

# Health Element



*Santa Clara County General Plan*  
*August 25, 2015*

## HEALTH ELEMENT

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The Health Element of the Santa Clara County General Plan has been prepared at the direction of the Santa Clara County Board of Supervisors as a new element, incorporating and updating certain existing subject matter and policies from the existing Health and Safety Chapters, and building a renewed emphasis on collaborative, comprehensive approaches to planning for community health.

The Health Element has been developed in collaboration the Santa Clara County Public Health Department and numerous other County agencies, staff, community organizations, health system representatives, stakeholders, and the public.

Thank you to all who have participated in developing the Health Element.

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**Adopted August 25, 2015**

## TABLE OF CONTENTS

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Introduction	1
A. Health Conditions, Equity and Access	5
B. Social and Emotional Health	17
C. Land Use and Urban Design	26
D. Active and Sustainable Transportation	34
E. Recreation and Physical Activity	41
F. Healthy Eating, Food Access, and Sustainable Food Systems	47
G. Air Quality and Climate Change	54
H. Healthy Housing	65
I. Violence Prevention and Safety	70
Works Cited	76



## INTRODUCTION

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### General Introduction

Maintaining and improving public health is one of society's most fundamental goals, similar in importance to public safety, equality of opportunity, and public education. Public health focuses on the health of populations and particular communities or groups, in addition to the individual. Many factors affect a community's health including income, education, race/ethnicity, culture, food security, access to health care, affordable insurance, heredity, and lifestyle.

Significant efforts have been made to eliminate disease, prevent or control epidemics, and improve environmental conditions. Great success has been achieved through a variety of means, including the availability of vaccines, tobacco controls, dietary research, sanitation, motor vehicle safety, and pollution controls.

Urban and regional planning in the United States has its roots in combatting environmental threats and communicable diseases in cities in the early industrial age. Overcrowding, industrial pollution, lack of sanitation, and other issues were addressed to make urban environments healthier places to live and work. Today, health risks of a different kind remain, but are being addressed through preventive measures and changes within our environments that facilitate healthier living. For example, chronic diseases and injuries now account for over 75 percent of all deaths in California, but these causes can be addressed through multi-disciplinary and coordinated efforts that promote positive behavior change, improved urban environments, and better access to preventive care.

Santa Clara County has recently ranked as high as the third healthiest in California. However, in a place as diverse and large as the County, with 1.8 million residents, significant health disparities and inequities exist. Experts point to rising rates of obesity and diabetes in younger populations as just one indication that maintaining and improving community health remains a significant challenge.

Improving community health contributes to lower governmental costs for health care. It also contributes to a healthier workforce and a better economy, and many other benefits to individuals and society. Positive health outcomes are not only the result of health-care treatment and interventions, but also must be achieved through preventive or “upstream” efforts that help avoid or reduce health problems in the first place.

## Goals of the Health Element

The goal of the County’s Health Element is to demonstrate the correlation between well-planned, safe, highly livable urban environments and improved health outcomes, such as reductions in chronic disease. A related goal is to place public health on par with traditional elements in general plans, such as housing and land use, and to make more explicit the connections between all subject areas and public health.

The conditions within our built and natural environments most conducive to improvements in public health are also intrinsically related to the sustainability of our environment and society. Moreover, the adverse impacts of climate change will pose additional threats to public health, particularly for more vulnerable populations, including children, the elderly, the poor, and those with chronic health conditions. Solutions for these many of these issues lie within promising opportunities for cross-sector collaboration between planning and public health.

## Guiding Principles

The Health Element is founded upon specific Guiding Principles listed below. They inform the subject matter, strategies, and policies contained in the Health Element, and the means by which the County and other implementers should approach these subjects.

1. **Prevention:** Preventive and holistic approaches to health and well-being result in better long-term health outcomes, which lower costs by effective and efficient use of taxpayer dollars.
2. **Leadership:** County officials, public agencies and employees are guided by best practices in public health decision-making and have an interest in the greater good. The County is also uniquely situated to provide leadership and serve as a model for public health.
3. **Community Empowerment:** Awareness, collaboration, and community-based implementation are key components in the success of health-focused and environmental interventions that can result in positive behavioral changes and improvement.
4. **Equity and Inclusion:** Santa Clara County is one of the healthiest areas in the country; however, there are disparities among different groups. The County seeks to eliminate health inequities by addressing the root causes of inequitable health outcomes and creating policies and programs that are responsive to diversity.

## Health Element – Introduction

5. **Sustainability and Co-Benefits:** By creating healthier communities we can also improve residents’ quality of life, reduce private and public sector costs, improve social cohesion, and provide a stronger foundation for environmental sustainability and resiliency.
6. **Strategic Roles:** The County plays a major role in managing and delivering health care and many other services important to public safety and welfare. It can be a major strategic partner in improving health conditions with hospitals and community health organizations.
7. **Responsibility:** Community health is a public and private responsibility that requires the collective effort of both institutions and individuals.
8. **Healthy Choices:** The County and other organizations work to ensure that healthier choices are the easier ones for residents and employees. Providing better options results in positive health behaviors and reduced negative health impacts.
9. **Promote the Public Interest:** The County and other entities engaged in community health have a responsibility to promote policies necessary to protect the public’s health, safety, and welfare, while fairly considering the interests of businesses and industries whose products and services may pose risks to human health and community well-being.

### Health in All Policies

Health in All Policies (HiAP) is a central concept of the Health Element, championed by the County Board of Supervisors and many other organizations worldwide. HiAP stresses the importance of infusing awareness and purpose in all governmental programs, functions, and responsibilities to promote community and personal health.

Growing research clearly indicates that our personal health behaviors are strongly influenced by conditions and environments where we live, learn, work, and play. The built environment in all facets greatly shapes the health of our community. This understanding sends a powerful message that policy decisions have significant influence shaping the health of communities and residents. Health is a consequence of every choice and policy decision made—hence the importance of the concept of Health in All Policies.

### Purposes and Intended Audience/Implementers

The Santa Clara County Board of Supervisors expressed the desire for the Health Element to be inclusive, innovative, and inspirational, the “three I’s.” In partnership with other health providers, stakeholders, agencies, and non-governmental organizations, the County also hopes to prioritize and implement measures that can make demonstrable improvements in public health. The Health

## Health Element – Introduction

Element’s major strategies, policies, and implementation recommendations will have many partners, including the cities of Santa Clara County.

The Health Element not only serves as a high-level policy guide for County decision-making, budgeting, and program initiatives, but also as a platform for future collaborative efforts with the community health system. Strategy and policy statements within the Health Element are intended to be mutually reinforcing and provide a broad perspective on the subjects addressed in each section. They are not intended to be a mandate that a particular action or other implementation be taken by the County or any of its agencies, without further Board- or executive-level direction, or to dictate the policies or actions of other jurisdictions, stakeholders or community-based organizations.

The Health Element is also intended to serve as a model for other jurisdictions and agencies in Santa Clara County and the region. The 15 cities of Santa Clara County, private health-care providers and networks, and many other entities will be as important as any other implementers and advocates for the goals, strategies, and policies articulated in the Health Element.

The Health Element contains information and policies organized by the following sections or subject matter:

- A. Health Conditions, Equity and Access
- B. Social and Emotional Health
- C. Land Use and Urban Design
- D. Active and Sustainable Transportation
- E. Recreation and Physical Activity
- F. Healthy Eating, Food Access, and Sustainable Food Systems
- G. Air Quality and Climate Change
- H. Healthy Housing
- I. Violence Prevention and Safety

## A. HEALTH CONDITIONS, EQUITY, AND ACCESS

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### Background

This section focuses on the most critical health conditions, inequities, and strategies for improving overall community health in Santa Clara County. The most critical issues include improving access to high-quality health care, addressing health equity issues, and treating the needs of the whole person. Another significant area of focus is how the physical environment and social determinants of health play a major role in an individual's health throughout one's lifespan.

Health conditions are influenced by policies and environmental conditions which either sustain healthy behaviors or fail to support them. Health in All Policies (HiAP) puts health at the heart of policy making. It was first championed by the Santa Clara County Board of Supervisors in their 2005 "Resolution Regarding Health," which called for the promotion of health by all branches and levels of County government.

HiAP integrates health, sustainability, and equity into policy considerations and promotes the ability to achieve full health potential. It also presents opportunities to address underlying root causes of poor health through policy and systems change. It engages diverse governmental partners and stakeholders to work together to improve health and simultaneously advance other goals such as promoting job creation and economic stability, environmental sustainability, and educational attainment. Now recognized internationally, the HiAP approach also emphasizes the key to good health lies primarily in prevention and helping people stay healthy in the first place, rather than by treatment alone.

