

4 HEALTH AND WELL-BEING

INTRODUCTION

This chapter summarizes various factors that contribute to the health and well-being of a community. Research has found that where people live can have a profound effect on health outcomes, including life expectancy. It influences access to resources that foster better health, such as safe streets, nutritious foods, quality and affordable housing, good jobs, access to health care, and excellent schools. These resources and the distribution of these resources can be influenced by decisions concerning land use, transportation mobility, and urban design. Decisions around these resources and issues can promote a positive physical, social, and economic environment that supports the overall well-being of its residents.

This chapter is organized into the following sections:

- A Healthy Community Model (Section 4.1)
- Food Security and Food Environment (Section 4.2)
- Socioeconomic Status and Economic Opportunity (Section 4.3)
- Active and Healthy Living (Section 4.4)

Much of the information contained within this chapter pertains to programs and data compiled and managed by the Ventura County Public Health Department (VCPH). Unlike some other functions performed by Ventura County that are limited to the unincorporated areas, programs managed by VCPH are available to both incorporated and unincorporated area residents of the county. Similarly, the data gathered and managed by VCPH combines information from the cities and the unincorporated area. Therefore, it is difficult to isolate health data for unincorporated Ventura County. In some cases, however, it is possible to extrapolate data that can be applied to unincorporated areas; such analyses are included herein, when applicable and feasible.

The VCPH maintains a website that includes information about the health status of Ventura County residents. The data included therein is intended for community residents, stakeholders, and decision-makers and is updated regularly. A subset of the data available online at www.healthmattersinvc.org has been summarized herein.

SECTION 4.1 A HEALTHY COMMUNITY MODEL

Introduction

Health and wellness are influenced by the homes, neighborhoods and communities in which people live, work, and play. Good physical and mental health depend, in part, on factors outside of the public health and health care system, such as affordable and secure housing, and sustainable and economically vital neighborhoods that provide access to employment opportunities and public resources.

Policy can promote communities designed to support health and safety, such as places to play and be active, access to affordable healthy foods, and streetscapes designed to prevent injury. Health and

wellness requires that all environments, including homes, schools, communities and worksites, have clean air and water and are free from toxins and physical hazards. A healthy environment gives people the opportunity to make healthy choices and decrease their risk for heart disease, cancer, obesity, diabetes, respiratory diseases such as asthma, and injuries.

Major Findings

- Ventura County ranked 8th in overall health outcomes out of the 58 California counties.
- Leading causes of death in Ventura County are cancer, coronary heart disease, cerebrovascular disease (stroke), Alzheimer’s Disease, and chronic lower respiratory disease (CLRD); of these five, four are greatly influenced by the built environment.
- According to the 2016 Ventura County Community Health Survey conducted by VCPH Ventura County residents believe that:
 - Healthy behaviors and lifestyles, low crime/safe neighborhoods, a clean environment, and access to health care make a healthy community;
 - Aging, mental health, and lack of good paying jobs are the three most important health problems in the county;
 - Being overweight/obese, alcohol abuse, drug abuse, poor eating habits, and lack of exercise are behaviors that have the greatest impact on overall community health; and
- Almost 90 percent of respondents believe that Ventura County is “somewhat healthy” to “healthy.”
- Ventura County is designated as a “serious” non-attainment area for the federal ozone air quality standard, and currently exceeds the standard on an average of 14 days per year. This means on those days the air is considered unhealthy, especially for children, the elderly, and people with respiratory problems. It is important to note that this air quality standard is rarely exceeded in the coastal portion of the county (Ventura, Oxnard, Port Hueneme, and Camarillo) and the Conejo Valley.

Existing Conditions

In January 2015, the Ventura County Board of Supervisors formally adopted a Health in All Policies Resolution, which states in part (full text can be found in Chapter 7):

The policy recognizes that the physical, economic, and social environments in which people live, learn, work, and play influences the adoption of healthy practices by making it either more or less difficult for individuals to choose behaviours that either promote or diminish health. These environments are significantly shaped by policy decisions developed by County agencies and departments outside of the health sector such as those dealing with housing, transportation, education, air quality, parks, criminal justice and employment.

The Health in All Policies (HiAP) framework was developed by the World Health Organization, but the HiAP concept can be implemented at all levels of government. Ventura County Public Health has worked to further refine the HiAP concept and has developed a model for the ideal healthy community.

According to the County Health Rankings & Roadmaps Report, in 2016, Ventura County ranked 8th in overall health outcomes out of the 58 California counties. VCPH monitors population health outcomes such as quality of life, disease incidence and prevalence, life expectancy, and death to assess the health of county residents. There are numerous other indicators that help quantify how the built environment supports health. Table 4-1 below includes a small selection of indicators for Ventura County; the data is managed by VCPH, and is continually updated on www.healthmattersincv.org.

TABLE 4-1 SELECTED INDICATORS FOR THE BUILT ENVIRONMENT			
2016			
Indicator	Measure	Ventura County	California
Solo driver with a long commute	Proportion of commuters who drive alone to work and commute for more than 30 minutes (2010-2014)	33.1%	37.7%
Liquor Store Density	Number of liquor stores per 100,000 population (2014)	15.2	10
Adults who are Obese	Percentage of adults aged 18 and older who are obese (2014)	25%	27%
Bicycle-Involved Collision Rate	Number of bicyclist-involved collisions resulting in injury or death, per 100,000 population (2013)	29.5	35.1
Youth who Smoke	Percentage of middle and high school students who are current smokers	13.8%	13.8%
Frequent Mental Distress	Percent of adults who experience frequent mental distress (2014)	10.1%	10.0%

Source: Ventura County Public Health, 2016

Note: Additional health and the built environment indicators maintained and continually updated by VCPH at www.healthmattersincv.org include: [Access to Exercise Opportunities](#); [Age-Adjusted Death Rate due to Motor Vehicle Traffic Collisions](#); [Age-Adjusted Death Rate due to Unintentional Injuries](#); [Annual Ozone Air Quality](#); [Annual Particle Pollution](#); [Children with Low Access to a Grocery Store](#); [Farmers’ Market Density](#); [Fast Food Restaurant Density](#); [Grocery Store Density](#); [Pedestrian Death Rate](#); [Recreation and Fitness Facilities](#); [Violent Crime Rate](#); [Adults who Smoke](#); [Adults with Asthma](#); [Age-Adjusted ER Rate due to Asthma](#); [Age-Adjusted ER Rate due to COPD](#); [Age-Adjusted ER Rate due to Pediatric Asthma](#); [Children and Teens with Asthma](#).

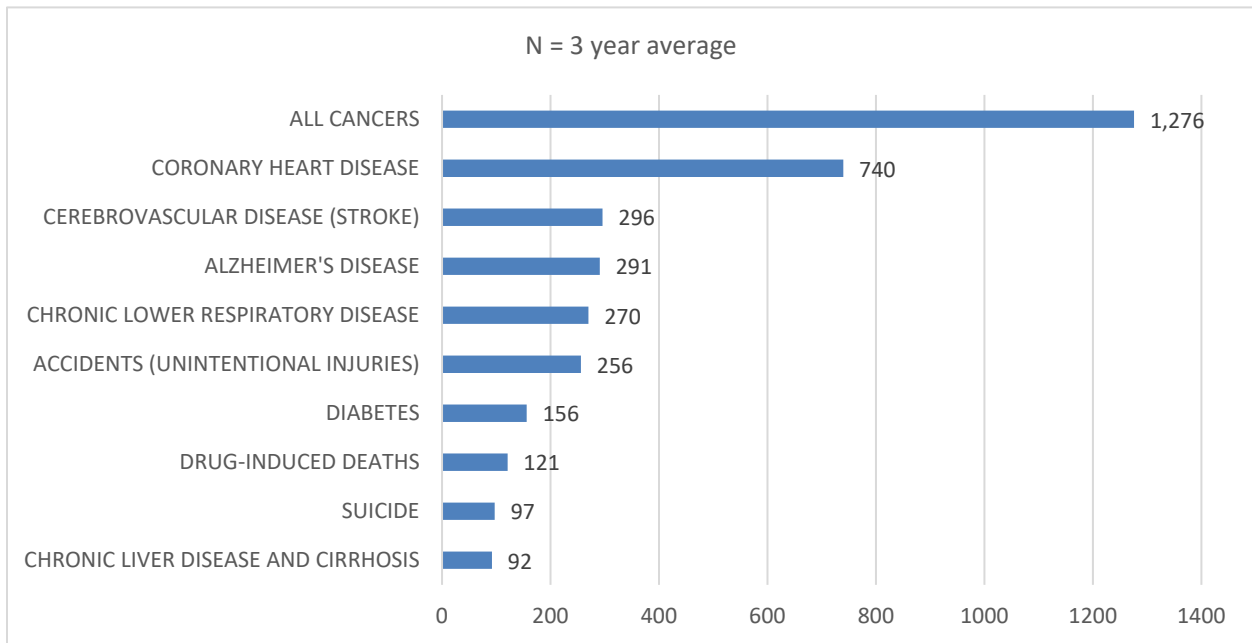
Social Determinants and the Built Environment

The concept of “social determinants of health” touches on all facets of daily life. According to the U.S. Department of Health and Human Services, social determinants of health impact how people live, learn, work, play, worship, and age. Social determinants of health include factors such as socioeconomic status (SES), access to affordable and safe housing, healthy foods, adequate health care, safe modes of transportation, and natural open spaces.

The built environment also impacts health and wellness; good physical and mental health depend on factors outside of the public health and health care systems. Figure 4-1 shows a chart of the leading causes of death in Ventura County. Of the top five, four are greatly influenced by the built environment: cancer, coronary heart disease, stroke, and chronic lower respiratory disease. Alzheimer’s is the fourth leading cause of death in Ventura County, but is mainly a result of age, family history, and genetics. The

built environment, however, can greatly facilitate or hinder access to the appropriate health care for those with Alzheimer’s.

**FIGURE 4-1
LEADING CAUSES OF DEATH
Ventura County
2012-2014**



Source: California Department of Public Health, County Health Status Profiles, 2016.

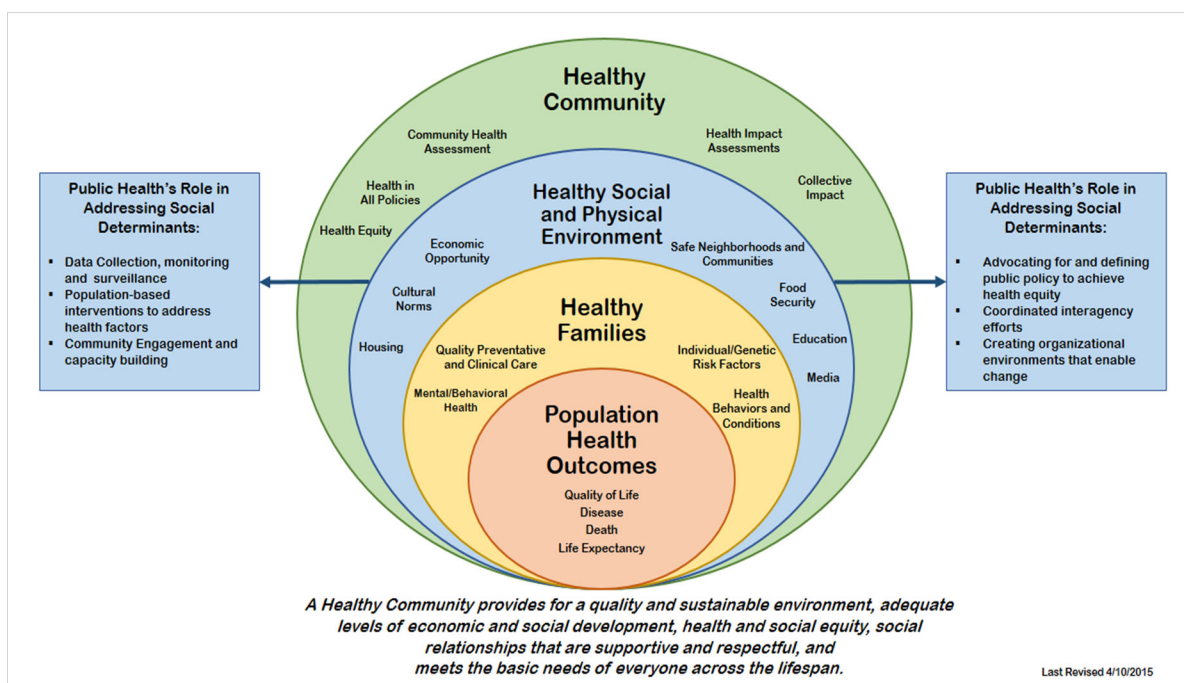
Policy can promote community design that supports health and safety by, for example, incorporating places to play and be active, facilitating access to affordable healthy foods, and designing streetscapes to prevent injury. Health requires that all environments, including homes, schools, communities and worksites, have clean air and water and are free from toxins and physical hazards.

