

Health

Why is this important?

California's rates of obesity, asthma, diabetes, and hypertension are increasing.³⁴ Though health is affected by many interrelated factors including environmental and neighborhood characteristics, socio-economics, and individual behavior, empirical evidence suggests that building healthier communities can improve a variety of health outcomes. The health outcomes impacted by the physical form of the community include levels of physical activity (linked to rates of diabetes, obesity and hypertension, with improving outcomes for more active people), air quality (linked to asthma and other respiratory illnesses), number of injuries and deaths from traffic-related collisions, and levels of social capital and mental health.³⁵ Physical and economic access to grocery stores and healthy food is a well-studied predictor of health in neighborhoods.³⁶ Other characteristics of healthy communities and neighborhoods include walkability, compact, mixed-use development that is close to goods and services, access to parks and recreational spaces, and a general encouragement of healthy lifestyles.³⁷

Socio-economic factors also have major impacts on health outcomes. Poverty and income inequality is a broadly reliable predictor for poor health outcomes, and many ethnic minority communities experience negative health outcomes at higher rates than the general population.³⁸ Higher incomes or more affordable housing can increase household expenditures on health care and healthy lifestyles.³⁹

³⁴ National Health and Nutrition Examination Survey results website, accessed on February 27, 2007 at <http://www.cdc.gov/healthyplaces/healthtopics/physactivity.htm>.

³⁵ Lopez, Russ, 2004, "Urban sprawl and risk for being overweight or obese," *American Journal of Public Health*, Vol. 94, pages 1574 to 1579; Ewing, R., T. Schmid, R. Killingsworth, A. Zlot, and S. Raudenbush, 2003, "Relationship between urban sprawl and physical activity, obesity and morbidity," *American Journal of Health Promotion*, September, Vol. 18, No. 1, pages 47 to 57; Ewing, Reid, Ross C. Brownson and David Berrigan, 2006, "Relationship between urban sprawl and weight of united states youth," *American Journal of Preventive Medicine*, Vol. 31, No. 6, pages 464 to 474; Design, Community & Environment et al., prepared for LEED-ND Core Committee, Congress for the New Urbanism, 2006, *Understanding the Relationship Between Public Health and the Built Environment*, *supra* note 1, page 117.

³⁶ S. Inagami et al., 2006, *You Are Where You Shop: Grocery Store Locations, Weight, and Neighborhoods*, Vol. 31, No. 1, *American Journal of Preventive Medicine*, at 10-17, 2006; K. Morland et al., *Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study*, Vol. 30, No. 4, *American Journal of Preventive Medicine*, pages 333-339. R. Sturm and A. Datar, September 2, 2005, *Body Mass Index in Elementary School Children, Metropolitan Area Food Prices, and Food Outlet Density*, *Public Health*.

³⁷ See *How to Create and Implement Healthy General Plans*, by Public Health Law and Policy and Raimi + Associates, available at http://www.healthyplanning.org/toolkit_healthygp.html.

³⁸ H. Kahn, *Pathways Between Area-Level Income Inequality and Increased Mortality in U.S. Men*, *Annals of the NY Academy of Sciences*, December 1999.

³⁹ R. Cohen, *The Positive Impacts of Affordable Housing on Health: A Research Summary*, Enterprise Community Partners, Center for Housing Policy, 2007.

Defining Sustainability

A sustainable community is one whose residents live healthy, safe, and physically active lives.

Indicator Results

Both the San Mateo County Public Health Department and the Healthy Community Collaborative of San Mateo County keep data on health behaviors in San Mateo County. Currently, the most detailed health outcome and health behavior data available is at the San Mateo County level, not the Redwood City level. When data is reported at the San Mateo County level, behaviors in Redwood City may differ.

Overweight

- In March 2008, 56.7% of San Mateo County adults reported being overweight or obese, an increase from the 50.8% that reported being overweight or obese in 1998.
- The prevalence of overweight or obese residents in San Mateo County as of March 2008 remains lower than the national average of 66.1%.
- In 2007, low-income residents in San Mateo County were more likely to be overweight than median-income residents.