#### Health Disparities and Inequities: Terms

**Health Disparities** refer to differences between groups of people. These differences can affect how frequently a disease affects a group, how many people get sick, or how often the disease causes death.<sup>1</sup>

**Social Determinants of Health** refers to circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.<sup>2</sup>

**Health Inequities** are disparities in health that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity.<sup>3</sup>

**Health Equity** is defined as attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health care disparities (Healthy People 2020).

## State of the County's Health

Santa Clara County ranks high in many comparative measures of community health. In 2013, Santa Clara County was the third healthiest county in California.<sup>4</sup> Such assessments provide a generally useful measure of overall health status for a large county. However, it is important to develop a more in-depth understanding of issues and needs, because there can be significant disparities and inequities.

As part of the preparation of the Health Element, the County published a “Community Health Existing Conditions Report” (ECR). This publication’s data and mapping analyses augment an insightful body of health assessments published by the County’s Public Health Department over recent years, including its 2010 County Health Profile and the 2012 Latino Health Assessment, among others. The ECR compiled and mapped the most significant health indicators and information on a variety of subjects in many sections of this element.

Health outcomes and inequities experienced by County residents are largely shaped by social determinants of health. These include social, economic, political, and environmental conditions, as well as income, education levels, and occupation. Public health experts now recognize that these factors fundamentally influence individual health as much or more than any other set of factors, including clinical interventions, protective interventions, such as immunization, and counseling/education.

Of all social determinants, income is one of the strongest predictors of health outcomes worldwide. Santa Clara County is the center of a regional technology-based economy that has brought affluence and acclaim. It had a median household income of \$86,850 in 2012, with the average being \$113,161, reflecting the generally higher incomes common in the technology sector. However, one in five residents lives at or below 200 percent of the Federal Poverty level. In 2014, that figure was \$47,700.00 in annual income for a family of four. Over time, additional measures of income sufficiency have been developed to provide a better understanding of need in areas like Santa Clara County, with its generally higher costs of living.

The estimated Family Economic Self-Sufficiency Standard for two adults, an infant, and a school-aged child in Santa Clara County in 2008 was \$67,213.<sup>5</sup> By 2014, the figure has grown to \$86,399. This standard is a measure of the minimum income necessary to cover all of a non-elderly (under 65 years old) individual or family’s basic expenses, including housing, food, childcare, health care, transportation, and taxes, without public or private assistance. It is a more realistic and meaningful indicator than the Federal Poverty Level, based on a more comprehensive set of factors.

In 2010, 29 percent of households earned under \$50,000. In contrast, more than two in five households earned over \$100,000 annually, illustrating the significant income

disparities in the County. Research has shown that people with higher levels of education are at lower risks for many diseases and have longer life spans.<sup>6</sup> Overall, County residents are relatively well educated; however, 14 percent of adult citizens have less than a high school education. Nearly one in five of those who have not graduated high school live in poverty.<sup>7</sup>

Chronic diseases, accidents, and suicide are the leading causes of death. The top two causes of mortality, cancer and heart disease, account for approximately 50 percent of all deaths.<sup>8</sup> Diabetes is often an underlying condition and contributor to heart conditions and mortality. The Centers for Disease Control and Prevention (CDC) have identified four modifiable risk factors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol—as the most common causes of chronic disease.<sup>9</sup>

#### California Wellness Plan 2014

The 2014 California Wellness Plan is a comprehensive overview and strategic plan published by the California Department of Public Health. Its aim is equity in health and well-being, with an emphasis on prevention. It notes that up to 80 percent of most chronic diseases, such as cardiovascular disease, stroke, diabetes (type 2), and many cancers, could be prevented by eliminating tobacco use, improving diet, increasing physical activity, and eliminating harmful use of alcohol. For example, chronic disease and injury accounted for 80 percent of all deaths in 2010.

To improve health equity and well-being, the report focuses on four main areas to achieve synergy and greater, collective impact:

1. Healthy Communities
2. Optimal Health Systems Linked with Community Prevention
3. Accessible and Usable Health Information
4. Prevention Sustainability and Capacity

These four focus areas align with the County’s Health Element and its focus on preventive measures, improved health equity, and chronic disease reduction. These function as a “roadmap to prevention” to reduce the massive cost burden of treating versus preventing and mitigating the most common threats to health and well-being of the community.

Average life expectancy in Santa Clara County is 83.7 years, higher than California and the U.S. However, in midtown San Jose it is 79.5 years, compared to 86.7 years in Los Altos, Mountain View, and Palo Alto. Asian females in the County can expect to live until age 89, 11.2 years longer than African-American males.

Of all the health trends in the U.S., the increasing rate of those who are overweight and obese is the most alarming. In Santa Clara County, 55 percent of adults and 25 percent of middle and high school students are overweight or obese. Racial and ethnic minorities, those with lower incomes or less education, and those in rural areas have the highest obesity rates.<sup>10</sup> The financial costs associated with obesity in the County were

\$2.5 billion in 2006. The proportion of Santa Clara County adults with diabetes has increased from 5 to 8 percent in less than 10 years.<sup>11</sup>

One in 10 adults and about one in 12 middle and high school students smoke tobacco,<sup>12</sup> and Santa Clara County residents continue to be exposed to second-hand smoke at home, in vehicles, at school, and the workplace. When surveyed, 17 percent of adults reported exposure at their workplace.<sup>13</sup> Smoking rates also vary greatly among racial/ethnic groups in the County. Eleven percent of Whites (13 percent of males), 12 percent of Vietnamese (24 percent of males), and 21 percent of Filipinos (32 percent of males) are current smokers.<sup>14</sup> In addition, a recent survey disclosed nearly 25 percent of the lesbian, gay, bisexual, transgender, queer (LGBTQ) community in Santa Clara County described themselves as smokers.<sup>15</sup>

Health conditions and health care costs directly impact the County's economic and fiscal stability. In the 2012 fiscal year, the Santa Clara Valley Health and Hospital System accounted for 44 percent of the County's entire budget.<sup>16</sup> To achieve greater efficiency in managing health care costs and spending, it's critical that residents have access to a variety of preventive health care services, not just clinical treatment. Improving community health and reducing costs can also benefit local businesses and non-profits, helping the state and regional economy remain more competitive.

Access to health care is a concept that has become much broader than just having convenient, accessible local health clinics. Adequate health care access also includes electronic health records, access to preventive care, transit accessibility, insurance coverage, and culturally/linguistically appropriate care. Access to preventive measures and screenings reduce the incidence and severity of illnesses and are often less expensive than the costs of care once someone becomes ill.<sup>17</sup>

Between 2000 and 2009, the percentage of adults age 18-64 without health insurance more than doubled from 8 to about 20 percent.<sup>18</sup> With the advent of insurance exchanges through the Affordable Care Act (ACA), access to affordable insurance has improved. Although 64,924 Santa Clara County residents enrolled from October 2013 through mid-2014 under the ACA,<sup>19</sup> 140,000 people in Santa Clara County, including undocumented residents, are projected to remain uninsured.<sup>20</sup> In addition, more than one-third of Santa Clara County adults do not have dental insurance, which was not included in the ACA.<sup>21</sup> Even when people have access to a provider and insurance, there are other factors that affect their ability to receive adequate care, such as their knowledge of the health care system, the skills to obtain referrals and set up appointments, dealing with insurance companies, and having time off or medical leave to obtain health care services.

The aging of the population will continue to shape the County’s health profile for years. According to the Seniors Agenda, by 2030, more than one in four residents will be over 60 (27.6 percent).<sup>22</sup> Health care costs are typically greater for the elderly, and more seniors are challenged by limited incomes than is commonly understood. The aging of the population and health needs of the “baby boomers” present an unprecedented challenge that can only be met successfully by interrelated efforts to ensure access to care, transportation needs, in-home services, adequate housing options, efforts to combat social isolation, and fall prevention.

Veterans, particularly those whose duty included combat experience, face unique and highly challenging health issues, including Post Traumatic Stress Disorder (PTSD). Depending on the experience, these can include musculoskeletal injuries and pain, mental and behavioral health problems, chemical exposure, noise and vibration exposure resulting in lasting harm, disease exposure, brain injuries, lifelong disabilities, and numerous other significant traumas. An estimated 66,700 Santa Clara County residents are veterans according to the U.S. Census Bureau, as of 2014. Many receive services and assistance from federal and/or local agencies, including the Veterans Administration, but many also struggle with ongoing behavioral and mental disorders, alcohol and other forms of substance abuse, lack of available housing, difficulty finding gainful, sustaining employment, and related challenges. Efforts to address these challenges are needed to ensure holistic treatment veterans’ needs, especially in the context of social services, behavioral health, homeless services, and employment opportunities.