Finally, although these conditions are often related to behaviors such as lack of physical activity, poor nutrition, and tobacco and/or alcohol use, SES and other social determinants of health greatly influence someone’s access to health care and their ability to make health-conscious decisions. See Section 4.3 for an expanded discussion of SES.

Ventura County Public Health Model for a Healthy Community

Based on Ventura County Public Health’s Model for a Healthy Community (VCPH Model) shown in Figure 4-2, a healthy community provides a sustainable environment, adequate levels of economic and social development, health and social equity, relationships that are supportive and respectful, while also meeting basic needs throughout a lifespan. The VCPH Model further suggests that it is most productive to shift the focus from addressing health factors to addressing the social and environmental determinants of health, which are described in Section 4.2.

**FIGURE 4-2
VENTURA COUNTY PUBLIC HEALTH MODEL FOR A HEALTHY COMMUNITY**



Source: Ventura County Public Health, 2016.

Population Health Outcomes

Health outcomes refer to the change in health status that result from an intervention or program instituted to address a health issue; health outcomes help to measure the success of these interventions and programs. VCPH monitors population health outcomes such as quality of life, disease incidence and prevalence, life expectancy, and death to assess the health of families in Ventura County. According to the theory of social determinants of health, targeting interventions to improve health outcomes is considered downstream to upstream causes such as social inequalities related to class, race/ethnicity, gender, and immigration status. To improve health outcomes, health interventions must target the upstream causes. Upstream causes also include the institutional power of corporations, government agencies, and schools, as well as social and physical neighborhood conditions, including land use, transportation, and housing. All of these upstream factors can work together to either improve or worsen health indicators like mortality, cancer, obesity, chronic lower respiratory disease, and life expectancy. For instance, people who are experiencing chronic stress over long periods of time are at higher risk of developing heart disease, high blood pressure, diabetes, depression, anxiety disorder, and others. Chronic stress brought on by routine responsibilities, such as driving through traffic, or living in an unsafe neighborhood, can often be addressed through planning policy.

Healthy Families

Healthy families need access to quality preventive and clinical care, including mental and behavioral health services. The health of a family is affected by individual/genetic risk factors as well as health behaviors and conditions. In addition, a healthy social and physical environment play a significant role in achieving overall family health.

Healthy Social and Physical Environment

Adequate housing can support occupants throughout their life stages, promote health and safety, and support mental and emotional health. Neighborhood characteristics have significant impact on health outcomes because they influence an individual's ability to adopt behaviors that promote health. For example, people in low-income neighborhoods often have limited access to affordable, healthy food options, but instead may have ample access to cheap fast-food outlets. Cultural norms can influence beliefs about health care, behaviors that contribute to food choices, attitudes regarding mental health and values concerning social status. Living in poverty and being unemployed are associated with poor physical and mental health outcomes across all races and ethnicities. People with higher levels of educational attainment consistently experience lower risks for a wide array of illnesses and increased life expectancy.

The County Health Rankings and Roadmap uses social associations to measure social isolation, social capital, and community interaction. Membership associations are used as a proxy for social associations because they provide a way for the community to interact. This includes membership-driven organizations like civic, sports, religious, business, or professional organizations. This methodology is limiting, however, because it does not account for the social support a person receives from family relationships or close friendships. In 2016, Ventura County had 6.0 membership associations per 10,000 population, which is slightly higher than California (5.8 associations/10,000), but much lower than the national 90th percentile (22.1 associations/10,000). Planning and development policy can contribute to supporting healthy social interaction by encouraging the provision of shared spaces and discouraging development forms that foster separation and isolation.

Healthy Community

According to the Centers for Disease Control and Prevention (CDC), health equity is achieved when every person has the opportunity to “attain his or her full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.” VCPH is committed to conducting periodic community health assessments and utilizing the Health in All Policies (HiAP) framework to improve the accountability of decision-makers to recognize the health impacts at all levels of policy-making. The VCPH Model helps define those social determinants as well as public health actions that can be taken to begin to address them.

Ventura County 2016 Community Health Survey

Through the work of VCPH, the County addresses Healthy Community components through the collection of data that is used to inform policy development, engage stakeholders, and support organizational changes that result in the development of healthy communities. As part of this work, VCPH conducts periodic community health assessments, the most current of which will be released in early 2017.

During the summer of 2016, as part of a series of General Plan Update community workshops held throughout the county, workshop participants were asked to complete a VCPH Community Health Survey. Of the 254 workshop participants, 141 people completed the survey. It was further administered at multiple venues over the course of the summer and fall of 2016; a total of 960 completed surveys were submitted to VCPH. The results from the larger dataset will be published in the 2017 VCPH Community Health Assessment. Data included here represents the responses of the 141 General Plan Update workshop participants.

The 2016 Community Health Survey included (but was not limited to) five questions related to respondents' ideas of what constitutes a healthy community:

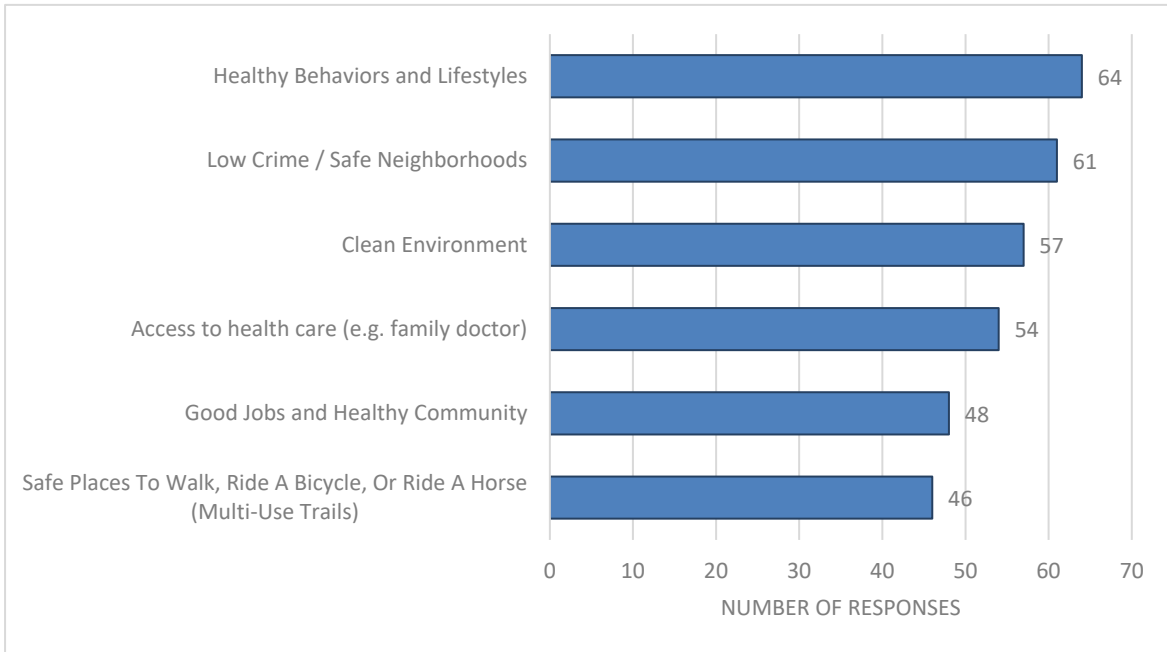
- Question 1: What do you think makes a healthy community? (Figure 4-3)
- Question 2: What do you think are the three most important health problems in our community? (Figure 4-4)
- Question 3: What do you think are the three most important “risky behaviors” in our community? (Those behaviors which have the greatest impact on overall community health.) (Figure 4-5)
- Question 4: What changes need to be made to address the health problems and risky behaviors that you have identified in the previous questions?
- Question 5: How would you rate Ventura County as a “Healthy Community”? (Figure 4-6)

Responses from Questions 1, 2, 3, and 5 are summarized below. The graphs shown below represent a subset of the data collected. In general, community members felt that:

- Healthy behaviors and lifestyles, low crime/safe neighborhoods, a clean environment, and access to health care make a healthy community
- Aging, mental health, and lack of good paying jobs are the three most important health problems in the county.
- Being overweight/obese, alcohol abuse, drug abuse, poor eating habits, and lack of exercise are behaviors that have the greatest impact on overall community health; and that
- Ventura County is, overall, “somewhat healthy” to “healthy.”

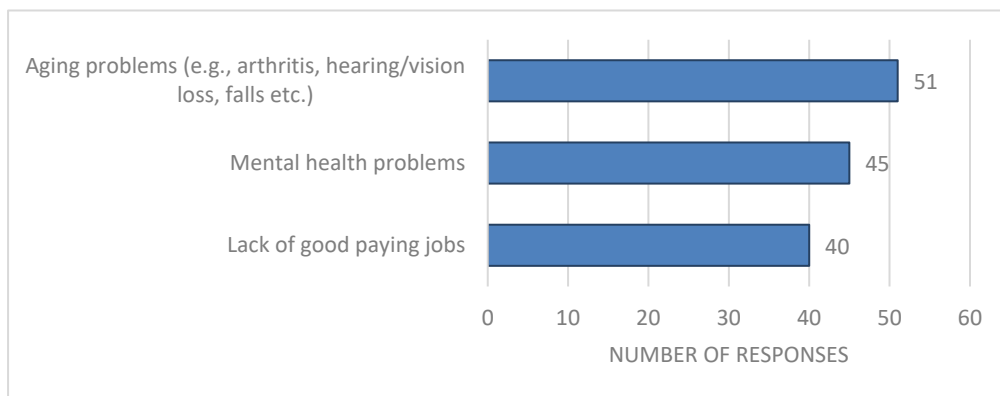
The 2016 Community Health Assessment also included several demographic questions (e.g., age, zip code, marital status, etc.). Responses showed that the majority of respondents who attended the workshops and completed the Assessment were over 40 years old, female, White, married, and college educated.

FIGURE 4-3
WHAT DO YOU THINK MAKES A
HEALTHY COMMUNITY?
Ventura County
2016



Source: Ventura County Public Health Community Health Survey, 2016.

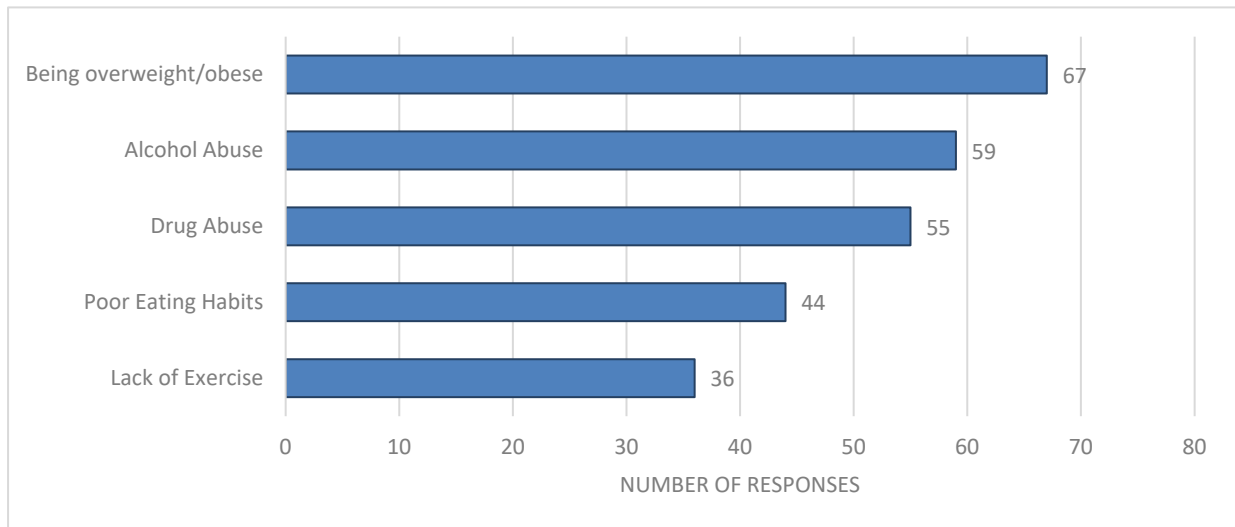
FIGURE 4-4
WHAT DO YOU THINK ARE THE THREE MOST IMPORTANT
HEALTH PROBLEMS IN OUR COMMUNITY?
Ventura County
2016



Source: Ventura County Public Health Community Health Survey, 2016.

