo Alto	Palo Alto Unified School District	Nixon (Lucille) School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Ohlone School	Yes	✓	
Palo Alto	Palo Alto Unified School District	Palo Alto High School	No		
Palo Alto	Palo Alto Unified School District	Palo Verde School	Yes	✓	
San Jose	Alum Rock Union Elementary School District	Anthony Russo	Yes		Incomplete
San Jose	Alum Rock Union Elementary School District	Arbuckle (Clyde) School	Yes	✓	
San Jose	Alum Rock Union Elementary School District	Cesar Chavez School	No		
San Jose	Alum Rock Union Elementary School District	Clyde L. Fischer Middle School	Yes	✓	
San Jose	Alum Rock Union Elementary School District	James McEntee Academy	No		
San Jose	Alum Rock Union Elementary School District	KIPP Heartwood Academy	No		

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
San Jose	Alum Rock Union Elementary School District	Linda Vista Elementary	Yes		Incomplete
San Jose	Alum Rock Union Elementary School District	Millard McCollam Elementary School	Yes	✓	
San Jose	Alum Rock Union Elementary School District	Painter (Ben) School	No		
San Jose	Alum Rock Union Elementary School District	San Antonio Elementary School	No		
San Jose	Berryessa Union School District	Cherrywood Elementary	No		
San Jose	Berryessa Union School District	Morrill Middle School	Yes	✓	
San Jose	Berryessa Union School District	Noble Elementary	No		
San Jose	Berryessa Union School District	Piedmont Middle School	Yes	✓	
San Jose	Berryessa Union School District	Ryan (Thomas P.) Elementary	No		
San Jose	Berryessa Union School District	Toyon School	No		
San Jose	Berryessa Union School District	Vinci Park Elementary	No		
San Jose	Cambrian School District	Bagby School	Yes		Incomplete
San Jose	Cambrian School District	Fammatre School	Yes	✓	
San Jose	Cambrian School District	Sartorette School	Yes	✓	
San Jose	Campbell Union Elementary School District	Forest Hill School	Yes	✓	
San Jose	Campbell Union Elementary School District	Lynhaven School	Yes	✓	
San Jose	Charter School	Rocketship Mateo Sheedy	Yes		Incomplete
San Jose	Charter School	Rocketship Si Se Puede Academy	Yes		Incomplete
San Jose	Cupertino Union School District	Dilworth (Nelson S.) Elementary	Yes		Incomplete
San Jose	Cupertino Union School District	Manuel De Vargas Elementary School	Yes	✓	
San Jose	Cupertino Union School District	Murdock-Portal Elementary School	Yes	✓	
San Jose	Discovery Charter School	Discovery Charter School			Incomplete
San Jose	Downtown College Preparatory	Downtown College Prep			Incomplete
San Jose	Evergreen School District	Cadwallar Elemntary	Yes		Incomplete
San Jose	Evergreen School District	Matsumoto (Tom) Elementary	No		
San Jose	Evergreen School District	Millbrook Elementary	No		
San Jose	Evergreen School District	Silver Oak Elementary	No		
San Jose	Evergreen School District	Smith (Katherine R.) Elementary	No		
San Jose	Franklin-McKinley School District	Dahl (Capt. Jason M.) Elementary School	No		
San Jose	Franklin-McKinley School District	George Shirakawa, Sr. Elementary School	No		
San Jose	Franklin-McKinley School District	Hellyer (G. W.) Elementary	No		