Lastly, according to California’s State Plan for Alzheimer’s disease, the number of residents living with Alzheimer’s disease will double to over 1.1 million in the next 20 years.<sup>23</sup> It is now the sixth-leading cause of death in California but the third leading cause of death in Santa Clara County after heart disease and cancer. Dementia, in general, is a serious clinical syndrome that goes beyond memory loss, including decline or loss of cognitive functions necessary for activities of daily living. Costs associated with dementia, of which Alzheimer’s is the most common, are significant. They include direct Medi-Cal payouts, the costs to families and others who provide unpaid care, and costs to businesses and the economy. Responses to this growing problem will need to be addressed through integrated coordinated care, better approaches to family caregiver support, and research into causes and possible cures or treatments.

## **Major Strategies and Policies**

The following major strategies and policies are intended to convey a comprehensive approach for improving health conditions, equity, and access.

*Strategy #1: Improve health for all residents through a “Health in All Policies” approach and countywide collaboration.*

*Strategy #2: Promote health equity through understanding of key social determinants of health.*

*Sub-strategy #2a: Increase educational attainment and employment readiness.*

*Sub-strategy #2b: Improve economic conditions and reduce poverty.*

*Sub-strategy #2c: Strive to eliminate institutional and structural racism.*

*Strategy #3: Ensure equitable access to high quality physical and behavioral health coverage and care for all County residents.*

*Strategy #4: Educate and empower individuals, employers and communities to improve population health and advocate for positive change.*

***Strategy #1: Improve health for all residents through a “Health in All Policies” approach and countywide collaboration.***

Santa Clara County policy and programs have great potential for improving the health of residents and communities. Conditions in our environment profoundly shape and influence individual health and the health of our communities. Public policies are some of the most powerful tools to reshape those conditions and create environments conducive to health and wellbeing. As a partner with other stakeholders and organizations, the County can develop consensus and priorities, and focus resources to achieve a collective impact across sectors and jurisdictions. The “Health in All Policies” approach can facilitate collaboration and reinforce efforts among governmental agencies, community-based organizations, businesses, and individuals.

**Policies:**

- HE-A.1 **Health in All Policies.** Integrate a “Health in All Policies” approach into all County government department and agency policies. Encourage and work with all local governments, special districts, and non-governmental organizations to adopt similar policies.
- HE-A.2 **County staff education.** Educate key County staff across departments on Health in All Policies approaches and engage them in understanding how their work may influence community health and on-going health challenges in Santa Clara County.
- HE-A.3 **Health Impact Assessments (HIAs).** Consider the use of health impact assessments, or similar tools, to evaluate how policies,

programs, strategic plans, and capital projects can improve public health.

***Strategy #2: Promote health equity through understanding of key social determinants of health.***

Promoting health equity is key for addressing major population health issues based in socioeconomic inequalities. Despite overall high health rankings for Santa Clara County in recent years, due partly to the relatively prosperous and well-educated population, major disparities and inequities in health outcomes remain. Social determinants of health play as large or larger role in public health than medical care and further perpetuate inequities that result in negative health outcomes for many in our community.

Improving health equity is consistent with and underlies the mission and purposes of many County services. This section further emphasizes underlying factors of education, income, race, and discrimination as critical social determinants of health. Additional issues of health disparities and equity will be addressed within subsequent sections, specific to the subject matter in each section.

**Policies:**

- HE-A.4 **Health equity focus.** Promote awareness and recognition of the role of social determinants of health and persistent health inequities. Assess and ensure the County’s policies, programs, and services affecting community health promote fairness, equity, and justice.
- HE-A.5 **Vulnerable populations.** Ensure that new policies, services, and programs improve the lives of those more vulnerable to poor health outcomes, including persons living in poverty, older adults, children, persons with disabilities, people of color, and immigrants.
- HE-A.6 **Community capacity building.** Enlist and strengthen the community’s capacity to participate in local planning, governmental affairs, and policy decision-making to advance health equity.

***Sub-strategy #2a: Increase educational attainment and employment readiness.***

Education is a key determinant of future employment and income, which correlates highly with improved health outcomes. An array of educational opportunities and social and financial support are necessary for people at various stages of life and those seeking

different training, experience, and growth potential. Inequality of income and wealth in the United States should be addressed, not only for achieving a more egalitarian society, but also for the positive health impacts that can be achieved.

**Policies:**

- HE-A.7 **Early childhood education.** Support a high quality, universal system of early childhood education, especially in low-income communities.
- HE-A.8 **Enrichment programs.** Promote free or low-cost child and family enrichment programs and after-school supplemental educational programs.
- HE-A.9 **Adult education and skills augmentation.** Promote expansion of academic and job skills-based educational opportunities for older adults, non-English speakers, formerly incarcerated, low-income individuals, and veterans.
- HE-A.10 **Child-care services.** Support expansion of affordable and high quality child-care options for working parents and those pursuing education.
- HE-A.11 **Youth employment skills.** Support youth development and employment opportunities, especially for low-income persons and people of color.
- HE-A.12 **Workforce development and training.** Promote efforts of local schools, colleges, trade schools, and non-profit scholarship organizations to promote career pathway alternatives to traditional higher education. Encourage on-the-job opportunities for skill development and advancement.

***Sub-strategy #2b: Improve economic conditions and reduce poverty.***

Living in substandard economic conditions or poverty is correlated with adverse health outcomes. It causes higher stress, shortened life span, depression, and often requires households to make critical choices and trade-offs between fundamental needs, such as food, shelter, medications, and health care.

Achieving health improvements among those with very low incomes requires actions that address root causes of poverty. That includes efforts to promote financial literacy, expanded job opportunities, training, and wages and benefits that allow people to meet

their basic needs. It should also be noted that without concerted efforts to fund affordable housing, improvements in economic status may be undermined by increased housing costs. Economic improvement also requires support from and partnerships with businesses that can provide good working conditions, pay, and benefits. Reducing income inequality through better wages, benefits, and bolstering middle-income jobs further reduces health inequities.

**Policies:**

HE-A.13 **Financial literacy.** Promote educational efforts to provide greater financial literacy in youth and adults in order to project lifelong needs, reduce debt, and generate personal savings and investment.

HE-A-14 **Adequate wages and benefits.** Support efforts to improve wages and benefits, including paid sick leave.

HE-A.15 **Entrepreneurship.** Promote business creation, retention, and entrepreneurship by providing education, technical assistance, and financial support to local businesses, including access to capital and microfinance loans.

HE-A.16 **Financial services.** Encourage community-sponsored alternatives to predatory financial institutions and to high-cost/predatory tax preparation services. Alternatives could include community check cashing and non-profit credit unions, including appropriate low-cost suites of services and alternatives to payday loans. Discourage predatory lending businesses.

HE-A.17 **Youth employment and service.** Support youth-employment and enhanced opportunities with pay for expanded youth-focused community service.

***Sub-strategy #2c: Strive to eliminate institutional and structural racism.***

Health inequity is related to a history of overt discriminatory actions and to present-day practices and policies that perpetuate diminished opportunity for certain populations. Inequities in economic, social, physical, and service environments continue to contribute to poor health. Achieving racial equity requires an understanding of how historical forces have prolonged the deep-rooted legacy of racism and segregation. Structural and systemic changes are necessary to overcome these forces and to improve opportunity for those who have experienced these challenges and the disadvantages that go along with it.<sup>24</sup>

While policies addressing poverty and education can expand opportunity to communities of color, there is growing evidence that racism itself is a factor in health and needs to be addressed directly in its own right. Research has shown that persistent exposure to discrimination and racism translates to chronic levels of stress, lowering the immune response and resulting in a host of illnesses and diseases.<sup>25</sup>

**Policies:**

HE-A.18 **Public awareness.** Promote public awareness of the persistence of various forms of racism and discrimination, explicit and implicit bias, and the health inequities they exacerbate.

HE-A.19 **Organizational efforts.** Continue to build organizational and institutional skills and commitment in County agencies to advance racial equity and eliminate institutional and structural racism. Disseminate local, regional, and national policies and best practices that promote racial equity.

***Strategy #3: Ensure equitable access to high quality physical and behavioral health coverage and care for all County residents.***

Access to comprehensive, quality health care coverage and services is critical for achieving greater health equity and for increasing the quality of life of the entire community. Health-care access means more than just adequate clinical service facilities and hospitals; it includes electronic records and patient access to services via the internet.

**Policies:**

HE-A.20 **Access to prevention services.** Promote equitable access to high quality clinical preventive services to ensure effective health screening, education, and early intervention.