FIGURE 4-5
WHAT DO YOU THINK ARE THE MOST IMPORTANT RISKY BEHAVIORS IN OUR COMMUNITY?
(BEHAVIORS WHICH HAVE THE GREATEST IMPACT ON OVERALL COMMUNITY HEALTH.)

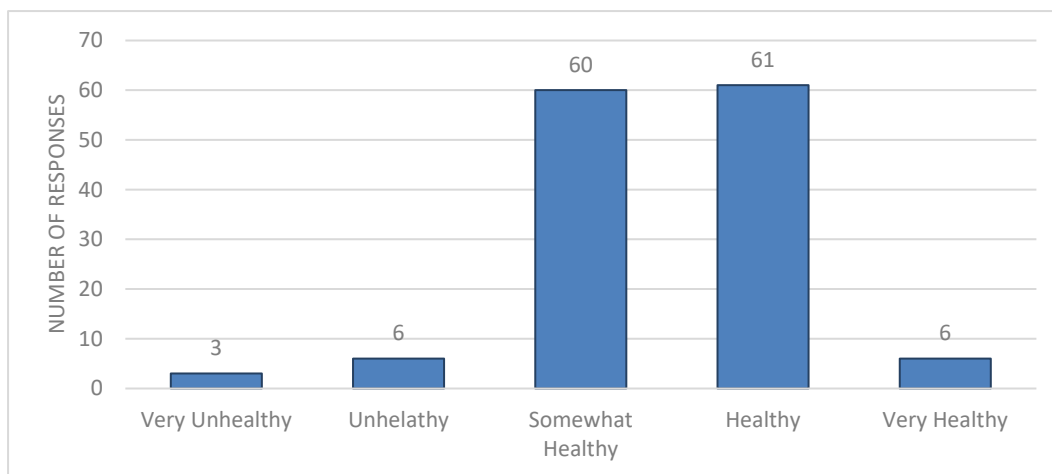
Ventura County
 2016



Source: Ventura County Public Health Community Health Survey, 2016.

FIGURE 4-6
HOW WOULD YOU RATE VENTURA COUNTY AS A HEALTHY COMMUNITY?

Ventura County
 2016



Source: Ventura County Public Health Community Health Survey, 2016.

Regulatory Setting

Federal

Healthy People 2020

The Healthy People initiative is a national 10-year plan for improving the health of Americans. Healthy People 2020 was launched in 2010 and is the third iteration of this national initiative. It is managed by the Office of Disease Prevention and Health Promotion (ODPHP) within the U.S. Department of Health and Human Services and funded by individual agencies based on agency-specific objectives. The major data sources used in tracking Healthy People objectives are funded by the National Center for Health Statistics. The mission of Healthy People 2020 is to 1) identify nationwide health improvement priorities, 2) increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress, 3) provide measurable objectives and goals that are applicable at the national, state, and local levels, 4) engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge, and 5) identify critical research, evaluation, and data collection needs.

State

Affordable Care Act/Covered California

The Affordable Care Act was signed into law in March 2010. Beginning in September 2010, all new plans are required to cover certain preventative services such as immunization; screening for blood pressure, cholesterol, depression, obesity, etc.; mammograms; and contraception. Individuals are required to have some form of health insurance, or else face paying a penalty.

California Health in All Policies Task Force

The Health in All Policies (HiAP) Task Force was established in February 2010 by Executive Order S-04-10. By Executive Order mandate, the Strategic Growth Council, a state entity responsible inter-agency collaboration to recommend policies and investment strategies, was required to establish the HiAP Task Force.

California Wellness Plan 2014

The California Wellness Plan is used by state and local community groups and organizations to prevent chronic disease and promote health and wellness. Approximately 14 million Californians had chronic diseases in 2007; these diseases are the leading cause of death, disability, and diminished quality of life in California. Prevention of chronic diseases is also economically beneficial; the Trust for America's Health estimates that every \$1 spent on health care prevention would yield \$4.80 in health care savings over 5 years. The Plan addresses causes of chronic disease, including factors beyond health care and traditional public health approaches, such as economic status, culture, literacy, race, educational attainment, and spatial environment. The Plan outlines how agencies can come together to collaboratively address these concerns and promote health equity.

Regional/Local

Health Matters

The Health Matters in Ventura County website provides access to data on local health, resources, news, and events. The goal of the site is to provide data needed to understand public health indicators and ultimately support organizations in establishing community goals and build healthier communities. Countywide data is provided, as well as data broken down by city.

Ventura County Public Health Strategic Plan

The Ventura County Public Health (VCPH) 2015-2020 Strategic Plan was developed by VCPH staff, community organizations, officials, and stakeholders to provide strategic priority areas, goals, and objectives for a healthier community.

(http://www.healthmattersinvc.org/content/sites/ventura/ph_strategic_plan_booklet_online_082615.pdf)

The Plan considers socioeconomic status as having significant effect on health, and the breakdown of those socioeconomic barriers such as disparities in income, education, and occupation. The four strategic priority areas are defined as: Health Equity (support each person in Ventura County in attaining his or her full health potential regardless of socially determined circumstances); Healthy and Safe Community Environments (support and develop neighborhoods and institutions that support healthy lifestyles); Preventative Health Care (improve the availability, use, and integration of prevention-focused, evidence-based health care services); and Community-Driven Partnerships (collaborate with existing stakeholders and non-traditional stakeholders to increase the collective effect for improving health and well-being). Population health indicators were selected to be tracked over the next five years to measure the effectiveness of the Plan; VCPH has a target of five percent improvement for each health indicator by the year 2020.

Key Terms

Built Environment. The built environment refers to all the physical components of where people live, work, and play.

Social Determinants of Health. Social determinants of health refer to the social and physical environment in which people carry out daily life. Examples of social determinants include: job opportunities, living wages, healthy foods, social norms such as discrimination, exposure to mass media and social media, exposure to violence and crime, concentrated poverty, quality schools, transportation options, and residential segregation. Examples of physical determinants include: natural environment, built environment, exposure to toxic substances, physical barriers such as for people with disabilities, and aesthetic features such as lighting and street trees.

Socioeconomic Status. Socioeconomic status (SES) refers to a person's economic and social position within their community, often measured with educational attainment, type of occupation, and income. SES is often used to explain disparities in education, wealth, and health.

Upstream Causes. Upstream causes of health refer to the institutional, cultural, and political structures that create health inequities. The purpose of identifying the upstream causes of certain health outcomes is to target interventions at the source of health inequities to create sustainable change in health outcomes.

References

Reports/Publications

Bay Area Regional Health Inequities Initiative. “Framework for Understanding and Measuring Health Inequities.” Accessed 2 August 2016, from

https://www.bcbsmnfoundation.org/system/asset/resource/pdf_file/53/BARHIIHEframework.pdf

California Department of Health. 2016. “County Health Status Profiles 2016.” Accessed 31 July 2016, from <http://www.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2016.pdf>

California Department of Public Health (CDPH). 2016. “County Health Status Profiles 2016.” Accessed 6 May 2016, from <http://www.cdph.ca.gov/programs/ohir/Pages/CHSPCountySheets.aspx#v>

Institute for Health Metrics and Evaluation (IHME), US County Profile: Ventura County, California, Seattle, WA: IHME, 2015. Accessed 28 June 2016, from http://www.healthdata.org/sites/default/files/files/county_profiles/US/County_Report_Ventura_County_California.pdf

Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). Health in All Policies: A Guide for State and Local Governments. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute. Accessed 23 June 2016, from

https://www.apha.org/~media/files/pdf/factsheets/health_inall_policies_guide_169pages.ashx

Websites

Centers for Disease Control (CDC). 2016. “Health-Related Quality of Life: Well-Being Concepts.” Accessed 8 July 2016, from <http://www.cdc.gov/hrqol/wellbeing.htm>

County Health Rankings & Roadmaps. 2016. “California: Adult Smoking.” *University of Wisconsin Population Health Institute (UWPHI)*. Accessed 1 August 2016, from

<http://www.countyhealthrankings.org/app/california/2016/measure/factors/9/map>

County Health Rankings & Roadmaps. 2016. “Social associations.” *University of Wisconsin Population Health Institute (UWPHI)*. Accessed 14 July 2016, from

<http://www.countyhealthrankings.org/measure/social-associations>

County Health Rankings & Roadmaps. 2016. “Ventura County Health Ranking Data, 2016.” *University of Wisconsin Population Health Institute (UWPHI)*. Accessed 14 July 2016, from

<http://www.countyhealthrankings.org/app/california/2016/rankings/ventura/county/outcomes/overall/snapshot>

Healthy People 2020 (<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>).

Other

Ventura County Public Health. 2014. “Community Health Assessment Overview: Health Matters in Ventura County! [presentation]” Accessed 1 August 2016, from

<http://vcportal.ventura.org/BOS/District2/Somis/docs/meeting/CommunityHealthAssessmentOverview.pdf>

SECTION 4.2 FOOD SECURITY AND FOOD ENVIRONMENT

Introduction

Increases in conditions like obesity and nutrition-related chronic diseases can be influenced by access to fresh, healthy, and nutritious foods. Food access restraints can be financial, geographic, temporal, or a combination of all three. Additionally, measurements of food accessibility in urban versus rural environments are different, as they experience different food security challenges. The ability or inability to access healthy food is discussed in terms of “food security.” According to the 1996 World Food Summit definition, “Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” This definition includes four dimensions of food security:

- Physical availability of food
- Economic and physical access to food
- Food utilization
- Stability of the other three dimensions over time

Food security occurs when all dimensions are fulfilled simultaneously.

Food security reflects the state of the current food infrastructure, which consists of a complex web of farmers, transporters, processing facilities, distribution companies, and retailers. As the tenth largest agricultural producer in the state of California, Ventura County is a major player in regional food infrastructure and, therefore, in regional food security.

Major Findings

- In 2014 there were 78,840 food-insecure people living in Ventura County, or roughly 9.4 percent of the county’s population. Among those who are food-insecure, an estimated 80 percent are within 200 percent of the poverty level, making them eligible for nutrition programs such as the federally-funded Supplemental Nutrition Assistance Program (SNAP).
- Ventura County has a lower food insecurity rate than neighboring counties and California overall.
- Changing climate patterns may disrupt the stability of farming communities, in addition to making it more difficult for them to carry out healthy behaviors.
- The national “modified retail food environment index” (mRFEI) score is 10 and the California mRFEI score is 11. Most census tracts in Ventura County score higher than California and national mRFEIs; there are, however, pockets within the county that have few to no healthy food retailers.
- The Ventura Unified School District (VUSD) and Conejo Valley Unified School District are two of Southern California’s pilot Farm-to-School service sites.
- In total, there are 79 DOE Summer Food Service Program sites that serve breakfast, lunch, dinner, and a morning and/or an afternoon snack in the summer months of 2016.
- There are 12 certified farmers’ markets operating within Ventura County in 2016.

- Food Forward has a Ventura County branch, which hosts roughly 20 fruit harvests a month and runs two farmers’ market recovery events each week.
- There are 15 FOOD Share Community Market sites and 101 food pantry sites around Ventura County.

Existing Conditions

Food Security

The term “food desert” is used to describe geographic areas that have limited access to affordable, healthy food options needed to maintain a healthy diet. The USDA defines a food desert, or “low-access community,” as communities of 500 people where at least 33 percent of the community lives more than one mile from a supermarket or large grocery store. For rural communities, the distance is 10 miles or more. The USDA recognizes, however, that there are many ways to achieve healthy food access; the distance-based definition of “low-access community” was put in place for the purposes of carrying out the Healthy Food Financing Initiative (HFFI). Food deserts often contain many fast food restaurants and convenience stores, an overabundance of which is a strong negative determinant of community health. In areas where there are high numbers of fast-food restaurants compared to grocery stores, there are higher rates of diabetes, cardiovascular disease, and cancer. Studies have shown that when there is better access to grocery stores, there is a lower incidence of overweight and obese individuals, higher rates of fruit and vegetable consumption, and more people with healthy diets.

Those who live in food deserts are considered “food-insecure” and are more prone to make tradeoffs between basic needs, such as either paying utility bills or buying fresh produce. Such tradeoffs may lead to obesity and/or malnutrition. According to Gunderson et al., in 2014 there were 78,840 food-insecure people living in Ventura County, or roughly 9.4 percent of the county’s population. Among those who are food-insecure, an estimated 80 percent are within 200 percent of the poverty level, making them eligible for nutrition programs such as the Federally-funded Supplemental Nutrition Assistance Program (SNAP), formerly the food stamps program. Table 4-2 shows that Ventura County has a lower food insecurity rate than neighboring counties and California as a whole. In addition to poverty, unemployment, and loss of home ownership, are life events that can contribute to food insecurity among individuals and families.