Healthy Behaviors

- Approximately 8.5% – less than 1 in 10 – of San Mateo County adults exhibit “multiple healthy behaviors.” (This are defined as “do not smoke, are not overweight, exercise adequately, and eat adequate fruits and vegetables”).
- Some demographic groups are less likely to report multiple healthy behaviors. These include men (5.7%), people over 65 (6.0%), persons without a high school education (2.9%), those below 200% of the poverty line (3.2%), and Asian (6.2%) and Hispanic (4.2%) respondents.
- The Healthy Community Collaborative of San Mateo County estimates that as many as 50% of premature deaths in San Mateo County are due to unhealthy behaviors, including smoking, obesity, lack of exercise, poor diet, or excessive alcohol use.

Percentage of 5th, 7th, and 9th Grade Students Meeting All State Physical Fitness Test Standards

- Between 2003 and 2007, the number of students that meet physical fitness test standards has increased from 22.5% to 29.4% for 5th graders, from 31.0% to 33.6% for 7th graders, and from 32.1% to 39.0% for 9th graders.
- A majority of students in all grades do not meet 6 out of 6 fitness standards. (Standards are for upper body strength, flexibility, aerobic capacity, body composition, abdominal strength, and trunk strength).

Table 19: Fitness

	2003	2004	2005	2006	2007
Percentage of 5 th grade students in the Redwood City School District meeting 6 out of 6 fitness standards	22.5%	25.6%	21.3%	20.3%	29.4%
Percentage of 7 th grade students in Redwood City School District meeting 6 out of 6 fitness standards	31.0%	32.8%	34.1%	28.3%	33.6%
Percentage of 9 th grade students in the Sequoia Union High School District meeting 6 out of 6 fitness standards	32.1%	32.5%	40.4%	40%	39%

Source: California Department of Education, 2008

Number of Fruit and Vegetable Vendors

The number of fruit and vegetable vendors in a city, and their distribution throughout the City, are an indicator of the accessibility of healthy food. The San Mateo County Health Department is preparing a complete Retail Food Environment Index for every city in the County, including Redwood City. A Retail Food Environment Index weighs the number of fast food, convenience, and liquor stores against vendors that sell fresh fruit and vegetables, such as grocery stores and fruit and vegetable markets. As of August 2008, the County had only tracked and mapped fruit and vegetable vendors for Redwood City. However, in California as a whole, there are 4.18 times as many fast-food, liquor and convenience stores vendors that sell fruit and vegetables.⁴⁰ This means that, like most places in California, Redwood City likely has many more unhealthy food outlets than fruit and vegetable vendors.

- Redwood City had 20 permanent fruit and vegetable vendors as of August 2008.
- The location of Redwood City's permanent fruit and vegetable vendors is shown in Figure 7.

Number of Farmer's Markets

Farmer's markets can contribute to health by providing access to high-quality fruits and vegetables, often within walking or biking distance of neighborhoods. They can also serve as social gathering places, support farmland and ecological diversity in the region, and spur interest in ecology and healthy food. As of June 2008, Redwood City had 3 farmers' markets, all sponsored by the Chamber of Commerce. These were:

- Kaiser Permanente Medical Center (Wednesdays; year-round)
- Kiwanis Redwood City Farmers' Market (Saturdays; April – November)
- Sigona's Farmer's Market (7 days a week; year-round)

⁴⁰ *Searching for Healthy Food: The Food Landscape in California Cities and Counties*, California Center for Public Health Advocacy, January 19, 2007.

Residential-Zoned Parcels within ¼ Mile of Grocery Stores

Figure 8 shows the total number of parcels in the city zoned to allow residential use, and which of these parcels are also within ¼ mile of a grocery store. Greater proximity to grocery stores is a well-studied predictor of health.⁴¹ This figure does not reflect potential barriers to access such as poor pedestrian or cycling facilities, major roads or rail without good pedestrian crossings, or street grid systems with low connectivity. Features of the figure include the following:

- 24.17% of residential-zoned parcels are within ¼ mile of Grocery Stores.
- Downtown is the area of town with the most residential-zoned parcels within ¼ mile of multiple grocery stores. Most residential parcels are within ¼ mile of at least 1 grocery store, and there are many parcels downtown that are within ¼ mile of 3 to 5 grocery stores.