HE-A.21 **Community-based primary care and assistance.** Work with the medical community and providers to promote access to community-based sources of high quality primary care and coordination of services. Promote efforts that help achieve higher levels of patient engagement and appropriate self-management through coordinated care.

- HE-A.22 **Health insurance coverage.** Focus efforts on increasing the number of residents with health insurance, including oral health, particularly for vulnerable communities, the residually uninsured, and those most likely to experience health inequities.
- HE-A.23 **Health care professionals.** Promote the recruitment and retention of sufficient numbers of primary care providers to meet the growing demand created by those with insurance coverage and needs for basic health services.
- HE-A.24 **Integrated care.** Continue to improve the integrated treatment of co-occurring physical and behavioral health needs, such as mental health and substance abuse disorders, particularly within County health settings.
- HE-A.25 **Elder and assisted care.** Support the increased availability of home care and appropriate assisted-living opportunities for older adults and people with disabilities, including appropriate support and resources for caregivers of older adults and people with disabilities.
- HE-A.26 **Culturally-informed and competent services.** Ensure the County's strategies, practices, services, and materials are culturally informed and competent for a diverse population. Support efforts of all health system providers to achieve cultural competency.

***Strategy #4: Educate and empower individuals, employers, and communities to improve population health and advocate for positive change.***

A key component of improving community health is the work of governmental and non-governmental organizations to educate, empower, and enlist support from all who play a role in improving health outcomes. Health equity cannot be achieved without informing and involving the affected groups who best understand the assets and needs of their communities and who can offer insight into the potential effectiveness of various strategies, programs, or actions. Ultimately, the insights from individuals and community organizations can be as much a part of the solution for improved community health as the direct services of public agencies and other health service providers.

**Policies:**

- HE-A.27 **Health education programs.** Continue to provide and expand innovative public education programs that support better health outcomes and help eliminate health inequities.
- HE-A.28 **Community engagement.** Maintain effective community presence, liaisons, and relationships within communities. Provide meaningful participation and dialogue with health department representatives in local forums.
- HE-A.29 **School-based partnerships.** Continue to partner with and utilize local schools and school-based organizations to provide educational services.
- HE-A.30 **Health profiles and trends.** Continue to provide countywide, citywide, and neighborhood-level health profiles and data to encourage neighborhood- and community-level participation in health issues and trends.
- HE-A.31 **Workforce/workplace wellness.** Support policies, initiatives and work-force collaborations to improve employee health, well-being, productive workplace engagement, and satisfaction. Demonstrate leadership through County-sponsored change and programs.
- HE-A.32 **Effective community service.** Support expanded opportunities for youth and older adults to engage in community service that integrates community health and improvement.
- HE-A.33 **Special needs and conditions of older adults.** Promote education, training, and information for seniors, caregivers, and emergency responders regarding special needs of older adults. These include, but are not limited to, fall prevention, dementia, nutrition, transportation, social isolation, and social support.
- HE-A.34 **Veterans awareness and community support.** Promote efforts to create greater understanding of the effects of PTSD for the individual veteran, families, and community, in order to foster social inclusion and solutions to veterans' health, employment, and housing needs.

## B. SOCIAL AND EMOTIONAL HEALTH

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### Background

Social and emotional health is an integral aspect of overall health and directly impacts the quality of life of individuals, families, and communities. Within the context of family, community and culture, social and emotional health refers to a state in which a person is able to cope with everyday events, think clearly, be responsible, meet challenges, and have meaningful relationships with others.

Social and emotional health is critical across the lifespan. In early childhood, social and emotional health relates to the ability to form secure relations, self-regulate emotions, explore, and learn. During school years, social emotional health centers on establishing healthy relationships with peers and adults and building self-esteem that comes with learning in the school environment. Throughout adolescence and early adulthood, social emotional health relates to a young person's development of self-identity, including issues of cultural and sexual identities. As an adult, social and emotional health involves intimate relationships and finding success in employment and careers. Achieving goals and finding purpose are critical to social emotional health during this period. Finally, during later life, issues of isolation and illness can threaten social emotional health, which can be mitigated by creating environments that support older adults.

Strategies and policies are necessary to ensure everyone experiences maximum social and emotional well-being throughout their life. While much of the health care delivery system concentrates on treating disease and extending life, social and emotional health focuses on improving the quality of life for all, regardless of the individual's particular circumstances.

Social and emotional health issues are often perceived in very different ways than physical illness. Varying socio-cultural norms may support or impede wellness. When serious mental illness occurs, individuals must cope with not only the symptoms and disabilities from their illnesses, but also the societal stigma attached to the disease that manifests in stereotypes and prejudice. As a result of both, people with mental illness are robbed of the opportunities that define a quality life, such as good jobs, safe housing, satisfactory health care, and affiliation with a diverse group of people.<sup>26</sup>

The physical, social, and environmental factors that affect social and emotional health are specific to culture, race, and income. Experiences of racism and discrimination increase stress levels and threaten social and emotional health. Pressures from job demands, employment insecurity, race and gender income disparities, and poverty persist in Santa Clara County and are significant contributors to chronic stress. A

majority of respondents to the 2012 Santa Clara County Quality of Life Survey reported being either “very stressed” or “somewhat stressed” over financial concerns; and nearly two-thirds expressed similar sentiments over work-related concerns.<sup>27</sup> Long-term, chronic stress taxes our hormone and immune systems which makes the body less resistant to other health risks.<sup>28</sup> Many aspects in the urban environment contribute to cumulative unhealthful stress, including long commutes and traffic congestion, scarcity of affordable housing, job loss among middle-aged adults (45-60), underemployment, and low pay in many service sector jobs.

### **Mental Illness and Substance Abuse**

Mental illness and substance abuse are problems that severely compromise social and emotional health. More recently referred to as *behavioral health problems*, they include schizophrenia, bipolar disorder, depression, and addiction to alcohol, illegal drugs (methamphetamine, heroin, hallucinogens, hazardous chemicals, etc.) or prescription drugs.<sup>29</sup> The U.S. Surgeon General defines mental illness as “collectively all diagnosable mental disorders” or “health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.” Mental illness can affect persons of any age, race, ethnicity, or income, but it is treatable.

Addiction is characterized by an inability to abstain, impairment in behavioral control, cravings, diminished recognition of significant problems with one’s behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death. According to the American Society of Addiction Medicine (ASAM), substance use disorders cover a spectrum from misuse at one end, to full-fledged addiction at the other, with several subtypes requiring different treatment approaches.

Substance use disorders are prevalent throughout society. Columbia University and the Substance Abuse and Mental Health Administration (SAMHSA) estimate 40 million Americans ages 12 and over (12 percent) meet the diagnostic criteria for addiction involving nicotine, alcohol or other drugs—affecting more Americans than heart conditions, diabetes, or cancer. Another 80 million people (26 percent) are risky substance users and drinkers, using drugs and alcohol in ways that threaten health and safety. Applying these percentages to Santa Clara County’s population, there would be about 220,560 (12 percent) ages 12 and over who meet the diagnostic criteria for addiction, and another 477,880 (26 percent) who are risky substance users, using drugs and alcohol in ways that threaten health and safety.<sup>30</sup>

Prescription drug abuse is the *intentional* use of a medication without a prescription or misuse for the experience or feeling it causes. It is not a new problem, but one that

deserves renewed attention. Among adolescents, prescription and over-the-counter medications are some of the most commonly abused drugs. Multiple factors contribute to the prevalence of this abuse, including a misperception that certain drugs are safe because doctors prescribe them, along with their increasing availability. Nationally, between 1991 and 2010, prescriptions for stimulants increased from five million to nearly 45 million, and for opioid analgesics, from about 75.5 million to 209.5 million.<sup>31</sup> Underlying reasons for prescription drug abuse include the goal to get high, to counter anxiety, for pain or sleep problems, and to enhance cognition.

A variety of health problems are associated with alcohol and drug abuse, including unintentional injuries, violence, birth defects, acute alcohol poisoning, stroke, heart disease, cancer, and liver disease. Alcohol is a factor in approximately 30 percent of deaths from motor vehicle crashes.<sup>32</sup> Drug use is responsible for higher rates of diseases such as tuberculosis (TB), sexually transmitted diseases (STDs), HIV, and Hepatitis B and C.