**TABLE 4-2
FOOD INSECURITY
Ventura County and Neighboring Counties
2014**

Indicator	California	Ventura County	Kern County	Santa Barbara County	Los Angeles County
Number of food insecure people	5,401,770	78,840	122,940	49,610	1,393,170
Rate of food insecurity ¹	13.9%	9.4%	14.3%	11.5%	14.0%
Program eligibility among food insecure people ²	79%	80%	98%	90%	92%

Notes: ¹Food insecurity rates determined using data from 2001-2014 Current Population Survey, 2014 American Community Survey, and 2014 Bureau of Labor Statistics. ²Those who are within the threshold of 200 percent of the poverty level are eligible for SNAP.

Source: Gunderson et al., 2014

Unlike a food desert, a healthy community has access to healthy food options, which can include fresh produce stores, farmers' markets, and community gardens. Community gardens not only provide a source of fresh fruits and vegetables, but they also increase physical activity and provide opportunities for positive social interaction.

Other factors that will impact food security include climate change and water supply. Chapter 2 of this Background Report discusses the economic importance of agriculture within Ventura County. Agriculture supports more than 28,000 direct jobs in farming and additional jobs in related support sectors and food processing. Moreover, the agricultural production and services sector is heavily concentrated in the unincorporated areas. Additionally, as weather patterns become hotter and drier, higher percentages of water will be diverted to support urban areas, leaving less water to support agriculture. Dwindling water supply for agriculture would not only negatively affect agricultural productivity, but also the local economies that depend on it.

See Sections 9.2, 9.3, and 12.2 of this Background Report for expanded discussions of Agricultural Resources, Agricultural Production, and Climate Change Effects.

Food Environment, Infrastructure, and Systems

The food environment can be discussed in terms of how the physical environment is connected, which includes places and settings where people make, buy, and/or eat food, such as homes, workplaces, schools, restaurants, community gardens, food banks, farmers' markets, and supermarkets. These physical places and where they are located influence what, where, and how much people eat. A healthy food environment is an environment that enables and encourages healthy eating and lifestyles, and both the social and physical aspects of a food environment can create or break down the barriers people may face in accessing and choosing to eat healthy food.

The Centers for Disease Control and Prevention (CDC) uses the modified retail food environment index (mRFEI) to describe the existing food environment, using census tract data to quantify the accessibility of "healthy food retailers." For purposes of this methodology, the CDC defines "healthy retailers" to include supermarkets, larger grocery stores, supercenters, and produce stores. "Less healthy retailers" include convenience stores, fast food restaurants, and small grocery stores with three or fewer employees. Farmers' markets are not included in the methodology because national data is not available.

A census tract generally has a population size between 1,200 to 8,000 people. A mRFEI score of 10 means that anywhere between 1,200 and 8,000 people are sharing 10 healthy food retailers. A mRFEI score of 0 means that 1,200 to 8,000 people live in a census tract without a healthy food retailer. This indexing system, however, simplifies how people make decisions on where, what, and how they eat. This methodology assumes that people will solely shop within their census tract, which may not make sense for where they live and how they go about their daily life. It is helpful to know where there are more or fewer healthy food retailers, but it should not be a proxy for food accessibility and overall well-being. Figure 4-7 maps the mRFEI scores for each Ventura County census tract. The national mRFEI score is 10 and the California mRFEI score is 11. Most census tracts in Ventura County score higher than California and national mRFEIs; there are, however, pockets within the county that have few to no healthy food retailers.

Local Production and Distribution

The food environment is supported by food infrastructure, which encompasses the different ways food can travel from the source to the consumer. The emphasis on local production is an attempt to create a

food environment where the produce is closer to the consumer, with the logic that local food is fresher and uses less energy to transport. In other words, the importance of local food lies in its value as a healthier and environmentally friendlier consumer choice. Standardizing “local production,” however, is difficult because it is defined in many different ways, differing between regional grocers, local food retailers, non-profit organizations, and government agencies. How far food has traveled has been measured in distance, time, and/or the number of agencies and companies it passes through to move it from producer to consumer. Market-based definitions of “local” are well-recognized, such as direct-to-consumer arrangements that include regional farmers’ markets or direct-to-retail/food service arrangements, such as farm sales to schools, whereas geography or time-based definitions may be more difficult to standardize.

Farm-to-Table initiatives are illustrative of local efforts to shorten the distance food needs to travel from the farm to the kitchen table. Western Ventura County markets itself as the home to many locavore restaurants, marketing itself as truly farm-to-fork. Local food markets are a small but growing sector of the U.S. agricultural production. Local sales account for a larger share of sales for small farms than for larger farms. As discussed in Chapter 9 of this Background Report, 2012, almost 80 percent of all farms in Ventura County were 49 acres or less. Given that Ventura County is a leading agricultural producer, supporting local food markets in Ventura County is important for both the health of residents and the livelihoods of local farmers and vendors.

Rural Food Infrastructure

Approximately eight percent of Ventura County residents live in unincorporated rural environments. In rural areas, transportation and connectivity is a big issue to address to ensure healthy food access. For local rural retailers, supplying and maintaining a wide selection of healthy foods can be difficult. Logistics such as getting distribution lines to stop at small towns or meeting minimum purchase requirements of wholesalers can be significant barriers for small-town retailers. According to ChangeLab Solutions, (a firm specializing in researching and drafting model laws and policies related to issues such as childhood obesity, planning, and healthy housing), there are three broad categories that can be used to describe the existing retail food environment within rural communities. First, there are areas with no food retail. Second, there are areas with some food retail. Third, there are areas with enough food retail but whose sustainability is in question. Small retailers, in particular, face barriers concerning produce supply and distribution networks.

County Food Programs

Food banks, food pantries, and local organizations play a role in increasing access to fresh and healthy food to those who are experiencing food insecurity, functioning as a food safety net. There are several programs operating in Ventura County that work to bridge the gaps in the food infrastructure.

- **Farm-to-Schools:** The Ventura Unified School District (VUSD) and Conejo Valley Unified School District are two of Southern California’s pilot Farm-to-School service sites. The program provides healthy lunches and nutrition education programs. It has stocked local school cafeterias with farm fresh produce, school gardens, and increased nutrition education programming in each VUSD school.
- **Summer Food Service Program:** During the summer when school is not in session, the California Department of Education (DOE) operates the Summer Food Service Program to give children access to nutritious meals when not attending school. In 2016, there are 79 DOE Summer Food Service Program sites in the county that served breakfast, lunch, dinner, and a morning

and/or an afternoon snack. Figure 4-8 maps all of the 2016 Summer Meal Sites in Ventura County. The Oxnard Planning Area had the highest number of sites (25), followed by the Planning Areas of Thousand Oaks (15) and Ventura (12). The Oak Park Planning Area has no sites operating Summer Food Service Programs. All other Planning Areas contained between one and six sites. (Chapter 3 lists all Planning Areas in the county.) Figure 4-8 shows the locations of these summer meal sites.

- **FOOD Share:** FOOD Share is a non-profit food bank headquartered in the city of Oxnard, serving Ventura County through distribution programs and food pantries located throughout the county. The organization collects food through donations, food drives, gleaning from connections through agricultural connections and local organizations, bulk purchasing, government programs, and through Feeding America, which is the national, parent organization for FOOD Share. FOOD Share partners with local organizations to host Community Markets in various locations throughout the county. As of 2015, there were 15 Community Market sites in Ventura County. The Thousand Oaks (four) and Oxnard (three) Planning Areas have the highest number of community markets within their boundaries. The Las Posas, North Half, Oak Park, and Piru Planning Areas don't have any community markets. Figure 4-9 shows the locations of these FOOD Share distribution locations. Figure 4-10 shows the locations of the FOOD Share food pantries.
- **Farmers' Markets:** The Ventura County Certified Farmers' Market Association (VCCFMA) is a nonprofit cooperative that organizes weekly farmers' markets located throughout the county. VCCFMA verifies that all products sold at Certified Farmers' Markets are grown in California and that vendors have obtained a Producer's Certificate from the County Agricultural Commissioner's office. There are 12 farmers' markets operating within Ventura County, in addition to one market in Los Angeles County that is run by VCCFMA. They are located in the Ojai, Ventura, Oxnard, Camarillo, Thousand Oaks, and Moorpark Planning Areas and are all within incorporated cities, except for one just north of Camarillo and one in the city of Santa Clarita in Los Angeles County. Although not within county boundaries, the Santa Clarita farmers' market serves the Piru and Fillmore Planning Areas. The other Planning Areas do not host farmers' markets. There are five farmers' market locations open all year that accept SNAP payments. Figure 4-11 shows the locations of the farmers' markets located within the county.

Regulatory Setting

Federal

Agricultural Act of 2014

The Agricultural Act of 2014, also known as the 2014 Farm Bill, is legislation that provides authorization for funding for a number of federal programs and services. The Bill supports a variety of efforts, supporting job creation in the agricultural sector, expanding markets for agricultural products on the domestic and international markets, maintains important agricultural research, and ensures access to safe and nutritious food. Programs related to nutrition that are supported by the 2014 Farm Bill include the Supplemental Nutrition Assistance Program (SNAP), the Food Insecurity Nutrition Incentive (FINI) Program, the Community Food Project Grants Program, the Seniors Farmers' Market Grants Program, the National Farmers' Market and Local Food Promotion Program, and the Specialty Crop Block Grant Program.

Healthy Hunger-Free Kids Act of 2010

The Healthy Hunger-Free Kids Act of 2010 is a reauthorization of the Child Nutrition Act and National School Lunch Act, as well as the Child and Adult Care Food Program (CACFP), and the Summer Food Services Program (SFSP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

National School Lunch Act

The Richard B. Russell National School Lunch Act is the Federal law that created the National School Lunch Program (NSLP) and the Child and Adult Care Food Program (CACFP). The Child Care Food Program was established by Congress under the National School Lunch Act in 1968; which over time expanded to include adults and became the Child and Adult Care Food Program (CACFP).

Supplemental Nutrition Assistance Program (SNAP)/CalFresh

Formerly known as food stamps, CalFresh is the California version of the federally-funded Supplemental Nutrition Assistance Program (SNAP). This is a nutrition program that allows eligible participants to purchase fresh food through the use of an electronic benefit transfer (EBT) card. Eligibility is based on income, resources, and residency of household members.

State

California Nutrition Incentives Act (AB 1321)

This bill creates the Nutrition Incentive Matching Grant Program within the Office of Farm to Fork at the California Department of Food and Agriculture. This program awards grants to certified farmers' markets that have the potential to double the nutrition benefits of consuming California produce (e.g., fruits, nuts, vegetables). One-third of grant funds is available to be awarded to small businesses that provide similar nutrition incentives. This bill aims to double the purchasing power of low-income persons at farmers' markets for the purpose of reducing poverty and food insecurity.

2014 Sustainable Ground Water Management Act

In September 2014, the California legislature enacted comprehensive legislation to manage California groundwater. Known as the Sustainable Groundwater Management Act (SGMA) of 2014, the legislation provides a framework for sustainable management of groundwater supplies by local authorities, but with the potential for state intervention if necessary. The aim of the legislation is to have groundwater basins managed within the sustainable yield of each basin. The legislation defines “sustainable groundwater management” as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results, which are defined as any of the following effects: chronic lowering of groundwater levels; significant and unreasonable reductions in groundwater storage; significant and unreasonable seawater intrusion; significant and unreasonable degradation of water quality; significant and unreasonable land subsidence; and surface water depletions that have significant and unreasonable adverse impacts on beneficial uses.

Sustainable Agricultural Lands Conservation Program (SALC)

SALC is administered by the California Department of Conservation (DOC), which receives authority to do so from the California Farmland Conservancy Program (Public Resource Code (PRC) Sections 10200-10277), the Agricultural Protection Planning Grant Program (PRC Sections 10280-10283), the Farmland Mapping and Monitoring Program (Government Code (GC) Section 65570), the California Land Conservation Act/Williamson Act (GC Sections 51190-51294.7), Revenue and Taxation Code Sections 421-430.5, and PRC Division 9. SALC aims to reduce air pollution, improve conditions in disadvantaged communities, and implement a Sustainable Communities Strategy (SCS) or another regional plan to reduce GHG emissions.

Regional/Local

Multi-County Goods Movement Action Plan (MCGMAP)

Given the prevalence of goods movement in the county and the region, VCTC participated in the development of a Multi-County Goods Movement Action Plan (MCGMAP) in 2007. The MCGMAP identified strategies to address regional goods movement issues and coordinate planning/programming objectives as they relate to goods movement. The 2016 RTP/SCS also identified over \$70 billion in investments needed to improve the regional goods movement system. The Goods Movement component in the RTP identified related improvements such as the development of truck facilities such as truck-only lanes; improving mainline rail capacity; expanding intermodal facilities; improving port infrastructure; introducing zero emissions freight technologies; and constructing grade separations at roadway crossings.