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
San Jose	Franklin-McKinley School District	Meadows (J.R.) School	No		
San Jose	Franklin-McKinley School District	Santee Elementary	No		
San Jose	Franklin-McKinley School District	Seven Trees School	Yes	✓	
San Jose	Franklin-McKinley School District	Stonegate School	No		
San Jose	Franklin-McKinley School District	SUCCESS Academy	Yes	✓	
San Jose	Franklin-McKinley School District	Windmill Springs	Yes	✓	
San Jose	Moreland Elementary School District	Baker (Gussie M.) Elementary	No		
San Jose	Moreland Elementary School District	Easterbrook Discovery School			Incomplete
San Jose	Moreland Elementary School District	Latimer School	No		
San Jose	Moreland Elementary School District	Payne (George C.) School	Yes		Incomplete
San Jose	Morgan Hill Unified School District	Los Paseos Elementary School			Incomplete
San Jose	Mount Pleasant School District	Mt. Pleasant Elementary	No		
San Jose	Mount Pleasant School District	Valle Vista Elementary	No		
San Jose	Oak Grove School District	Del Roble Elementary	No		
San Jose	Oak Grove School District	Glider Elementary	Yes		Incomplete
San Jose	Oak Grove School District	Oak Ridge Elementary	No		
San Jose	Oak Grove School District	Santa Teresa Elementary	Yes		Incomplete
San Jose	Orchard School District	Orchard School	No		
San Jose	San Jose Unified School District	Allen at Steinbenck Elementary	Yes	✓	
San Jose	San Jose Unified School District	Booksin Elementary	Yes		Incomplete
San Jose	San Jose Unified School District	Darling (Anne) Elementary	No		
San Jose	San Jose Unified School District	Gardner Elementary	Yes		
San Jose	San Jose Unified School District	Grant Elementary	No		
San Jose	San Jose Unified School District	Hacienda Science/Environmental Magnet	Yes		Incomplete
San Jose	San Jose Unified School District	Hammer/Galarza	Yes		Incomplete
San Jose	San Jose Unified School District	Los Alamos School	Yes	✓	
San Jose	San Jose Unified School District	Pioneer High School	Yes	✓	
San Jose	San Jose Unified School District	Reed Elementary	No		
San Jose	San Jose Unified School District	River Glen School	No		
San Jose	San Jose Unified School District	Simonds School	No		
San Jose	San Jose Unified School District	Terrell School	No		
San Jose	San Jose Unified School District	Trace Elementary School	Yes	✓	
San Jose	San Jose Unified School District	Washington Elementary	No		
San Jose	San Jose Unified School District	Williams Elementary School	Yes	✓	
San Jose	San Jose Unified School District	Willow Glen School	Yes	✓	
San Jose	Special Education	Blackford Elementary	Yes		Incomplete
San Jose	Special Education	Dorsa (A. J.) Elementary	No		

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
San Jose	Special Education	McKinley Elementary	Yes		Incomplete
San Jose	Union Elementary School District	Carlton School	Yes	✓	
San Jose	Union Elementary School District	Dartmouth Middle School	No		
San Jose	Union Elementary School District	Guadalupe School	Yes	✓	
San Jose	Union Elementary School District	Idella Lietz Elementary School			Incomplete
San Jose	Union Elementary School District	Lietz School	No		
San Jose	Union Elementary School District	Noddin School	Yes	✓	
San Jose	Union Elementary School District	Oster School	Yes	✓	
San Jose	Union Elementary School District	Union Middle School	Yes	✓	
San Jose		Shields (Lester W.) Elementary	Yes		Incomplete
San Martin	Morgan Hill Unified School District	San Martin/Gwinn Elementary	No		
Santa Clara	Cupertino Union School District	Eisenhower (Dwight D.) Elementary School	Yes	✓	
Santa Clara	Santa Clara Unified School District	Bowers School	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Briarwood Elementary	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Don Callejon School	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Haman School	No		
Santa Clara	Santa Clara Unified School District	Hughes (Kathryn) School	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Laurelwood Elementary	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Millikin School	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Montague School	Yes	✓	
Santa Clara	Santa Clara Unified School District	Pomeroy School	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Scott Lane Elementary	No		
Santa Clara	Santa Clara Unified School District	Sutter School	Yes	✓	
Santa Clara	Santa Clara Unified School District	Washington Open	Yes		Incomplete
Santa Clara	Santa Clara Unified School District	Westwood School	No		
Saratoga	Cupertino Union School District	McAuliffe (Christa) Elementary School	Yes		Incomplete
Saratoga	Santa Clara County Office of Education	Walden West Outdoor School	Yes	✓	
Saratoga	Saratoga Union School District	Foothill Elementary	Yes		Incomplete
Saratoga	Saratoga Union School District	Saratoga School	Yes		Incomplete
Stanford	Palo Alto Unified School District	Escondido Elementary	Yes		Incomplete
Sunnyvale	Cupertino Union School District	West Valley Elementary School	Yes	✓	
Sunnyvale	Fremont Union High School District	Sunnyvale Cupertino Adult and Community Education	Yes	✓	
Sunnyvale	Santa Clara Unified School District	Peterson Middle School	Yes	✓	
Sunnyvale	Santa Clara Unified School District	Ponderosa School	No		
Sunnyvale	Sunnyvale School District	Bishop (Jarvis E.) School	Yes		Incomplete