Within Santa Clara County's population of over 1.8 million, an estimated 18.6 percent cope with mental illness, and between 10-12 percent engage in substance use. The Mental Health Department serves 7 percent of the estimated 346,000 residents in need. Of the approximately 180,000 residents who deal with substance abuse, the Department of Alcohol and Drug Services reaches 8,500 on an annual basis, which only meets 4.7 percent of the need.<sup>33</sup>

#### **Tobacco Use**

According to the Centers for Disease Control and Prevention (CDC), tobacco use is the leading preventable cause of disease, disability, and death in the United States. Cigarette smoking results in more than 443,000 premature deaths in the U.S. each year—about 1 in every 5 U.S. deaths—and an additional 8.6 million suffer with a serious smoking-related illness. For every one person who dies from smoking, 20 more suffer from at least one serious tobacco-related illness.

Tobacco addiction, specifically smoking, harms nearly every organ in the body and causes death, cardiovascular disease, respiratory disease, and many types of cancers.<sup>34</sup> Smoking and secondhand smoke increase the risk and severity of other health issues, such as reproductive and early childhood development, coronary heart disease, and strokes. Effects of secondhand smoke can be as harmful as—or worse than—the smoke consumed firsthand by the user. Community efforts to protect vulnerable populations, such as children, can be an important part of public policy and behavioral health.

According SAMHSA's Center for Integrated Health Solutions, people with mental illnesses and addictions can die decades earlier than the general population, and

smoking is a major contributor to disease and early death. About 50 percent of people with behavioral health disorders smoke, compared to 23 percent of the general population. People with mental illnesses and addictions smoke half of all cigarettes produced, and are only half as likely as other smokers to quit. Smoking-related illnesses cause half of all deaths among people with behavioral health disorders.<sup>35</sup>

### **Suicide**

Suicide is the 10th- leading cause of death in the United States, accounting for more than 36,000 per year.<sup>36</sup> And an even greater number of people attempt suicide. According to a CDC study, more than 2.2 million adults reported making suicide plans in the last year.<sup>37</sup> Approximately 90 percent of all individuals who committed suicide met criteria for one or more diagnosable psychiatric conditions. Because mental health treatment providers are in regular contact with patients at risk for suicide, they are an important resource for early detection and prevention. Substance use disorders are also linked to suicide risk. Individuals with a diagnosis of abuse or dependence on alcohol or drugs are almost six times more likely to report a lifetime suicide attempt.<sup>38</sup>

In Santa Clara County, suicide is the leading cause of death by fatal injury.<sup>39</sup> While suicide is confounding, it is preventable, given effective education, services, and supports. Prevention for suicide must be focused on risk detection and reduction through a variety of means. The earlier treatment is sought, generally the better the outcome. In Santa Clara County, death by suicide is the 10<sup>th</sup> leading cause of death, the same as the national rate. Santa Clara ranks 54<sup>th</sup> out of California's 58 counties in the rate of adolescent self-inflicted injury. Death by suicide occurs, on average, every three days. There are two attempts and an estimated 14 suicidal behaviors every day in Santa Clara County.<sup>40</sup>

### **Stigmas**

The belief or perception that persons with mental illness and/or drug addiction are dangerous, and may pose a threat of violence towards others and themselves, are significant factors in the stigma and discrimination affecting those with behavioral health problems. Thirty-eight percent of Americans report they are unwilling to be friends with someone having mental health difficulties; 64 percent do not want to work with someone who has schizophrenia, and 68 percent are unwilling to have someone with depression marry into their family.<sup>41</sup> The potential for stigma, shunning, and isolation is great.

Although studies suggest a link between mental illnesses and violence, the contribution of people with mental illnesses to the overall rates of violence is small and the magnitude of the relationship is greatly exaggerated in the minds of the general

population.<sup>42</sup> In fact, people with mental health conditions are more likely to be the victims rather than perpetrators of violent crime.<sup>43</sup>

Fortunately, many people with behavioral health problems can recover and live healthy, productive lives. Many mental and substance use disorders can be prevented, and if symptoms appear, the severity can be reduced through programs focused on health promotion, illness prevention, and early treatment intervention.<sup>44</sup>

## Major Strategies and Policies

This section provides a framework to promote mental and behavioral health in all residents of the County, with the following primary strategies:

*Strategy #1: Foster community-wide, family-based social and emotional health across the lifespan for all residents, including specific efforts to eliminate stigma.*

*Strategy #2: Improve health care systems so they more effectively promote social and emotional health.*

*Strategy #3: Prevent and effectively address harmful habitual and addictive behaviors.*

*Strategy #4: Integrate behavioral health care into the health care delivery system.*

*Strategy #5: Reduce suicide, suicide attempts, and related risk factors.*

***Strategy #1: Foster community-wide, family-based social and emotional health across the lifespan for all residents, including specific efforts to eliminate stigma.***

### **Policies:**

HE-B.1 **Social and emotional health literacy.** Provide and promote activities and resources that increase social and emotional health literacy and self-care across the lifespan.

HE-B.2 **Community awareness and sensitivity.** Promote public awareness and sensitivity to the needs of people with behavioral health challenges to reduce stigma and discrimination and increase community support.

## Health Element – Social and Emotional Health

- HE-B.3 **Role of faith and community.** Engage with faith-based organizations and other groups to address emotional/social wellness needs within the community and provide support for those needing services.
- HE-B.4 **Workplace wellness.** Provide and promote resources and services within employment locations and businesses to openly and affirmatively assist employees with needed counseling, support, and referral services, without stigma attached or employment-related repercussions.
- HE-B.5 **Work-life balance.** Promote organizational policies that foster work-life balance and reduce stress.
- HE-B.6 **Arts and cultural expression.** Explore and promote opportunities for residents to experience or participate in arts and cultural activities that can enhance mental health and social connectedness.
- HE-B.7 **Aging population needs.** Address social isolation and the various needs of an aging population to reduce depression and other behavioral health problems that may be more prevalent among seniors.
- HE-B.8 **Lesbian, Gay, Bisexual, Transgender, Queer/Questioning (LGBTQ) population.** Effectively support and promote the social and emotional health of youth and adults in the LGBTQ population.
- HE-B.9 **Diverse cultural needs.** Promote access to high quality behavioral health services that meet the cultural, linguistic, gender, and sexual orientation needs of the population.
- HE-B.10 **Veterans health issues and needs.** Support and encourage all possible efforts to improve the social and emotional wellness of veterans through studies, integration of services where possible, and coordination of health-related planning. Focus should be on holistic approaches to behavioral and physical health issues, particularly PTSD, and efforts that create greater stability for the individuals to be served.

***Strategy #2: Improve health care systems so they more effectively promote social and emotional health.***

### **Policies:**

- HE-B.11 **System and service integration.** Build capacity and linkage within key social institutions and agencies such as social services, criminal

justice, education, and faith communities to promote social and emotional health and reduce trauma among populations served within those systems.

- HE-B.12 **Wellness in schools.** Support schools to develop emotional intelligence, improve conflict resolution skills, and identify barriers to learning. Promote skill-based techniques for classroom use and district-level systems.
- HE-B.13 **Children in foster care.** Promote policies, programs, and resources directed at supporting the special needs of children whose families are disrupted and who may need foster care.

***Strategy #3: Prevent and effectively address harmful habitual and addictive behaviors.***

**Policies:**

- HE-B.14 **Safe prescribing guidelines.** Promote use of safe prescribing guidelines that minimizes over-prescribing and risks of misuse of prescription medications.
- HE-B.15 **Overdose prevention program.** Promote and implement opioid overdose prevention methods throughout the County's health and hospitals system, including primary care.
- HE-B.16 **Density and location of alcoholic beverage outlets.** Support cities' efforts to discourage the number of alcoholic beverage outlets near schools and areas having a high density of alcoholic beverage outlets.
- HE-B.17 **Alcohol and drug abuse.** Promote the most effective, evidenced-based measures to reduce substance abuse and curb excessive drinking and alcohol-related harm.
- HE-B.18 **Density and location of tobacco retail outlets.** Encourage and support cities to restrict the number of tobacco retailers near schools, other youth-populated areas, and areas with a high density of existing tobacco retailers.

- HE-B.19 **Tobacco retail licensing.** Encourage and support cities to create a tobacco and/or electronic smoking device retail licensing policy that earmarks a portion of the license fee for enforcement.
- HE-B.20 **Distribution and redemption of coupons.** Support restrictions on the distribution and/or redemption of coupons, gift certificates, gift cards, and rebates for tobacco and electronic smoking devices.
- HE-B.21 **Electronic smoking devices.** Encourage and support cities to include electronic smoking devices in all existing smoking and tobacco policies, regulations, and education programs.
- HE-B.22 **Flavored tobacco and electronic smoking products.** Support the elimination of the sale and distribution of mentholated cigarettes and/or other flavored tobacco and electronic smoking products.
- HE-B.23 **Tobacco-free pharmacies.** Encourage and support retailers, service providers, and cities to eliminate the sale of tobacco products, including electronic smoking devices, in places where pharmacy and/or other health care services are provided by a licensed health care professional (e.g. hospital, vision screening, blood pressure screening).
- HE-B.24 **Smoke-free colleges and universities.** Support and encourage local colleges and universities to create smoke-free campuses, including restricting the use of electronic smoking devices.
- HE-B.25 **Secondhand smoke.** Encourage and support cities to reduce residents' exposure to secondhand smoke by banning use on government property and public spaces and events, including outdoor dining and service areas, entryways, farmers' markets, plazas, and community street fairs (NOTE: Policy HE-E.9 addresses smoking in parks and HE-H.3 addresses multi-unit housing).
- HE-B.26 **Tobacco cessation services.** Support and increase the number of programs, clinics, and social service agencies that implement evidence-based tobacco cessation treatment services.