Key Terms

Food Desert. As defined by the 2008 Farm Bill, a food desert is “an area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities.”

Food Insecurity. Food insecurity refers to difficulty accessing healthy food. The USDA describes low food security as reports of reduced quality, variety, or desirability of the food available, with no or some indication of reduced food intake; very low food security refers to multiple indications of disrupted eating patterns and reduced food intake.

Low-Access Community. A low-access community refers to an area whose residents experience some degree of food insecurity.

Food Environment. The food environment describes a person’s exposure to food in daily life, encompassing places such as homes, schools, stores, restaurants, and food pantries.

Food Infrastructure. The food infrastructure describes how food travels from producer to consumer, including the different organizations, companies, and entities required to organize the food distribution.

Food Retailer. A food retailer is a vendor who sells food, either exclusively, or with other products. Food retailers do not include restaurants.

References

Reports/Publications

Food Research & Action Center. 2015. “Child Nutrition Reauthorization Primer.” Accessed 3 August 2016, from http://frac.org/pdf/cnr_primer.pdf

Martinez, S., et. al. 2010. “Local Food Systems: Concepts, Impacts, and Issues.” *United States Department of Agriculture – Economic Research Report Number 97*. Accessed 23 July 2016, from http://www.ers.usda.gov/media/122868/err97_1_.pdf

National Center for Chronic Disease Prevention and Health Promotion – Division of Nutrition, Physical Activity, and Obesity. 2011. “Census Tract Level State Maps of the Modified Retail Food Environment Index (mRFEI).” *Centers for Disease Control*. ftp://ftp.cdc.gov/pub/Publications/dnpao/census-tract-level-state-maps-mrfei_TAG508.pdf

Office of Assembly Member Philip Y. Ting. 2015. “AB 1321 Fact Sheet.” Accessed 3 August 2016, from http://www.rootsofchange.org/wp-content/uploads/AB1321FactSheet_5.22.15.pdf

United States Department of Agriculture (USDA). 2009. *Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences*. Accessed 30 June 2016, from http://www.ers.usda.gov/media/242675/ap036_1_.pdf

United States Department of Agriculture (USDA). “Definition of a Food Desert.” Accessed 10 July 2016, from http://www.ers.usda.gov/dataFiles/Food_Access_Research_Atlas/Download_the_Data/Archived_Version/archived_documentation.pdf

United States Department of Agriculture. 2013. “National School Lunch Program Fact Sheet.” Accessed 27 July 2016, from <http://www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf>

United States Global Change Research Program. 2014. “2014 National Climate Assessment.” Accessed 2 August 2016, from <http://nca2014.globalchange.gov/>

Websites

- California Strategic Growth Council. 2015. “Sustainable Agricultural Lands Conservation (SALC) Program Overview.” Accessed 3 August 2016, from <http://www.sgc.ca.gov/Grant-Programs/SALC-Program.html>
- Feeding America. 2014. “Food Insecurity in California.” Accessed 2 August 2016, from <http://map.feedingamerica.org/county/2014/overall/california>
- FOOD Share. 2016. “About FOOD Share.” Accessed 1 July 2016, from <http://www.foodshare.com/about-food-share/>
- FOOD Share. 2016. “Community Market.” Accessed 22 July 2016, from <http://www.foodshare.com/community-market/>
- FOOD Share. 2016. “Find a Pantry.” Accessed 2 August 2016, from <http://www.foodshare.com/find-a-pantry/#marker88>
- National Sustainable Agriculture Coalition. 2016. “Child Nutrition Act – Background.” Accessed 27 July 2016, from <http://sustainableagriculture.net/our-work/campaigns/child-nutrition-act-reauthorization-cnr/child-nutrition-act-backgrounder/>
- National Sustainable Agriculture Coalition. 2016. “Federal-State Marketing Improvement Program.” Accessed 28 July 2016, from <http://sustainableagriculture.net/publications/grassrootsguide/local-food-systems-rural-development/federal-state-marketing-improvement-program/>
- United States Department of Agriculture. 2014. “National School Lunch Program (NSLP).” Accessed 27 July 2016, from <http://www.fns.usda.gov/nslp/history>
- United States Department of Agriculture. 2016. “Top 10 Reasons to Shop at a Farmers’ Market.” Accessed 1 August 2016, from <https://www.nutrition.gov/farmers-markets>
- United States Department of Agriculture. 2016. “USDA Programs and Services.” Accessed 3 August 2016, from http://www.usda.gov/wps/portal/usda/usdahome?navid=PROGRAM_AND_SERVICE
- United States Department of Agriculture. 2016. “WIC Farmers’ market Nutrition Program (FMNP).” Accessed 3 August 2016, from <http://www.fns.usda.gov/fmnp/wic-farmers-market-nutrition-program-fmnp>
- Ventura County West. 2016. “Restaurants.” Accessed 23 July 2016, from <http://www.venturacountywest.com/restaurants>

Academic Sources

Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. Map the Meal Gap 2016: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America, 2016. Accessed 28 April 2016, at http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/CA_AllCounties_CDs_MMG_2014.pdf

Story, M., Kaphingst, K.M., Robinson-O'Brien, R., and Glanz, K. 2007. "Creating Healthy Food and Eating Environments: Policy and Environmental Approaches." *Annual Review of Public Health*, 29:253-72. Accessed 25 July 2016, from <http://www.annualreviews.org/doi/pdf/10.1146/annurev.publhealth.29.020907.090926>

Other

California Department of Finance. 2015. E-4 Population Estimates for Cities, Counties, and State.

ChangeLab Solutions. 2014. Webinar: Food Access Strategies in Rural Communities. Accessed 29 June 2016, from <http://www.changelabsolutions.org/publications/food-access-strategies-rural-communities>

SECTION 4.3 SOCIOECONOMIC STATUS AND ECONOMIC OPPORTUNITY

Introduction

Socioeconomic status typically reflects the combination of education, income, and occupation, and is tied to an individual's access to resources. Access to resources, in turn, affects an individual's health and well-being. A person's socioeconomic status greatly influences how he/she makes decisions about personal care, which affects a person's capacity to take advantage of economic opportunities. If we are low on money, we may choose unhealthy fast food over more-costly fresh produce, or opt to go to work instead of seeing the doctor because the doctor's office is too far away and we do not have any more paid time off. Someone with a higher socioeconomic status has greater economic opportunity; conversely, someone with a lower socioeconomic status has less mobility and fewer choices.

Major Findings

- There are pockets of disadvantaged neighborhoods within the county, namely within the Ojai, Oxnard, Ventura, Santa Paula, Fillmore, and Piru planning areas.
- The Oak Park (60.7 percent), Camarillo (49.2 percent), Simi Valley (40.6 percent), and Thousand Oaks (40.2 percent) planning areas have the highest percentage of residents attaining at least a Bachelor's degrees, while the Piru (46.7 percent), Santa Paula (34.5 percent), and Oxnard (30.0 percent) planning areas have the lowest percentage. (Five-year average 2010-2014)
- In 2014, 58 percent of renters within Ventura County were spending 30 percent or more of housing income on rent.
- In 2016, 53 percent of the chronically homeless reported they had a chronic illness such as diabetes, seizures, and hepatitis, and 48 percent reported they had a mental health problem.
- In 2014, approximately 17 percent of people in Ventura County reported having delayed or not received medical care they felt they needed.
- In 2016, Ventura County has a lower primary care provider-to-people ratio (75 providers/100,000) than the statewide rate (78 providers/100,000)
- According to the U.S., Census, American Community Survey (2011-2015), just over 86 percent of Ventura County adults had insurance coverage, compared with the statewide value of 81 percent.

Existing Conditions

Socioeconomic Status and Related Factors

Socioeconomic status is the most fundamental reason for differences in health outcomes. The Health Disadvantage Index (HDI), developed by the Public Health Alliance of Southern California, illustrates where health disadvantaged communities are located within the entire state of California. HDI is informed by social determinants of health and defined by six categories of indicators: economic resources, social resources, educational opportunity, health outcomes, environmental hazards, and complete neighborhoods, listed in order of weight in the model from highest to lowest. The benefits of this model

include a heavy emphasis on economic and social resources, which underscores the importance of understanding the effects of socioeconomic status on health.

Figure 4-12, which maps HDI by census tract, shows that there are pockets of disadvantaged neighborhoods within the county, namely within the Ojai, Oxnard, Ventura, Santa Paula, Fillmore, and Piru planning areas.

Research suggests that both physical and mental health is strongly associated with SES. In particular, studies suggest that lower SES is linked to poorer health outcomes. Poor health may in turn decrease an individual's capacity to work, thus reducing their ability to improve their SES. Reducing SES disparities will require major changes which are often structural and complicated in their political dimensions, and will require policy initiatives that address the components of SES such as income, education, and occupation, as well as the pathway by which these conditions affect health of the community.

The following list summarizes some of the effects of SES on health and economic opportunity:

- Low SES is associated with increased morbidity and mortality.
- Low-income individuals are 2-5 times more likely to suffer from a diagnosable mental disorder than those in the top SES bracket.
- Within families, economic hardship can lead to marital distress and disrupted parenting that may increase mental health problems among children, such as depression, substance abuse and behavior problems.
- Educational and employment opportunities may be hindered by mental health problems.
- Access to health insurance and preventive services are part of the reason for socioeconomic health disparities.
- Research shows that SES is associated with a wide array of health, cognitive, and social emotional outcomes in children, with effects beginning prior to birth and continuing into adulthood.
- Individuals with low SES often experience barriers to obtaining mental health services, including lack of or limited access to mental health care, child care and transportation.
- Education has a positive and statistically significant impact on the health of individuals.
- Child pedestrian collisions are nine times more likely to occur in low-income neighborhoods compared to high-income neighborhoods.

In unincorporated Ventura County, the planning areas with the highest proportions of residents 25 years and older with at least a Bachelor's degree are Oak Park (60.7 percent), Camarillo (49.2 percent), Simi Valley (40.6 percent), and Thousand Oaks (40.2 percent). The planning areas with high proportions of residents 25 years and over without a high school diploma are Piru (46.7 percent), Santa Paula (34.5 percent), and Oxnard (30.0 percent). (Five-year average 2010-2014)

**FIGURE 4-12
HEALTH DISADVANTAGE INDEX**

In the unincorporated areas of Ventura County, employed residents have a higher representation (41.4 percent) in management, business, science, and arts occupations. Conversely, incorporated areas have a higher representation in the retail and manufacturing industries. Agricultural workers generally had the highest concentration around the Oxnard, Santa Paula, and Ojai planning areas, while workers in the professional, scientific, and technical services were more concentrated around the Oak Park, Ojai, and Camarillo planning areas. The Ojai planning area also had the highest concentration of workers in educational services, and overall, had the highest number of employees compared to all other Ventura County planning areas. It is important to note that the agriculture industry supports more than 28,000 direct jobs in farming, as well as jobs in related support sectors and food processing.

Educational attainment is often tied to earned income. Ventura County's overall median income was \$77,335 during the five-year period between 2010 and 2014. This median income was above the statewide median household income of \$61,489. Among the cities and unincorporated CDPs in Ventura County, only Piru and Saticoy had a median income that fell below 80 percent of the statewide median household income. Among the county's planning areas, the Camarillo, Las Posas, Moorpark, Oak Park, Simi Valley, and Thousand Oaks planning areas had the highest estimated mean income, with each of them averaging over \$125,000 (2014 dollars). The lowest mean household incomes occurred in the Piru (\$53,470) and Santa Paula (\$71,986) planning areas.¹

An expanded discussion of education attainment, employment, and income can be found in Chapter 2.

Housing

In Ventura County, housing prices are rising; home values grew 6.8 percent between 2015 and 2016, and are projected to grow 2.8 percent by 2017. As of May 31, 2016, Zillow reported that the median sale price in Ventura County was \$531,250. Those experiencing housing burden may also be at risk for experiencing food insecurity. In 2014, 58 percent of renters within Ventura County were spending 30 percent or more of housing income on rent. Increasingly, access to safe and affordable housing considered a public health issue, and the ability to choose and afford quality housing in a safe neighborhood with good public services is the combined effect of someone's education, occupation, and income. The Piru and Santa Paula planning areas have the lowest educational attainment levels in the county, and the lowest mean household incomes as discussed earlier in the section.