School Gardens

City	School District	School Name	Garden	Survey Complete	Notes
Sunnyvale	Sunnyvale School District	Cherry Chase School	Yes	✓	
Sunnyvale	Sunnyvale School District	Columbia Middle School			Incomplete
Sunnyvale	Sunnyvale School District	Cumberland School	Yes		Incomplete
Sunnyvale	Sunnyvale School District	Ellis School	Yes		Incomplete
Sunnyvale	Sunnyvale School District	Lakewood Elementary	Yes		Incomplete
Sunnyvale	Sunnyvale School District	Sunnyvale Middle School	Yes	✓	
Sunnyvale	Sunnyvale School District	Vargas School	Yes	✓	

Appendix C: Local Plans and Policies – Sources

Municipalities throughout Santa Clara County have adopted land use policies and programs to support residents' access to healthy food resources. The following table provides a snapshot of where healthy food resources are mentioned in different cities' policies and initiatives, with links to the complete policy documents.

To view a comprehensive listing of the land use policies referenced here, see the companion guide “Local Plans and Policies: Healthy Food Resources in Santa Clara County” at www.healthtrust.org/foodaccess.

Policy/Initiative	Date*	Sections Cited	URL
Campbell			
General Plan	2001	Land Use and Transportation; Conservation and Natural Resources; Open Space; Parks and Public Facilities	www.ci.campbell.ca.us/Planning/GeneralPlan.htm
Municipal Code		n/a	www.ci.campbell.ca.us/Planning/index.htm
Parks and Recreation	n/a	Community Garden	www.ci.campbell.ca.us/Recreation/parks/parkinfoComGarden.htm
Cupertino			
General Plan	2005	Environmental Resources/ Sustainability; Land Use/ Community Design	www.cupertino.org/index.aspx?page=285
Municipal Code	2010	Zoning Ordinance	www.cupertino.org/index.aspx?page=291
Green Cupertino	n/a	Green Learning Initiative	www.cupertino.org/index.aspx?page=770
Gilroy			
General Plan	2002	Community Design and Development; Public Facilities	www.ci.gilroy.ca.us/cityofgilroy/city_hall/community_development/planning/general_plan/default.aspx
Municipal Code		Zoning Ordinance	www.ci.gilroy.ca.us/cityofgilroy/city_hall/community_development/planning/zoning_ordinance/default.aspx
Consolidated Plan	2010 (Draft)	Neighborhood Revitalization Strategy	www.ci.gilroy.ca.us/planning/pdf/Conplan0510.pdf
Los Altos			
General Plan	2002	n/a	www.ci.los-altos.ca.us/commdev/planning/index.html
Municipal Code	2010	n/a	www.ci.los-altos.ca.us/commdev/planning/index.html
Living Classroom	Initiated 2008	Garden-Based Science Program	www.losaltos.k12.ca.us/garden/Living_Classroom_Website/index.html
Los Altos Hills			
General Plan	2007	n/a	www.losaltoshills.ca.gov/docs/browse/cat_view/61-general-plan
Municipal Code	2010	n/a	www.losaltoshills.ca.gov/city-government/municipal-code/code
Los Gatos			
General Plan	2000	n/a	www.losgatosca.gov/index.aspx?NID=27
Municipal Code	2009	n/a	www.town.los-gatos.ca.us/index.aspx?NID=184
Community Services	2005	Community Unity Projects	www.losgatosca.gov/index.aspx?nid=1075

Policy/Initiative	Date*	Sections Cited	URL
Milpitas			
General Plan	2002	Open Space and Conservation	www.ci.milpitas.ca.gov/government/planning/plan_general.asp
Municipal Code	2010	Zoning Ordinance	www.ci.milpitas.ca.gov/government/planning/ordinance.asp
Joint Use Agreement: City of Milpitas and Milpitas Unified School District	26-Jan-10	Cesar Chavez Community Gardens	www.ci.milpitas.ca.gov/_pdfs/council/2010/030210/item_09.pdf
City Council Finance Subcommittee Meeting Minutes	18-Nov-09	Proposed Fee Increase: Parks and Recreation	www.ci.milpitas.ca.gov/_pdfs/subcommittee/finance/2009/111809/minutes.pdf
Monte Sereno			
General Plan	2008 (Draft)	n/a	www.montesereno.org/documents/planning/Draft%20General%20Plan.pdf
Municipal Code	2007	n/a	www.montesereno.org/municipal/_DATA/TITLE10/index.html
Morgan Hill			
General Plan	2001	Economic Development; Community Development; Open Space and Conservation	www.morgan-hill.ca.gov/index.aspx?nid=75
Municipal Code	2010	Zoning Ordinance	www.morganhill.ca.gov/index.aspx?NID=76
Mountain View			
General Plan	1992	Land Use; Environmental Management	www.ci.mtnview.ca.us/city_hall/community_development/planning/plans_regulations_and_guidelines/general_plan.asp
Zoning Ordinance	2009	Zoning Ordinance	www.ci.mtnview.ca.us/city_hall/community_development/planning/plans_regulations_and_guidelines/zoning_ordinance.asp
Mountain View Natural Suburban Ecosystem Working Group	n/a	Preliminary List of Recommendations	www.ci.mtnview.ca.us/civica/filebank/blobdload.asp?BlobID=4748
Mountain View Recreation Division	n/a	Community Gardens	www.mountainview.gov/city_hall/comm_services/recreation_programs_and_services/community_gardens.asp
Palo Alto			
General Plan	2007	Land Use and Community Design	www.cityofpaloalto.org/depts/pln/planning_forms.asp
Municipal Code	2007	Zoning Ordinance	www.cityofpaloalto.org/depts/pln/planning_forms.asp
Community Services Department	n/a	Community Gardens	www.cityofpaloalto.org/living/news/details.asp?NewsID=457&TargetID=41
City Council Approval; March 15, 2010	15-Mar-10	Approval of Revised Plan for Downtown Weekday Palo Alto FarmShop	www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=19055