***Strategy #4: Integrate behavioral health care into the health care delivery system.***

**Policies:**

HE-B.27 **Integrated care and services.** Organize County behavioral health services to deliver the highest possible level of care, integrated with other health and human services.

HE-B.28 **Community level integration.** Coordinate with community behavioral and mental health service organizations to better integrate and provide high quality, culturally competent services.

HE-B.29 **Availability of treatment providers.** Address the potential shortage of professional counselors, therapists, and psychologists available to provide services, given the increasing demand and availability of health insurance coverage.

HE-B.30 **Parity.** Promote parity for behavioral health services and needs with physical health in all County services and settings.

***Strategy #5: Reduce suicide, suicide attempts, and related risk factors.***

**Policies:**

HE-B.31 **Intervention services.** Expand and coordinate suicide prevention and intervention programs and services for targeted high-risk populations.

HE-B.32 **Suicide awareness.** Advocate for change in suicide awareness and prevention and ensure public messaging and responses to suicide-related concerns are in alignment with best practices for prevention and awareness.

HE-B.33 **Data monitoring.** Improve data collection and monitoring to increase the scope and availability of suicide-related data and evaluate suicide prevention efforts.

## C. LAND USE AND URBAN DESIGN

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### Background

The way in which urban growth is managed on a regional scale, how land uses are arranged, and how the urban environment is designed and developed all have a strong influence on the health and wellbeing of residents. The mix of uses, intensity, and design of communities affect a resident's level of physical activity, access to nutritious foods, social connectedness, and enjoyment of their surroundings. Land use and urban design also affect exposure to pollutants and noise, potential for crime, and other adverse impacts. In highly auto-dependent communities, people are more likely to have health problems related to a sedentary lifestyle, including obesity, diabetes, and social isolation. Populations are also affected by inadequate transit options in areas that are difficult to serve.

Research indicates that certain land use and urban design characteristics can encourage and facilitate healthier behaviors and social cohesion. These characteristics include:

- Walkable areas with a diverse mix of uses (e.g., homes and jobs closer together and within walking distance of goods and services, grocery stores, schools, and parks).
- Attractive streetscapes and short blocks with safe crossings.
- Higher population and employment densities in strategic areas.
- Job and housing concentrations that make transit use more viable and create more of a balance of employment within each jurisdiction.
- Greater mix and affordability of housing for all incomes.

Together, these land use and design characteristics can increase a resident's opportunity to walk and bike for transportation and recreation, and engage in a variety of social and recreational activities, contributing to more positive health outcomes.

Santa Clara County's urbanized areas can generally be characterized as having low to moderate densities of development, mostly suburban in nature, except for concentrations of higher intensity in downtowns, selected other locations, and along certain transit corridors. The County also contains vast areas of sparsely populated, rural lands of the Diablo Range, Santa Cruz Mountains, and south valley agricultural areas. The focus of this section is the urban area built environment and landscape, where most of the County's 1.8 million residents live, while acknowledging the rural areas also have unique opportunities to address and improve health.

There are many portions of Santa Clara County's urbanized area that exhibit low levels of walkability, separated land uses, and a lack of easily accessible employment

opportunities and recreational facilities. Office parks and campus style developments can be attractive locations for businesses, but are often devoid of amenities and lack a sense of place or interest other than as an employment location.

Of the County's urbanized areas, the highest density and most walkable areas are in or near downtowns of cities, such as San Jose, Palo Alto, and Mountain View. Many residential neighborhoods have poor walkability due to disconnected, non-grid street design and a low mix of services and amenities, typical of most suburban areas developed in the mid-20<sup>th</sup> century. Where sidewalks are prevalent and wide enough to promote walking, efforts to maintain and improve them are an important aspect of neighborhood walkability, particularly for the elderly and those with disabilities.

The location and distribution of employment centers and jobs can also strongly influence a region's functionality and character. Santa Clara County's jobs are not evenly distributed. Santa Clara, Palo Alto, Mountain View, and Sunnyvale have the greatest concentration of jobs, while Los Altos Hills, Saratoga, Morgan Hill, and unincorporated Santa Clara County have the lowest concentration of jobs. San Jose, the largest city in the County (nearing one million), has the largest urbanized downtown, but most of its growth and development since the 1950s consisted of suburban single-family subdivisions, multi-family developments along major arterials, and automobile-oriented shopping centers.

A major focus for San Jose since the '80s has been employment and economic development to create more balance, to rejuvenate downtown, strengthen existing neighborhoods, and promote new transit-oriented, smart growth developments within its urban area. The most recent innovation has been the city's Envision 2040 General Plan, and its promotion of Urban Transit Villages. As with many large cities, San Jose has abundant opportunities for reuse, redevelopment, and infill. A challenge for urban planning is to make the most of such opportunities for place-making and complete communities, rather than settling for density for its own sake. Furthermore, within targeted higher density areas and developments, concerted efforts are needed to ensure gains of available, affordable housing, and a range of housing prices.

This section of the Health Element contains policies that contribute to healthier lifestyles, while reinforcing many of the longstanding countywide growth management policies and principles shared by the County, cities, and Santa Clara County's Local Agency Formation Commission (LAFCO). Regional agencies such as the Association of Bay Area Governments (ABAG), also endorse the County's growth management policies as part of regional sustainability plans.

These policies focus primarily on the character of the cities. They encourage new urban development in walkable areas near downtowns and along high frequency transit corridors, along with improving walkability of all urban neighborhoods and employment

areas. They promote attention to designing a variety of new developments to enhance physical activity, locating goods and services in closer proximity to residents—creating more complete communities. These development patterns will increase options for residents and workers to walk, bicycle, and use transit as part of daily life.

Each city in the County should interpret and implement the strategies and policies of this section in a manner most appropriate for the varied urban environments within its jurisdiction. Priority Development Areas (PDAs) in many cities are important aspects of local general plans and regional sustainability plans, such as Plan Bay Area, which directs most new growth to a small percentage of the overall urban landscape. However, even within existing, built-out neighborhoods and non-residential areas, there can be improvements to walkability, safety, and proximity to goods and services. Reuse and renovation of older commercial centers can improve neighborhoods and increase amenities, improve the quality of our urban experience, reduce travel demand, and increase diversity of use. Ultimately, even single-use office parks may be re-envisioned to promote more housing and mixed use in proximity to workplaces.

The County also plays a significant role for urban unincorporated islands not yet annexed to cities, and preserving rural, open space character of lands not planned or intended to become part of the urban area. Within urban unincorporated areas, the County's role in planning and development review is limited. The County encourages the ultimate annexation of all islands to their surrounding city, and allows only minor forms of new urban development where consistent with the city's general plan. The County's role within the rural areas is greater, with a focus on preserving rural character, natural resources, and allowing only low density, non-urban development. Together, these strategies and policies are intended for informational and advisory value to the cities and County, to special districts, to non-governmental organizations interested in these subjects, and engaging with the public.

### **Major Strategies and Policies**

Policies within this section fall under a series of major land use and urban design strategies that provide overall direction to promote and protect public health. The major strategies are as follows:

*Strategy #1: Maintain existing policies that accommodate future urban growth and development appropriately within existing cities.*

*Strategy #2: Plan for and create complete, healthy communities that support a mix of land uses, services, and amenities.*

*Strategy #3: Design and build new developments at the project level for health and sustainability.*

***Strategy #1: Maintain existing policies that accommodate future urban growth and development appropriately within existing cities.***

The County, its 15 cities, and the Santa Clara County Local Agency Formation Commission (LAFCO), which governs municipal boundaries, have for over 35 years jointly implemented countywide urban growth management policies that require urban uses and development to be located in cities. These joint land use policies provide for new urban housing and other land development within the existing urbanized area, and promote conservation of rural lands for a variety of stewardship purposes. Creating dynamic, complete communities with attractive, walkable environments and a healthier mixes of uses can be accomplished best within the existing urbanized area, through redevelopment, rehabilitation, and reinvestment.