Ventura County's 2014 General Plan Housing Element discusses housing opportunity and diversity. The main goal of the element is to "increase housing opportunities for households of all income levels with special emphasis on lower-income households, senior citizens, mentally-ill, single heads of household, large families, farmworkers, handicapped and homeless." Addressing the need for housing, especially for the populations emphasized by the 2014 Housing Element will play an important role in reducing stress, exposure to poor living environments, and ultimately, the risk for developing chronic conditions such as obesity and/or Chronic Lower Respiratory Disease.

The countywide Health Care for the Homeless program, served 10,070 unduplicated patients that self-identified as homeless in 2015. The 2016 Ventura County Homeless County and Subpopulation Survey Report includes data showing that chronically homeless adults struggle with chronic health conditions and

¹ The mean is calculated by adding together all values, and dividing them by the number of values. Because the indicators for the Ventura County Planning Areas are aggregated together from Census Tract level data, the mean, rather than the median income was used.

mental health issues. Specifically, 53 percent of the chronically homeless reported they had a chronic illness such as diabetes, seizures, and hepatitis, and 48 percent reported they had a mental health problem.

Access to Health Care

Access to health care has been measured in terms of distance, cost, and/or cultural sensitivity. Barriers to health care arise when it is difficult to visit the nearest facility (e.g., it is too far away, the patient does not have access to a car, the facility is not open at convenient times), the cost of care is too expensive (e.g., lack of insurance or inadequate insurance coverage), and/or when the patient is uncomfortable going to the doctor (e.g., the system is too complicated, the doctor does not speak the patient's language, the patient feels judged, seeing the doctor is not part of the patient's health-seeking behavior). Typically, it is a combination of many barriers that create a patient's experience of accessing health care.

Efforts to increase access to health care have involved increasing insurance coverage, reforming the health care system to lower costs, increasing the number of small health care clinics, and investing in outreach and health education programs. Access to health care can also be influenced by planning policies such as transportation connectivity. Please see Sections 4.4 and 6.5 for an expanded discussion on transportation connectivity.

As evidenced by responses to the most recent Health Assessment conducted by the County, respondents felt strongly that access to health care was a crucial component of a healthy community. One aspect of health care is the degree to which the community can access clinical preventive services. These include procedures, tests, counseling or medications used by health care providers to prevent disease, detect health problems early, and/or provide individuals with the information they need to make good health decisions. Health care access is also affected by socioeconomic status and built environment factors such as accessible infrastructure. Several key indicators related to preventative services and access to health care include:

- **People Delayed or had Difficulty Obtaining Care:** Approximately 17 percent of people in Ventura County reported having delayed or not received medical care they felt they needed (2014). This compares with a statewide rate of 11 percent, and represents an increase in delay/difficulty of almost 80 percent since 2003. The 45-to-64-year-old cohort reported the most difficulty (28 percent); the 0- to 17-year-old cohort reported the least difficulty (11 percent).
- **Primary Care Provider Rate:** This indicator identifies the number of primary care providers per 100,000 people, and can include practicing physicians specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The rate in Ventura County is 75 providers/100,000 (as measured in 2013 and updated in 2016). This compares to a statewide value of 78 providers/100,000.
- **Adults with Health Insurance:** This indicator shows the percentage of adults aged 18 to 64 that have any type of insurance coverage. The rate in Ventura County is 82 percent (2013-2014). This compares to a statewide value of 81 percent.

Other health care access indicators include: Children with Health Insurance; Kindergarteners with Required Immunizations; Children who Visited a Dentist; and Dentist Rate. These indicators can be found on the VCPH website. Chapter 7 provides a discussion of clinical and public health care services provided by and in Ventura County.

Regulatory Setting

2014 Ventura County Housing Element

Please see the 2014 Housing Element Update for relevant regulations and legislation concerning housing.

California Health and Safety Code Section 131019.5

This section defines “determinants of equity,” “health equity,” “health and mental health disparities,” “health and mental health inequities,” “vulnerable communities,” and “vulnerable places.” This section also establishes the Office of Health Equity, which is responsible for researching various trends and issues related to health equity, for the purpose of making recommendations for strategic plans.

Key Terms

Socioeconomic Status. Socioeconomic status (SES) refers to a person’s economic and social position within their community, often measured with educational attainment, type of occupation, and income. SES is often used to explain disparities in education, wealth, and health.

References

Reports/Publications

Cutler, D.M. and Lleras-Muney, A. 2007. “Education and Health.” *National Poverty Center Policy Brief #9*. Accessed 15 July 2016, from http://www.npc.umich.edu/publications/policy_briefs/brief9/policy_brief9.pdf

Kaplan, G. A. (2009). “The poor pay more: Poverty’s high cost to health.” Robert Wood Johnson Foundation. Accessed from <http://www.rwjf.org/content/dam/farm/reports/reports/2009/rwjf47463>

Public Health Alliance of Southern California. 2016. “Identifying Disadvantaged Communities: Comparison of the California Health Disadvantage Index with CalEnviroScreen.” Accessed 28 July 2016, from <http://phasocal.org/wp-content/uploads/2016/02/HDI-V-CES-Factsheet-vertical.pdf>

Zillow. 2016. “Ventura County Home Prices & Values.” Accessed 15 July 2016, from <http://www.zillow.com/ventura-county-ca/home-values/>

Websites

Healthy Communities Institute. 2014. “Community Dashboard: Renters Spending 30% or More of Household Income on Rent.” Accessed 12 July 2016, from <http://www.healthmattersinvc.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=20244923>

United States Department of Health and Human Services. 2015. “Population Health: Behavioral and Social Science Insights – Understanding the Relationship Between Education and Health.” Accessed 3 August 2016, from <http://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html>

Academic Sources

- Adler, N. 1994. Socioeconomic Status and Health: The Challenge of the Gradient. *American Psychologist*, 15-24.
- Bourdon K.H., R. D. 1994. National Prevalence and Treatment of Mental and Addictive Disorder. Washington D.C.: Center for Mental Health Services.
- Bradley, R. a. 2002. Socioeconomic Status and Child Development. Little Rock: University of Arkansas, Center for Applied Studies in Education.
- Chakravarthy B et al. n.d. The relationship of pedestrian injuries to socioeconomic characteristics in a large Southern California County. Irvine: UC Irvine.
- Conger, R. C. 2010. Socioeconomic Status, Family Processes, and Individual Development. *Journal of Marriage and Family*, 685-704.
- Link, B.G. and Phelan, J. 1995. "Social Conditions as Fundamental Causes of Disease," *Journal of Health and Social Behavior*, Spec. No:80–94.
- McGinnis, J. W.-R. 2002. The Case for More Active Policy Attention to Health Promotion. *Health Affairs*, 78-93.
- McGrath, E. K. 1990. Women and depression: Risk factors and treatment issues: Final report of the American Psychological Association's National Task Force on Women and Depression. Washington D.C.: American Psychological Association.
- Murray, C. a. 1997. Global Mortality, Disability, and the Contribution of Risk Factors: Global Burden of Disease Study. Boston: Harvard School of Public Health.
- Sillies, M. 2009. The Casual Effect of Education on Health: Evidence from the United Kingdom. *Economics of Education Review*, 122-128.
- United States Surgeon General. 2006. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Office of the Surgeon General. United States Department of Health and Human Services.

Other

- Public Health Alliance of Southern California (PHASOCAL). 2016. HDI v1.1 Map Shape File. Access on 28 July 2016, from <http://phasocal.org/ca-hdi/hdi-reports-data-files/hdi-data-files/>

SECTION 4.4 ACTIVE AND HEALTHY LIVING

Introduction

There are many health benefits associated with convenient access to public transit and active transportation (e.g., walking, biking), including increased physical activity and reduced air pollution from vehicle emissions. Proximity to transit improves access to social, medical, employment, and recreational activities, and using public transit helps people meet minimum requirements for physical activity as it imbeds physical activity into everyday life. Pedestrian and bicycle trips do not contribute to noise or air pollution emissions, including ozone and particulate matter, which are risk factors for cardiovascular mortality and respiratory disease and illness.

Leading an active and healthy life is easier when opportunities to walk and bike are available and when people feel safe and welcome doing so. Implementation measures include human-scaled design and sidewalk maintenance to ensure a pleasant and welcoming public space. Pedestrian and bicyclist safety is also critical to address to promote active and healthy lifestyles.

Major Findings

- Historic development patterns within unincorporated communities often do not support safe and accessible walking, physical activity, or recreation.
- The current land use mix in the unincorporated county promotes an automobile-centric lifestyle since different types of destinations are not within walking distance.
- The County does not have a plan for pedestrian facilities.
- Due to higher percentages of transit-dependent populations, the Piru, Santa Paula, Moorpark, Las Posas, Ojai, and Oak Park areas may have greater need for public transit improvements and transit connectivity
- Ventura County has abundant active open space areas, although additional study may be necessary to evaluate connectivity and access to existing active open spaces.
- There is one federally-funded Safe Routes to School project within the unincorporated county.
- Communities around Oxnard and slightly south of Port Hueneme are experiencing a disproportionately higher amount of pollution burden.

Existing Conditions

Land Use and Urban Development

As shown in Table 3-1 of Chapter 3 of this Background Report, rural residential, single-family, and manufactured/mobile homes account for 2.2 percent of land use area within the unincorporated county. There is a negligible amount of commercial development, and less than one percent of industrial land uses. Commercial businesses, office buildings, and educational facilities are typically located in commercial strips, business parks, and on large campuses, maintaining separation between where people live and where entertainment, services, and schools are located. This type of land use mix promotes an

automobile-centric lifestyle since different types of destinations are not within walking distance, decreasing opportunities for physical activity within daily life, which in turn can negatively impact health.

In addition, historic development patterns within unincorporated communities often do not support safe and accessible walking, physical activity, or recreation. For example, two existing county policies outlined below have limited the degree to which existing urban development supports active living.

Ventura County Pavement Policy

While sidewalks, street lighting, and street trees are often key components of an active community, the County's existing "Pavement Policy" first passed in 1968, restricts the use of the County's Road Fund to maintenance of existing roads only. As a result, the County mostly relies on developers to construct road improvements, including sidewalks and other pedestrian amenities. (Historically, the County has also applied for limited federal and state transportation grants.) While some infrastructure improvements are best accomplished by private developers, a patchwork of pedestrian improvements implemented as part of private development is not conducive to creating an ideal infrastructure for walking.

Legacy of Proposition 13 on County Parks

Resources for park improvements within the unincorporated areas of the county are also limited. Following the 1978 passage of Proposition 13, the Board of Supervisors affirmed the policy that regional parks be self-sustaining without contributions from the General Fund. This means that park development can only occur if a method of financing (other than the General Fund), is available for acquisition, construction, operation, and maintenance. This requirement may work for large regional parks, such as those along the beach where space rental fees for motor homes can be charged, but it is challenging for smaller parks that may serve smaller existing communities within the unincorporated area.

Transportation Connectivity

Development patterns in much of California, including Ventura County, tend to be automobile-centric, prioritizing the efficiency of automobile traffic over other forms of transportation. For instance, streets are designed to be wide to accommodate increasing levels of traffic. Wide streets and lanes without pedestrian features, and increased distances between crosswalks encourage faster driving, while discouraging walking. As of 2016, the County does not have a plan for pedestrian facilities. Additionally, based on the discussion of land use and urban design, it appears that unincorporated areas of the county, including the urbanized areas, don't include policies that encourage or promote walking.

In areas where people drive faster, businesses tend to locate further back from the street edge and use bigger and higher signs that are intended to be read at a distance while driving in a car. On the other hand, narrower streets with landscaping and regular crossings, encourages safer driving and more walking. Ensuring the safety of pedestrians and bicyclists is important for encouraging people to choose walking and biking over driving.

Any kind of transportation other than driving is considered an alternate mode of transportation. This includes biking, walking, and the use of public transportation. Improving connectivity between different modes of transportation increases the convenience of getting around without a car. This is especially important for those who are "transit-dependent." Transit-dependents, as defined in Chapter 6, are people who, due to disability, age, and/or economic status, do not have access to a vehicle or are unable to drive, and, therefore, rely on public or private transportation services. In the unincorporated county, the two largest age groups are those under 18 and those between ages 25 and 64. The majority of the population

under 18 is younger than 16, and is therefore, not legally able to drive. This means that alternate modes of transportation are critical, especially if they do not have anyone to drive them. However, the greatest increase in county population is in people 65 years and over (2010-2016). This cohort grew by over 17 percent, mirroring trends seen in Ventura County's cities, as well as in California as a whole. The planning areas with the highest percentages of people age 65 and over are Moorpark (21 percent), Las Posas (20 percent), and Ojai (19 percent), while Oak Park (23 percent), Piru (21 percent), and Santa Paula (20 percent) planning areas have the highest proportion of people under 18 years. Due to higher percentages of transit-dependent populations, the Piru, Santa Paula, Moorpark, Las Posas, Ojai, and Oak Park areas may have greater need for public transit improvements and transit connectivity.