Retail alcohol outlets within ¼ mile of Schools

Figure 9 shows retail alcohol outlets (those with an “ABC” license) within a ¼ mile radius of schools. There are currently 25 retail outlets within a ¼ mile radius of schools. _

Summary of Results

As with many other communities in California, Redwood City suffers from high rates of obesity, low levels of physical activity, and limited access to healthy food sources. Over ½ of San Mateo County residents are overweight or obese, and only around 30%-40% of Redwood City 5th – 9th graders meet state physical activity standards. This is partially due to the fact that less than 1 in 10 of county residents exhibit multiple healthy behaviors like adequate exercise and nutrition. Additionally, while there are three Farmer’s Markets in the City, less than 20% of residential parcels are within ¼ mile of a grocery store. There is a total of 20 fruit and vegetable vendors in the City.

Potential Policy Responses

General Health

- Adopt improved public health as a criterion for decision-making at all levels of city government, including planning, public works, parks and recreation, economic development, and city operations. This can be accomplished through health impact assessments or other similar studies.
- Consider health impacts in community design and land use decisions.
- Provide diverse public spaces – including plazas and active and passive parks – that provide pleasant places for neighbors to meet and congregate.

⁴¹ S. Inagami et al., 2006, *You Are Where You Shop: Grocery Store Locations, Weight, and Neighborhoods*, Vol. 31, No. 1, American Journal of Preventive Medicine, at 10-17, 2006; K. Morland et al., *Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study*, Vol. 30, No. 4, American Journal of Preventive Medicine, pages 333-339. R. Sturm and A. Datar, September 2, 2005, *Body Mass Index in Elementary School Children, Metropolitan Area Food Prices, and Food Outlet Density*, Public Health.

- Publicize the importance of healthy lifestyles, and consider city sponsorship or participation in events promoting healthy behavior.

Physical Activity

- Create convenient and safe opportunities for physical activity for residents of all ages and income levels:
 - Create neighborhoods with safe, attractive and accessible opportunities for recreational exercise.
 - Provide sufficient density and diversity of uses to allow residents to walk to meet their daily needs.
 - Maintain and enhance the multi-modal transportation system.
 - Provide attractive, safe and well-maintained streetscapes that cater to pedestrians and cyclists.
- Reduce childhood obesity through such strategies as increasing opportunities for outdoor recreation, increasing youth recreation programs, and promoting physical activity within and outside of school settings.

Access to Healthy Foods

- Adopt a city-wide objective and implementation program to increase city-wide access to healthy food choices, such that every residential parcel is within ½ mile of a healthy food outlet. Policies to implement this objective could include the following:
 - Create guidelines defining “healthy food outlets.” Healthy food outlets generally include grocery stores, healthy convenience stores, fruit and vegetable stands, farmer’s markets, community gardens, CSA (community-supported agriculture) delivery sites, or shuttle service to any of these things.
 - Work with the San Mateo Health Department to prepare a full Retail Food Environment Index for Redwood City.
 - Host farmer’s markets at city facilities and use other city resources to support Chamber of Commerce-sponsored farmer’s markets.
 - Facilitate partnerships between CSAs and food vendors such as grocery stores and smaller convenience stores, creating more healthy food outlets.
 - Provide city facilities as CSA delivery points.
 - Develop community gardens in neighborhoods.
 - Provide economic development incentives or other incentives for grocery stores and other healthy food outlets, particularly downtown and in underserved areas.
- Increase pedestrian and cycling connections to farmer’s markets.
- Avoid concentrations of unhealthy food providers, especially near neighborhoods and schools.
- Adopt ordinances that prohibit trans fats in food service establishments, in coordination with the state-wide ban to be adopted by California.
- Adopt an ordinance to require calorie information on menus.