**Policies:**

- HE-C.1 **Model for healthy development.** The County’s Health Element and growth management policy framework should serve as a model for the region in implementing healthy land use and urban development policies.
- HE-C.2 **Urban area focus.** Encourage cities to accommodate new urban growth and development only within existing urban service areas, consistent with countywide growth management policies. Most new urban development should occur through urban infill, redevelopment, and compact, transit-oriented development that promotes equity and access to a variety of housing types, affordability levels, and needed services.
- HE-C.3 **Focused development.** Support efforts to focus the majority of new higher density development in Santa Clara County in “Priority Development Areas” (PDAs), consistent with city and regional plans. Encourage cities to promote new and existing PDAs to provide sustainable growth, achieve greenhouse gas emission goals, and to coordinate transportation investment.
- HE-C.4 **Downtown and corridor development.** Encourage cities to emphasize development potential in downtowns and along commercial and transit corridors, to ensure the efficient use of land and existing infrastructure, and to promote employment locations along transit rather than in isolated, difficult to access locations.

- HE-C.5 **Health planning coordination.** Promote coordination with cities and other local agencies to incorporate and emphasize health considerations in general plans, area plans, economic development planning, and new urban development.
- HE-C.6 **Open space preservation.** Maintain the County’s commitment to preserve open space and natural areas. Focus urban uses and development away from these areas, to protect natural resources, agricultural lands, wildlife habitat, forested lands, recreational areas, and water supply resources. Coordinate with countywide stakeholders to update and implement Priority Conservation Area (PCA) planning to enhance open space systems and ecosystem services (e.g. recharging groundwater, carbon sequestration, erosion and flood control, and supporting plant and animal life).

***Strategy #2: Plan for and create complete, healthy communities that support a mix of land uses, services, and amenities.***

Within urbanized areas, greater attention is needed to create quality of life as well as greater densities of urban development. There is a need for ongoing innovation in urban design, which helps create a sense of place and attractive, livable communities and built environments. Complete communities encourage active living, capitalizing on the area’s climate, one that is highly favorable to walking, bicycling, and the use of outdoor public places, cafes, as well as diversification and place-making within the urban environment.

**Policies:**

- HE-C.7 **Complete communities.** Promote more complete communities that afford greater access to a range of goods and services within comfortable walking and biking distance of homes, schools and jobs, including:
- a. Adequate space for neighborhood-serving retail and community services within walking distance of the majority of residential areas.
  - b. Active parks, plazas, paths and trails, urban forests, and open spaces.
  - c. Community-serving uses such as childcare, educational facilities, and public facilities near neighborhoods.
  - d. Safe and attractive pedestrian and bicycle connections between, and within, neighborhoods and nearby goods and services.

## Health Element – Land Use and Urban Design

- e. Diverse rental and owner housing for all income levels and special needs populations.
- HE-C.8 **Development without displacement.** Encourage cities to develop best practices to mitigate displacement and gentrification effects resulting from new urban projects, focused urban infill development, and intensification in Priority Development Areas.
- HE-C.9 **Walkability.** Promote attractive, safe, and walkable areas that are pedestrian-friendly. Features should include short blocks, wide sidewalks, tree-shaded streets, and buildings that define attractive spaces and are appropriately oriented to streets.
- HE-C.10 **Development densities, locations, and affordability.** Encourage new development near transit corridors, transit nodes, and neighborhood centers, with varied densities and affordability levels, supportive of transit and mixed use and complete communities.
- HE-C.11 **Public spaces.** Support the maintenance and creation of urban public spaces that enhance the urban environment, promote walking, and provide social gathering places.
- HE-C.12 **Reduced automobile dependency and parking needs.** Support planning and development that reduce automobile dependency and parking needs, wherever possible. Provide for alternative commute and transportation opportunities and make more efficient and varied use of lands within employment areas, including housing and mixed use development.
- HE-C.13 **Office park retrofit and mixed use.** Encourage cities to retrofit and redesign low-density office and business parks with mixed use and mid-rise housing for employees and others. Where possible, redevelop such areas with appropriate retail and reduce parking as part of transit village development and similar area concepts.
- HE-C.14 **Age-friendly cities.** Promote and design urban environments to meet the needs of the elderly and adults with disabilities to remain active and to reside in their homes for as long as possible. Promote planning and coordination to achieve the goals of the Age Friendly Cities & Communities network and encourage local jurisdictions to identify needs and attain appropriate certification.

***Strategy #3: Design and build new developments at the project level for health and sustainability.***

At the project level, many aspects of design and implementation can enhance livability, walkability, and health. It is not uncommon to find office and campus developments in many locations with no internal pedestrian accommodations or external connections other than streets. Whatever mix of urban uses and development are conceived and executed in appropriate locations, best standards and design principles can be incorporated to improve or create more healthful places and outcomes.

**Policies:**

- HE-C.15 **Health-focused developments.** Encourage new urban development projects in cities to support better public health outcomes by using health-oriented design principles and health impact assessment tools.
  
- HE-C.16 **Healthy buildings.** Promote the use of building design principles for healthful living and working conditions, including enhanced internal circulation, healthy building materials, design for universal accessibility, optimal mechanical systems, and other green building standards for new and rehabilitated construction.
  
- HE-C.17 **Space design.** Where new, higher density, and mixed use urban development occurs, promote high quality street level interface and designs, appropriate allocation of space necessary for a variety of uses, and building orientation to promote sense of place and architectural interest.
  
- HE-C.18 **Human scale.** Promote design elements that incorporate human scale principles. Elements may include smaller block sizes, grid street patterns in new development and area plans, and path connectivity and route choices that encourage more walking and physical activity. Design features, such as lighting, and active spaces can improve safety. Promote street level uses and designs that encourage pedestrian activity. For existing street networks with long block lengths and/or poor connectivity, consider use of pedestrian cut-throughs, midblock crossings, and new street/alley connections.
  
- HE-C.19 **Pedestrian paths and connectivity.** Promote clear sidewalk, path, and trail connectivity in all neighborhoods with appropriate support of

residents. Encourage adherence to minimum standards for adequate widths of 4-5 feet.

- HE-C.20 **Greenhouse gases and air quality.** Promote plans and developments that reduce greenhouse gas emissions and result in decreased air pollution, especially for communities with disproportionate exposure to air pollution, and for vulnerable populations such as children, seniors, and those with respiratory illnesses.
- HE-C.21 **Public facilities siting and design.** Work with local jurisdictions, school districts, the County, and other public agencies to site and design public facilities as models for health. Design for walkable and accessible spaces, transit, bicycle and pedestrian accessibility, inviting public spaces, and sustainability.
- HE-C.22 **School siting and design.** Promote school and community facilities to serve as centers for health and sustainability, based on the criteria of California's Division of the State Architect, including:
- a. The vulnerabilities of children and other sensitive populations to hazardous substances or pollution exposure.
  - b. The modes of transportation available to students, users, and staff.
  - c. The efficient use of energy and land.
  - d. The potential use of schools and other community facilities as sites for emergency services and shelter.
  - e. Potential recreational joint-use and/or co-location opportunities.
  - f. The costs/benefits of infrastructure, utilities, demolition, and operations.

## D. ACTIVE AND SUSTAINABLE TRANSPORTATION

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### Background

Transportation patterns, habits, and decisions affect a community's overall health. Every day, people in Santa Clara County use highways, roads, sidewalks, bicycle lanes, trails, and public transit to travel to work or school, run errands, and other daily activities. However, the County's transportation system was primarily developed between 1950 and 1980. In that time, a number of factors, such as increased automobile ownership, suburban tract subdivisions, and cul-de-sac street design forms resulted in a transportation system chiefly designed for automobiles. Only limited consideration was given to other modes of travel, such as walking, biking, and public transit. Therefore, many people now have limited options, particularly if they wish to walk or bicycle.

In many parts of the County, walking or bicycling isn't a practical transportation option, due to the suburban patterns and densities of the built environment, the sheer size of the urbanized area, and a lack of infrastructure. Neighborhoods in Santa Clara County with high concentrations of elderly residents, such as in Saratoga and Los Altos, tend to be less walkable and have fewer transit services. Additionally, many areas lack easy non-car access to essential services, recreational facilities, and employment, while exhibiting high rates of collisions between motor vehicles and bicycles and pedestrians. Analysis also revealed that transit riders in Santa Clara County have longer average commutes than those in the greater Bay Area, and longer commutes than those in the County who commute by automobile. More commuters in Santa Clara County rely on the automobile than transit or other modes of travel than in most of the region, while regional and local plans promote healthier, less automobile-dependent mode splits.