These transportation considerations are part of the state's "Complete Streets" framework, and are discussed in greater detail in Chapter 6.

Active Open Spaces

Having access to active open spaces has both mental and physical health benefits. As discussed in the Chapter 7 (Public Facilities, Services, and Infrastructure), Ventura County has land devoted to active open spaces (e.g., trails, playgrounds, campgrounds), although additional study may be necessary to evaluate connectivity between amenities and access to existing active open spaces.

Safety

Safe Routes to School

Walking and biking to school is one way to increase the amount of physical activity children engage in on a daily basis. Due to distance and/or safety concerns, however, many parents opt to drive their children to school, increasing congestion and worsening air quality near schools, and decreasing the amount of time children are active. There are five Federally-funded Safe Routes to School projects in Ventura County, but only one within the unincorporated county, in El Rio near Rio Del Valle Junior High School. This project proposed to install traffic signals, crosswalks, and bike lanes, as well as construct sidewalks. The project location is on the south side of Rose Avenue and Collins Street, and on Rose Avenue between Collins Street and Orange Drive.

Crime

Crime rates are important to consider when encouraging people to be more active. If crime rates are high in a neighborhood, people will be less likely to walk, bike, or use public transportation. Violent crime in the unincorporated county accounts for 31 percent of total countywide violent crimes, the majority of which is classified as "aggravated assault." See Chapter 7 (Public Facilities, Services, and Infrastructure) for an expanded discussion of law enforcement and emergency services.

Air Quality

Healthy air quality is important for promoting an active lifestyle. It is counterproductive to encourage people to be active outside when environmental conditions outdoors could put them at higher risk of developing respiratory diseases. Additionally, promoting good air quality supports the statewide goals of reducing GHG emissions and other pollutants. See Chapter 8 (Natural Resources) for a detailed discussion of air quality and the different types of pollution faced by communities in Ventura County.

Smoke-free Places

Since tobacco use is the leading cause of premature and preventable death in the United States, it is important to prevent and reduce tobacco use and protect people from secondhand smoke in public settings, such as parks, recreation areas, work sites, schools, multi-unit housing, etc. As with many other health indicators, smoking prevalence differs by socioeconomic status; individuals with lower income, less education, and those who receive public insurance are more likely to be smokers. Living tobacco-free lowers a person's risk of developing lung cancer, heart disease, and other diseases and causes of death related to tobacco use. Tobacco-free living means avoiding use of all types of tobacco products such as cigarettes, cigars, smokeless tobacco, hookahs as well as electronic cigarettes (a nicotine delivery system) and also living free from secondhand smoke exposure. Policies requiring signage within buildings and around the peripheries of buildings can help enforce a smoke-free environment. In 2013, 13.1 percent of Ventura County adults smoked. Additional tobacco-free living indicators include: Adults with Asthma; Age-Adjusted ER Rate due to Asthma; Age-Adjusted ER Rate due to COPD; Age-Adjusted ER Rate due to Pediatric Asthma; Children and Teens with Asthma; Youth who Smoke.

Environmental Air Quality

Chapter 12 (Climate Change) notes that on April 2, 2007, the United States Supreme Court ruled that CO₂ is identified as an air pollutant under the federal Clean Air Act (CAA). Furthermore, on December 7, 2009, in their adopted Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA, the U. S. Environmental Protection Agency (EPA) determined that greenhouse gas (GHG) emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which the EPA found is endangering public health and welfare. EPA's final findings respond to the 2007 Supreme Court decision that GHGs fit within the CAA definition of air pollutants. In 2012, 53 percent of Ventura County greenhouse gas (GHG) emissions came from on-road transportation; although in unincorporated Ventura County, on-road transportation only accounts for 19 percent of GHG emissions while non-residential electricity use accounts for 38 percent. Chapter 8, Section 8.1 notes that cars and trucks are the largest contributors of ozone precursor emissions within Ventura County. Within Ventura County ROG and NO_x emissions are declining, coming closer to meeting CAAQS and NAAQS for ozone. As of October 2015, however, Ventura County was listed as a serious nonattainment area for the NAAQS for 8-hour ozone. Additionally, as the county and region continue to grow and population increases, ROG emissions are expected to increase as well. Furthermore, climate change and expected increases in temperature could lead to increased smog.

Environmental Hazards

In response to increasing concerns about vulnerable communities in California experiencing instances of environmental injustice, the State Legislature passed and Governor Brown signed Senate Bill 1000 (SB 1000). SB 1000 requires that general plans adopted after January 2018 include either a stand-alone environmental justice element or goals, policies, and objectives addressing environmental justice integrated in other elements. The law also requires general plans to identify disadvantaged communities within the area covered by the general plan of a city, county, or city and county, with a reference to CalEnviroScreen as a means for such identification. See Chapter 3, Land Use, Section 3.11, Environmental Justice and Disadvantaged Communities, for further discussion of environmental justice and disadvantaged communities in Ventura County, and also refer to Figure 4.13 for locations of these Disadvantaged Communities.

**FIGURE 4-13
DISADVANTAGED COMMUNITIES (CALEPA)**

Pursuant to Senate Bill (SB) 1000, a disadvantaged community is an area identified by the California Environmental Protection Agency (EPA) pursuant to Section 39711 of the Health and Safety Code, or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation. For the first component of the definition, pursuant to H&S Code section 39711, Cal EPA designates disadvantaged communities as areas within which census tracts scores are at or above 75 percent of all scores as identified by the CalEnviroScreen online mapping software created by California Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA). CalEnviroScreen identifies which communities are most burdened by multiple pollution sources and vulnerable to their effects. The tool ranks each of the state's 8,000 census tracts using data on 20 indicators of pollution, environmental quality, and socioeconomic and public health conditions. For the second component of the definition, SB 1000 identifies a "low income area" as "an area with household incomes at or below 80 percent of the statewide median income", or an area with "household incomes at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093 of the Health and Safety Code."

Under the first component of the definition of a disadvantaged community, there are no census tracts within any existing community in unincorporated Ventura County ranked among the highest 25 percent of all scores by CalEnviroScreen. Existing Communities are defined as areas designated as Existing Community in the 2040 General Plan and identified as such in the Save Open Space & Agricultural Resources (SOAR) initiative as renewed in 2016. These areas identify existing urban residential, commercial, or industrial enclaves outside of incorporated areas and urban centers. The Existing Community area designation applies to areas that include uses, densities, building intensities, and zoning designations that are normally found in incorporated areas or urban centers, but which do not qualify as urban centers.

Under the second component of the definition of a disadvantaged community, the community of El Rio is a low-income area with CalEnviroScreen individual pollution indicator scores of 75 percent or greater for potential exposure to drinking water contaminants, potential for exposure to pesticide use, proximity to road segments with high traffic density, proximity to impaired water bodies, and proximity to solid waste facilities. The community of Saticoy is a low-income area with CalEnviroScreen individual pollution indicator scores of 75 percent or greater for potential for exposure to hazardous and volatile pesticides, and proximity to solid waste facilities. The community of Piru is a low-income area with CalEnviroScreen individual pollution indicator scores of 75 percent or greater for ozone emissions, potential for exposure to hazardous and volatile pesticides, and proximity to impaired water bodies. The health risks and pollution burdens experienced by these communities are discussed in more detail below.

According to the January 2017 CalEnviroScreen 3.0 Report, California public water systems have a high rate of compliance with drinking water standards and approximately 97 percent of Californians using public systems received water that met all federal and state drinking water standards in 2014. However, drinking water quality varies with location, water source, treatment method, and the ability of the water purveyor to remove contaminants before distribution. According to the CalEnviroScreen Report, low income and rural communities, particularly those served by small community water systems, can be disproportionately exposed to contaminants in their drinking water. The drinking water contaminant index used in CalEnviroScreen 3.0 is not a measure of compliance with federal and state drinking water standards. The drinking water contaminant index is a combination of contaminant data that takes into account the relative concentrations of different contaminants and whether multiple contaminants are present. The indicator does not indicate whether water is safe to drink.

According to the CalEnviroScreen Report, communities near agricultural fields, primarily farm worker communities, may be at risk for exposure to pesticides. Drift or volatilization of pesticides from agricultural fields can be a significant source of pesticide exposure. Pesticide use, especially use of volatile chemicals that can easily become airborne, can serve as an indicator of potential exposure. Similarly, unintended environmental damage from the use of pesticides may increase in areas with greater use. The specific measure of pesticide use for CalEnviroScreen scoring is based on the total pounds of selected active pesticide ingredients (filtered for hazard and volatility) used in production-agriculture per square mile, averaged over three years (2012 to 2014) based on pesticide use reporting to the California Department of Pesticide Regulation.

The CalEnviroScreen score for traffic density is derived from the sum of traffic volumes adjusted by road segment length (vehicle-kilometers per hour) divided by total road length (kilometers) within 150 meters of each census tract boundary. Traffic density is used to represent the number of mobile sources in a specified area, resulting in human exposures to chemicals that are released into the air by vehicle exhaust, as well as other effects related to large concentrations of motor vehicles. According to the CalEnviroScreen Report, major roadways have been associated with a variety of effects on communities, including noise, vibration, injuries, and local land use changes such as increased numbers of gas stations. The Report also cites studies showing that non-white and low-income people make up the majority of residents in high-traffic areas and that schools that are located near busy roads are more likely to be in poor neighborhoods, and that Latinos, non-whites, foreign born and people who speak a language other than English at home were most likely to live within 150 meters of a major highway.

Impaired Water Bodies are streams, rivers, and lakes that have been contaminated by pollutants and subsequently compromised as sources for drinking, swimming, fishing, aquatic life protection, and other beneficial uses. Listing a water body as impaired in California is governed by the Water Quality Control Policy for developing California's Clean Water Act Section 303(d) Listing Policy. The State and Regional Water Boards assess water quality data for California's waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. These regular assessments are required by the Federal Clean Water Act.

The presence of solid waste sites and facilities may cause contamination of air, water, and/or soil with hazardous materials. Though many new solid waste landfills are designed to prevent contamination, older sites and facilities are often out of compliance with current standards, and/or illegal solid waste sites may degrade environmental conditions and threaten exposure. Solid waste sites can pose multiple impacts on a community, including exposure of waste gases like methane and carbon dioxide, even after site closure. Odors often impair a community's perceived desirability and affect the health and quality of life of residents.

According to the CalEnviroScreen, the score for solid waste facilities in census tracts in the communities of Mira Monte and Meiners Oaks in the Ojai Valley are greater than 75 percent based on their proximity to the following facilities:

- Ojai Valley Organics, 140 Old Baldwin Road, Ojai
- CalTrans Ojai Maintenance Station, 1116 Maricopa Highway, Ojai
- Former dump site closed in 1964, Old Baldwin Road, Ojai

Based on further review of these sites, these facilities do not pose a pollutant exposure risk or health hazard to nearby communities. The Ojai Valley Organics site closed in November 2019 and all related material and equipment have been removed. The CalTrans Ojai Maintenance Station, which is a transfer processing facility for handling freeway sweepings, litter, and landscape green waste, is operating under an active permit and is in compliance with Local Enforcement Agency imposed state minimum standards. Furthermore, inspection report records show no violations or areas of concern since 2011 when the facility opened. The former dump site on Old Baldwin Road is a pre-regulation closed disposal site which is inspected quarterly by the Ventura County Environmental Health Division as the Local Enforcement Agency. No areas of concern or violation relating to pollutant releases have been noted from 1996 to present. Based on the foregoing, Mira Monte and Meiners Oaks are not considered as disadvantaged communities pursuant to SB 1000.

El Rio/Del Norte Community

The El Rio/Del Norte community is adjacent to the City of Oxnard, just northeast of U.S. Highway 101 and south of the Santa Clara River. It is within the City of Oxnard Sphere of Influence. As reflected in Table 2-3, the 2016 population for El Rio was estimated to be 6,945. Table 2-9, the average median household income in the El Rio community for 2014 was \$59,179.

Based on CalEnviroScreen individual pollution indicator scores, this community has scores that are 75 percent or greater for potential exposure to drinking water contaminants, potential for exposure to hazardous and volatile pesticides, proximity to road segments with traffic density, proximity to impaired water bodies, and proximity to solid waste facilities.

Water service for the El Rio/Del Norte community is provided by the Vineyard Acres Mutual Water Company, Cloverdale Mutual Water Company, El Rio Plaza Water Company, as well as several other small water purveyors.