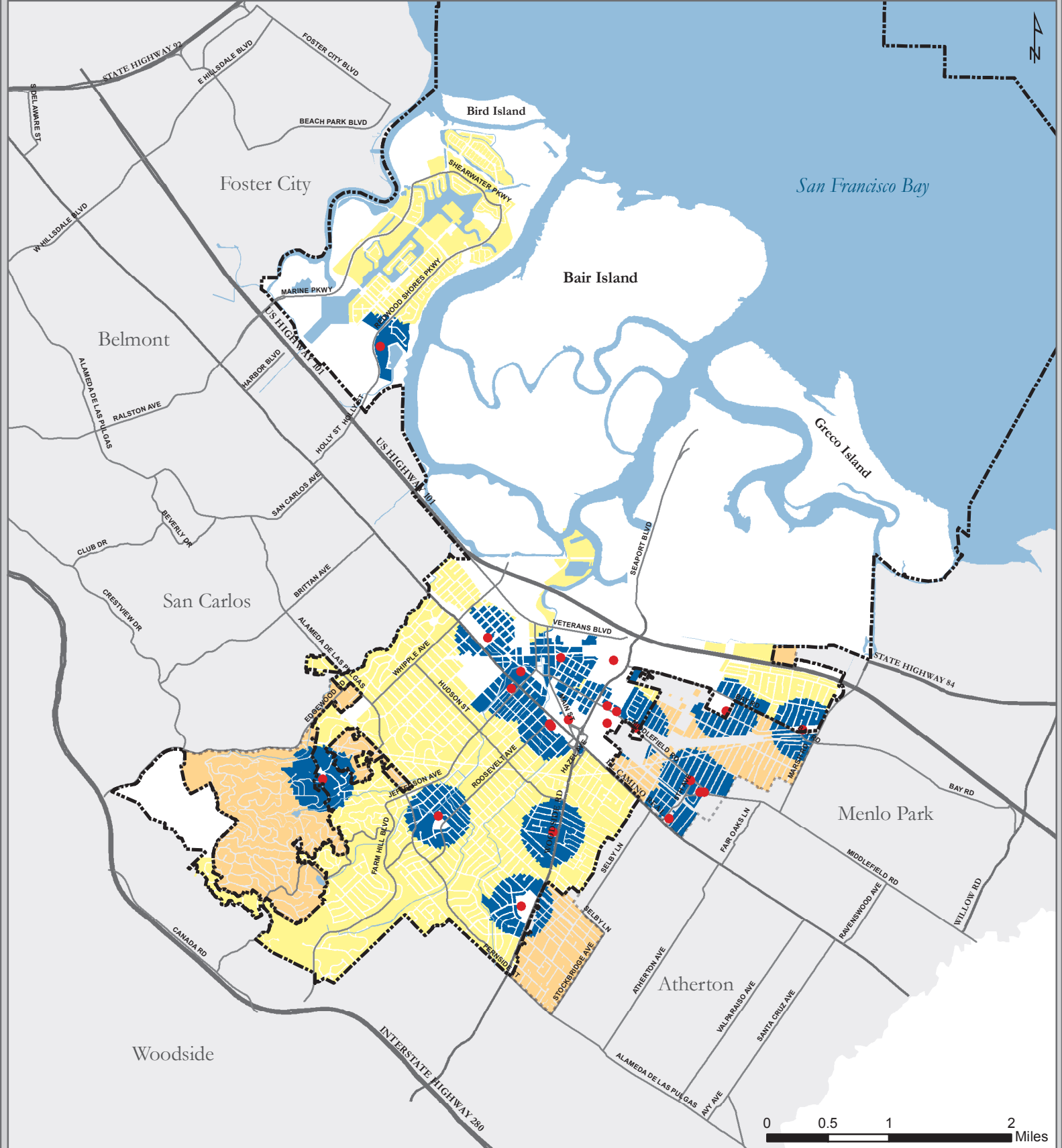
Redwood City Fruit and Vegetable Retailers



Legend

- Fruit and Vegetable Retailer
- 1/2 Mile Buffer

PLACEHOLDER BACK PAGE OF FIGURE



- City Boundary
- Sphere of Influence
- Grocery Stores

- City Parcels Allowing Residential Uses (19,634)
- Sphere of Influence Parcels Allowing Residential Uses (6,521)
- Parcels Allowing Residential Uses within 1/4-Mile of Grocery Stores (6,322 or 24.17%)