Policy/Initiative	Date*	Sections Cited	URL
San Jose			
General Plan	2008	Goals and Policies; Land Use/ Transportation Diagram	www.sanjoseca.gov/planning/gp/gptext.asp
Municipal Code	2009	n/a	www.sanjoseca.gov/planning/zoning/zoning_code_update_052010.pdf
Department of Parks, Recreation & Neighborhood Services	n/a	San Jose Community Garden Program	www.sjcommunitygardens.org
Chief Development Officer Report	28-Sep-09	Facilitate Business and Retail Attraction and Development	www.sjeconomy.com/publications/oedpubs.asp
Santa Clara (City)			
General Plan	2010 (Draft)	Major Stragies; Goals and Policies	www.santaclaraca.gov/index.aspx?page=1263
Municipal Code	2010	n/a	www.codepublishing.com/ca/santaclara/frameless/index.pl?path=../html/SantaClara18/SantaClara18.html
Santa Clara County (Unincorporated)			
General Plan	1994	Rurual Unincorporated Area Issues & Policies; Resource Conservation	www.sccvote.org/portal/site/planning/agencychp?path=%2Fv7%2FPlanning%2C%20Office%20of%20(DEP)%2FPlans%20%26%20Programs%2FGeneral%20Plan
Municipal Code	2010	Zoning Ordinance	www.sccgov.org/portal/site/planning/agencychp?path=%2Fv7%2FPlanning%2C%20Office%20of%20(DEP)%2FPermits%20%26%20Development%2FZoning%20Ordinance
Draft Martial Cottle State Park General Plan and County Park Master Plan	2010	Existing Conditions; Park Plan; Implementing the Plan	www.sccvote.org/SCC/docs/Parks%20and%20Recreation,%20Department%20of%20(DEP)/attachments/Public_Review_Draft_Martial_Cottle_Park_MP.pdf
Santa Clara County Housing, Land Use, Environment, & Transportation Committee (HLUET) Minutes	15-Oct-09	Department of Agriculture and Environmental Management (DAEM)	www.sccgov.org/keyboard/attachments/Committee%20Agenda/2009/November%2020,%202009/202852468/TMPKeyboard202877852.pdf
Enjoying Santa Clara County	n/a	Certified Farmers' Markets	www.sccgov.org/portal/site/scc/chlevel3?path=%2Fv7%2FSCC%20Public%20Portal%2FLiving%20and%20Working%2FEnjoying%20Santa%20Clara%20County%2FCertified%20Farmers%20Markets
Saratoga			
General Plan	1987-2007 (varies by element)	Open Space and Conservation	www.saratoga.ca.us/cityhall/cd/planning/default.asp
Municipal Code	2010	n/a	www.saratoga.ca.us/cityhall/cd/planning/default.asp
Sustainability in Saratoga	n/a	Buy Local	www.saratoga.ca.us/cityhall/sustainability_in_saratoga/buylocal.asp

Policy/Initiative	Date*	Sections Cited	URL
Sunnyvale			
General Plan	1989-2009 (varies by element)	Open Space and Recreation; Community Design; Community Engagement	www.sunnyvale.ca.gov/CodesandPolicies/ GeneralPlan.aspx
Municipal Code	2010	Zoning Ordinance	www.sunnyvale.ca.gov/CodesandPolicies.aspx

* = Date approved or amended



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