The Brown Barranca drains/flows into the Santa Clara River, which is in the northern portion of the El Rio/Del Norte planning area, as recorded on the CalEPA 303(d) List. According to the CalEnviroScreen 3.0 Impaired Water Bodies Map, portions of the El Rio community are in the 98th percentile and either contain, or are in close proximity to, 18 documented impairments to waterbodies. The Brown Barranca pollutants include nitrate and nitrite. The estimated affected area is approximately 2.6 linear miles and potential sources of contamination have been identified as agriculture-storm water runoff. Calleguas Creek Reach 5, previously referred to as Beardsley Channel on the 1998 303(d) List, is also listed as an Impaired Water Body. This body of water is adjacent to the El Rio/Del Norte southern boundary. The estimated affected area is 4.3 linear miles and pollutants from agriculture-storm runoff, diazinon, and sedimentation. Trash is also prevalent and is a result from agriculture-storm runoff, recreation and tourism activities (non-boating related), and urban runoff/storm sewers. Additional impaired water bodies include the Santa Clara River Reach 3 (Freeman Diversion to A Street) which encompasses approximately 31 linear miles of affected areas, and Fox Barranca which encompasses 6.7 linear miles of assessed area and is a tributary to Calleguas Creek Reach 6.

According to CalEnviroScreen, Census Tract 06111005100 in El Rio has a 96th percentile rating for solid waste sites, meaning the potential exposure to pollutants from nearby solid waste sites is higher than 96 percent of the state's census tracts. This indicator is calculated by considering the number of solid waste facilities, including illegal sites, the weighted prioritization score of each site, and the distance to the census tract. Based on available data, the solid waste sites are located in the eastern portion of the census tract, away from the El Rio/Del Norte planning area. These sites include the Somis Dump (solid waste disposal site), BMB Norcom 355 (inert debris ENG fill operation), and Balcom Canyon II and III.

All of El Rio is in the 97th percentile or higher for potential exposure to hazardous and volatile pesticides. One of the El Rio Census Tracts is ranked fourth highest in the state for pesticide exposure, and 10 out of the top 15 census tracts in the state are adjacent or nearby. These rankings are based on total pounds of selected active pesticide ingredients used in production-agriculture per square mile, and are above 10,000 pounds per square mile for the three Census Tracts in El Rio, and over 66,000 pounds per square mile for Census Tract 06111005003.

Additionally, Census Tract 06111005004 is in the 75th percentile for traffic density, with 1,204 vehicle-kilometers per hour per road length. This is the Census Tract which lies at the intersection of Oxnard Boulevard and Highway 101, and also contains The Collection at RiverPark development. The other two El Rio Census Tracts are ranked in the 56th and 17th percentiles for traffic density.

Population & Socioeconomic Indicators

According to CalEnviroScreen, none of the Census Tracts in El Rio are above the 51st percentile for the population characteristics indicator, which is a measure of socioeconomic factors and health issues. However, one of the Census Tracts (06111005003), comprising the majority of the El Rio community ranked highly for the percent of the population over 25 with less than a high school education, and the percent of limited English-speaking households, in the 89th and 84th percentiles, respectively. For two of El Rio's Census Tracts, the percent of the population living two times below the federal poverty level is above 30 percent, and the unemployment rate is above seven percent. These indicators are still in line with or somewhat below the state average, as are indicators for health, including percentage of the population with asthma, low birth weight, or cardiovascular disease.

Saticoy Community

The Saticoy Area Plan boundary includes approximately 240 acres and is bounded by the Santa Clara River to the south, Aster Street to the north, Brown Barranca and the City of Ventura to the west, and the Franklin Barranca and agricultural uses to the east. The Saticoy community is located within the City of Ventura's (City) sphere of influence. Based on the 2010 U.S. Census demographic data, the Saticoy community consists of 1,029 residents and has a median household income of \$21,343. Saticoy is classified by the State of California as a "severely economically disadvantaged community" pursuant to Health and Safety Code Sec. 116760.2.

Based on CalEnviroScreen individual pollution indicator scores, this community has scores that are 75 percent or greater for potential for exposure to hazardous and volatile pesticides, and proximity to solid waste facilities.

Years of disinvestment and outdated policies have taken their toll on the Saticoy community. Vacant buildings exist throughout the community, and disconnected, vehicular-oriented streets lack basic pedestrian amenities such as sidewalks or street lighting. Job opportunities and access to affordable housing are limited, and existing circulation and land use patterns have hindered economic growth. In addition, aging and inadequate infrastructure (e.g., wastewater treatment capacity, access to potable water, and undersized flood control facilities) has limited Saticoy's redevelopment potential.

Water service is provided to the Saticoy community from the City of Ventura and regulated by the City's Extraterritorial Water Service Policy.

The Saticoy Sanitary District (SSD) is an independent special district that serves the Saticoy community with sewer services. Saticoy faces wastewater infrastructures challenges, including aging sewer pipes and sewage plant capacity limitations.

Population & Socioeconomic Indicators

Two Census Tracts lie within the Saticoy community, both of which have overall population characteristics scores approximately on par with the state average, according to CalEnviroScreen. The unemployment rate for Census Tract 06111001301 is 14 percent as of 2018, which puts it in the 81st percentile for the state. However, indicators for poverty, households burdened by housing costs, and educational attainment are about average or somewhat better than average. For percentage of the population with cardiovascular disease or asthma, Saticoy is in the 65th and 38th percentiles, respectively, and approximately the 57th percentile for percentage of the population with low birth weight.

Piru Community

Existing information pertaining to fire protection, water, wastewater and stormwater drainage services for the Piru community can be found in Section 3.11 of the Background Report under the discussion of Senate Bill 244.

Based on CalEnviroScreen individual pollution indicator scores, this community has scores that are 75 percent or greater for potential for ozone emissions, potential for exposure to hazardous and volatile pesticides, and proximity to impaired water bodies.

According to the CalEnviroScreen Impaired Water Bodies Map, Census Tract 06111000200 in Piru is in the 96th percentile and either contains, or is in close proximity to, 15 documented impairments to waterbodies. As identified by the CalEPA's 303(d) List, Lake Piru is located in Region 4 and flows into Piru Creek, through the community of Piru, and ultimately into the Santa Clara River. Both Lake Piru and Piru Creek contain several pollutants, including chloride, boron, specific conductance, sulfates, and dissolved solids. The sources of contamination are unknown. Lake Piru is also connected to Pyramid Lake, which is upstream and north of Lake Piru via Piru Creek; Pyramid Lake is also a listed Impaired Water Body. The estimated affected area is approximately 67 linear miles.

Piru also scores in the 78th percentile for ozone concentration, and the 87th percentile for potential for pesticide exposure, with 675 pounds of pesticide ingredients being used in production-agriculture per square mile.

Population & Socioeconomic Indicators

Piru scores above the 75th percentile for several socioeconomic indicators. The percent of the population over 25 with less than a high school education is 42 percent, which places it in the 89th percentile statewide. In addition, 16 percent of the households in the Census Tract Piru are within are limited English speaking (77th percentile), and 55 percent of the population live below two times the federal poverty level (79th percentile). Piru also scores in the 82nd percentile for CalEnviroScreen's cardiovascular disease indicator (11 emergency room visits for heart attacks per 10,000 people).

Regulatory Setting

Federal

Clean Air Act.

Please see Chapter 8 for a description of this legislation.

State

Safe Routes to School

The California Streets & Highways Code Section 2333.5 established the State-legislated Safe Routes to School (SR2S) Program. It was extended indefinitely by Assembly Bill 57 (Chapter 673, Statutes of 2007) in 2007. Both cities and counties may apply for the grant to fund infrastructure improvement projects within the vicinity of a K-12 school. Local jurisdictions are required to match 10 percent of the grant. Projects are expected to be completed within 4.5 years of project funds allocation. There have been 10 cycles completed as of 2016.

California Indoor Clean Air Act of 1976

California Health and Safety Code Sections 118875-118915 (Article 1) and Sections 118920-118945 (Article 2), together commonly referred to as the California Indoor Clean Air Act of 1976, recognizes tobacco smoke as a health hazard of the general public and regulates the smoking of tobacco products in public places to protect the health, safety, welfare, comfort, and environment of non-smokers. Requirements of signage for designated non-smoking and smoking areas and restrictions on amount of space that may be designated for smoking areas are defined for different types of public spaces. These defined public spaces are indoor public meeting spaces, health facilities, gathering spaces for performances or sporting events, restaurants, retail food establishments, and public transportation spaces, including planes, vehicles, trains, and waiting areas for use of public transportation.

Transit-Oriented Development Implementation Fund

The California Health and Safety Code Section 53562a,b,c) allows the Health Department to make grants to cities, counties, cities and counties, or transit agencies to carry out infrastructure projects that develop higher-density uses near a transit station, or to facilitate connections between developments and a station.

Fixing America's Surface Transportation Act (FAST) Act

The FAST Act funds the Rides to Wellness Demonstration and Innovative Coordinated Access and Mobility Grants: Federal Transit Authority setting aside \$5.3 million to test promising and replicable public transportation health care access solutions that support 1) increased access to care, 2) improved health outcomes and reduced health care costs. An expanded description of this legislation can be found in Chapter 6.

Senate Bill 1000 (SB 1000)

SB 1000 was passed in 2016, and requires jurisdictions to identify environmentally disadvantaged communities and develop measures to mitigate the adverse effects. SB 1000 uses the California

Environmental Protection Agency definition of disadvantaged communities, which is based on Senate Bill 535. The definition of an environmentally disadvantaged community is based on scores derived from CalEnviroScreen 2.0. Census tracts that rank within the highest (worst) 25 percent of all scores are defined as a disadvantaged community.

Key Terms

Transit Dependents. These are persons who, due to disability, age, and/or economic status, do not have access to a vehicle and rely on public or private transportation services.

References

Reports/Publications

California Department of Transportation. 2016. “Federal Safe Routes to School (SRTS) Program Delivery Report Project List.” Accessed 2 August 2016, from <http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/documents/DeliveryReport.pdf>

California Department of Transportation. 2016. “State-Legislated Safe Routes to School (SR2S) Program Delivery Report.” Accessed 2 August 2016, from <http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/documents/Jan-16-Delivery-Report.pdf>

Public Health Alliance of Southern California. 2016. “Identifying Disadvantaged Communities: Comparison of the California Health Disadvantage Index with CalEnviroScreen.” Accessed 28 July 2016, from <http://phasocal.org/wp-content/uploads/2016/02/HDI-V-CES-Factsheet-vertical.pdf>

Schlossberg, M., Rowell, J., Amos, D., and Sanford, K. 2013. “Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations.”

Urban Land Institute. 2015. “Building Healthy Places Toolkit: Strategies for Enhancing Health in the Built Environment.” Washington, DC: Urban Land Institute.

Ventura County Sheriff’s Office. 2015. “2013-2015 January-December Comparison of UCR Reported Crimes.” Accessed 2 August 2016, from <http://www.vcsd.org/pdf/SheriffYearEndUCR2013-2015asof0152016.pdf>

Websites

American Psychological Association. 2016. “Older Adults’ Health and Age-Related Changes.” Accessed 2 August 2016, from <http://www.apa.org/pi/aging/resources/guides/older.aspx>

California Department of Transportation. 2016. “Safe Routes to School Programs.” Accessed 2 August 2016, from <http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm>

Centers for Disease Control and Prevention (CDC). 2016. “Smoking & Tobacco Use: Smokefree Policies Improve Health.” Accessed 12 July 2016, from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/protection/improve_health/

County Health Rankings & Roadmaps. 2016. “Driving alone to work.” *University of Wisconsin Population Health Institute (UWPHI)*. Accessed 20 July 2016, from <http://www.countyhealthrankings.org/app/california/2016/measure/factors/67/map>

National Center for Safe Routes to School. 2012. “2011-2012 Summary Annual Report.” Accessed 27 July 2016, from <http://www.saferoutesinfo.org/2011-2012-summary-annual-report>

Project for Public Spaces. 2016. “Placemaking and the Human Scale City.” Accessed 2 August 2016, from <http://www.pps.org/blog/placemaking-and-the-human-scale-city/>

Academic Sources

Hiscock et al. 2011. “Socioeconomic status and smoking: a review.” *Annals of the New York Academy of Sciences*, 107-123.

United States Surgeon General. 2006. “The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Office of the Surgeon General.” United States Department of Health and Human Services.

Other

Department of Transportation. 2016. “Rides to Wellness Demonstration and Innovative Coordinated Access and Mobility Grants.” *Federal Register*, 81(60). <https://www.gpo.gov/fdsys/pkg/FR-2016-03-29/pdf/2016-07008.pdf>

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