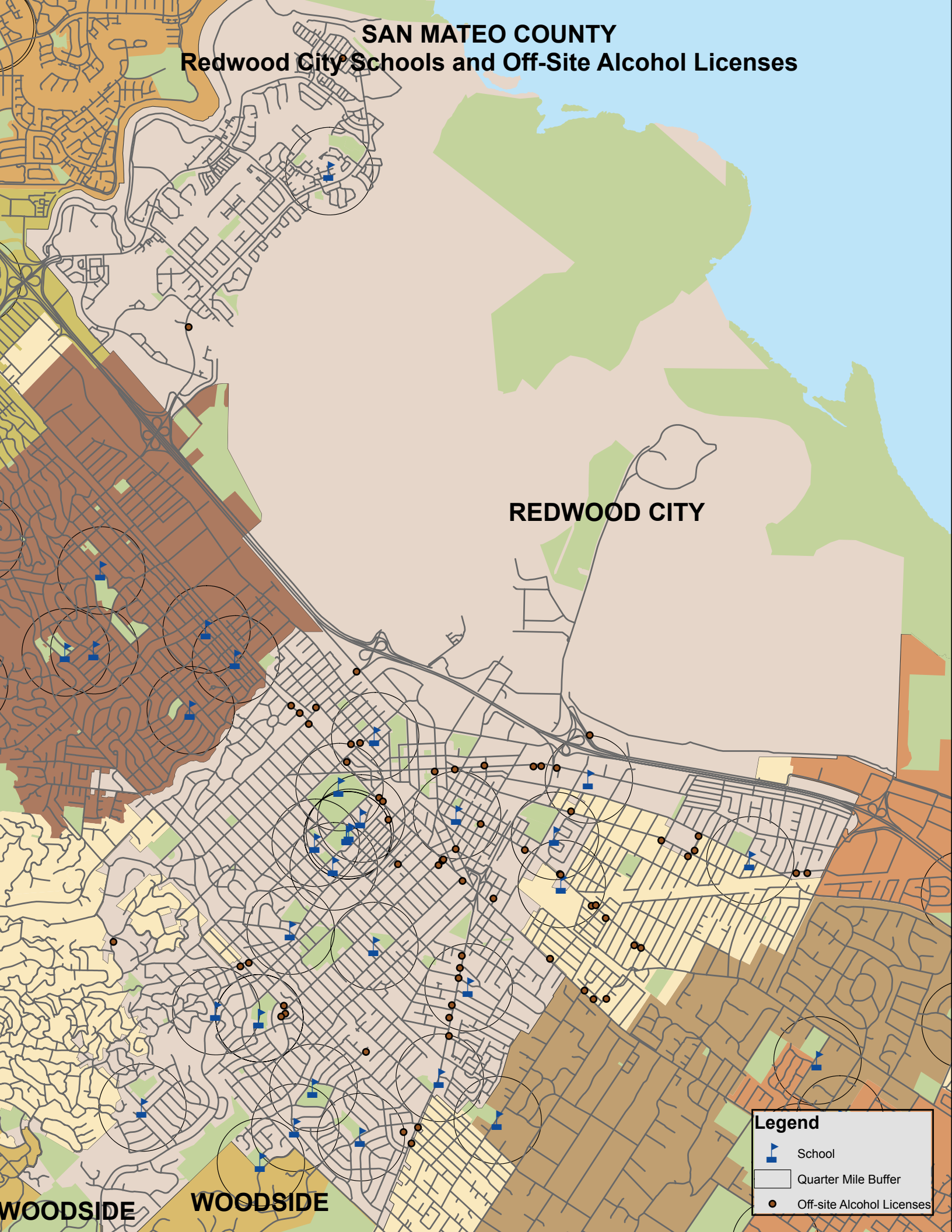
Proximity to Grocery Stores



*Zoning allowing for Residential Usage: CB, CBR, CG-R, R-1, R-2, R-3, R-4, R-5, RH, MH, DGEZ, and some P

PLACEHOLDER BACK PAGE OF FIGURE

SAN MATEO COUNTY Redwood City Schools and Off-Site Alcohol Licenses






REDWOOD CITY

WOODSIDE

WOODSIDE

Legend

-  School
-  Quarter Mile Buffer
-  Off-site Alcohol Licenses

PLACEHOLDER BACK PAGE OF FIGURE

- Adopt a city-wide objective of encouraging healthy food options through municipal operations. Policies to implement this objective could include the following:
 - Set standards for healthy food at all city functions.
 - Encourage or require healthy food vendors in city buildings or on city property.
 - Create guidelines for city employers to replicate the city program.