Healthy communities designed to encourage active transportation, such as walking and biking,<sup>45</sup> can help address some of these problems. The benefits of walking and bicycling to school or work, for daily errands, and for recreation include increased physical activity and stress reduction, and better respiratory fitness. Active transportation also lowers cancer mortality and morbidity rates of the middle-aged and elderly. It also improves cardiovascular fitness and reduces risk factors among working-age adults.<sup>46</sup> Additionally, when more people walk and bicycle for transportation, car emissions decrease, especially given that about one-third of trips in California are under a mile, and most are made by motor vehicle. Reducing the number of short trips by motor vehicle can significantly improve air quality, promote respiratory health, and reduce carbon emissions that contribute to climate change.<sup>47</sup> Finally, walking and bicycling are no- or low-cost options, saving money that individuals would otherwise spend on fuel and car expenses.<sup>48</sup>

The use of public transportation can also help individuals meet daily requirements for physical activity and reduce vehicular emissions and pollution. Studies show that people who use public transit typically walk more per day than those who drive.<sup>49</sup> However, many opt not to use transit, due to a lack of available routes, lack of frequent, reliable service to their destinations, and increased travel times. For some, the cause may also be unfamiliarity with how to use public transportation, the need for flexibility given child-care needs or varied work schedules, perceived and real challenges for those with disabilities, and perceived safety and convenience issues.

In recent years, there has been a greater emphasis on improving the transportation system to better accommodate all modes of travel. During the next several decades, the County, the Santa Clara Valley Transportation Authority (VTA), other agencies, and cities will make significant decisions about investments in transportation infrastructure, building on the diversification of the last several decades. In recognition of the need to expand mode choice while maintaining the transportation infrastructure, there is a new opportunity to develop a more balanced, health-informed system to facilitate all modes of travel, safely and efficiently, without prioritizing one mode of travel at the expense of others.

### **Major Strategies and Policies**

This section includes transportation strategies and policies intended to provide safe, viable, and convenient transportation options, while encouraging physical activity, decreasing stress, increasing access options to employment and essential services, and reducing emissions and air pollutants. The major strategies outlined are as follows:

*Strategy #1: Promote and implement Complete Streets and livable streetscapes.*

*Strategy #2: Develop a robust pedestrian and bicycle network that enables active transportation.*

*Strategy #3: Provide balanced, innovative, and equitable transit systems and services.*

#### ***Strategy #1: Promote and implement Complete Streets and livable streetscapes.***

Complete Streets is a term for streets that have been planned, designed and operated taking into consideration the needs of all travel modes and users of all ages and abilities. Ensuring the provision of safe streets for all users is a core tenet of Complete Streets. Since 2008, state law requires that Complete Streets policies and implementation be fully incorporated in circulation elements of general plans upon the next comprehensive update of such elements. Livable streets is a concept similar to Complete Streets that

seeks to enhance the pedestrian character of streets by providing continuous sidewalks and streetscape treatments such as plantings, benches, lighting, and other beautification elements. Livability includes incorporating design features that minimize negative impacts of motor vehicle use on pedestrians. It also includes aspects of building and urban design that relate to providing destinations and streetscapes of sufficient interest and diversity to promote walking and biking.

Together, Complete Streets and livable streetscapes help achieve the goals of the Health Element, creating safe means for a range of transportation options, including alternatives to driving.<sup>50</sup> In turn, these policies contribute to improved air quality, increased physical activity, and decreased incidence and severity of vehicular, bicycle, and pedestrian collisions.<sup>51 52 53</sup> In addition, Complete Streets and livable streetscapes aid vulnerable populations such as children, the elderly, and people with disabilities by providing different transportation choices and improved mobility. Many older Americans faced with mobility challenges can be more independent, while children and those with disabilities benefit from safe walking and bicycling routes to schools, community centers, and other destinations.

**Policies:**

- HE-D.1 **Complete Streets.** Encourage the adoption and implementation of local policies and ordinances to champion and fulfill Complete Streets concepts. The planning, design, and construction of all transportation projects should consider Complete Streets features and infrastructure that are appropriate to the urban or rural context of the transportation corridor, and that are consistent with locally adopted general plans and transportation plans.
- HE-D.2 **Complete Streets implementation priorities.** Within overall transportation system plans, promote the importance of identifying priorities for implementation of complete streets infrastructure improvements to provide demonstrable benefits as soon as possible.
- HE-D.3 **Transportation system impacts.** Encourage cities and the County to evaluate impacts to all modes of travel when considering transportation system performance, in accordance with Transportation Impact Analysis and multi-modal level-of-service guidelines developed and maintained by the Valley Transportation Authority.
- HE-D.4 **Roadway capacity.** Consider improvements to add roadway vehicular capacity via new or expanded rights of way or travel lanes where consistent with anticipated future demand and roadway classification, and to close gaps in road grid system. Expanding

roadway capacity should happen after considering improvement possibilities to other modes of travel and technologies that add capacity within existing rights of way or travel lanes and/or promote more active modes of travel (e.g. Express/HOT lanes, signal coordination and timing strategies, bicycle facilities, bus rapid transit and shuttles).

HE-D.5 **Safety and calming measures.** On roads and at intersections with a high level of existing or planned pedestrian and non-motorized vehicle activity, promote all feasible means of improving safety and reducing collisions for all users. Cities and the County should consider traffic calming where necessary with appropriate community input and engineering considerations, as well as infrastructure features including, but not limited to, bulb-outs, midblock crossings, pedestrian refuges, signal alerts, and high visibility crosswalks to focus drivers' attention and control traffic flow on local streets.

HE-D.6 **Vehicle safety.** Support activities such as public outreach and informational campaigns, and increased enforcement of existing speed, seat belt, and distracted driving laws, to reduce the number and severity of injuries and fatalities involving motor vehicles. Support advances in intelligent transportation systems infrastructure (pedestrian and bicycle adaptive signal operations to ensure safe crossings of wide roads like expressways, for example) and vehicle technology such as autonomous or semi-autonomous vehicles that reduce safety risks.

***Strategy #2: Develop a robust pedestrian and bicycle network that enables active transportation.***

The County, cities, and transportation planning agencies should strive to increase levels of active transportation. A safe, continuous, and more extensive pedestrian and bicycle network provides direct connections between residences, employment, shopping, schools, recreation, and civic uses. Moreover, it can encourage residents to incorporate physical activity as part of daily living and achieve better health outcomes. Participation in federal and state programs, such as Safe Routes to Schools, can further create a robust active transportation environment. These efforts can create a culture where alternatives to automobile travel are normal and desirable, particularly in a region where the climate is so conducive to walking and bicycling.

**Policies:**

- HE-D.7 **Pedestrian network.** Promote planning and funding to create a safe and convenient circulation system for pedestrians, including:
- a. Marked crosswalks, pedestrian-adaptive signal operations, and similar enhancements to pedestrian crossings.
  - b. Improved accessibility and connectivity between neighborhoods and commercial areas, including sidewalk gap reduction.
  - c. Places to sit or gather, pedestrian-scaled street lighting, and buffers from moving vehicle traffic appropriate to the urban land use setting and type of street.
  - d. Amenities that serve and attract pedestrians of all ages and abilities, including transit stop and facility improvements to curb crime and vandalism.
- HE-D.8 **Bicycle network.** Support a more robust bicycle network that safely accommodates biking for commuting, school, shopping, and recreational trips by riders of all ages and levels of experience. Improvements may include:
- a. Facilities completely separated from vehicular traffic (Class I trails) or those along low speed, low traffic roadways (bicycle boulevards, Class II lanes, and Class III routes).
  - b. Additional safety measures along heavily trafficked arterials, such as buffered bicycle lanes and colored lanes, as conditions allow.
  - c. Minimum four-foot shoulders along lower volume rural roads, where feasible, for walking and bicycling outside of the travel lane.
  - d. Appropriate levels of maintenance and sweeping to provide for safety of cyclists.
- HE-D.9 **Vulnerable users.** Promote awareness that pedestrians and bicyclists are vulnerable users, in order to improve safety on roadways, particularly for children and older adults. Promote education regarding state laws requiring motor vehicles to yield to bicyclists, slow before passing, and pass at a safe distance (three-foot safety rule).
- HE-D.10 **Three E's:** Continue support for education, encouragement, and enforcement training for motorists, taxis, bus operators, pedestrians, and bicyclists. Focus on enhancing bicyclists' capabilities, reducing distracted behaviors, increased awareness of issues related to walking and bicycling, and the need for lawful, responsible, and safe riding and walking.

- HE-D.11 **Bicycle parking.** Encourage public and private development projects to provide sufficient bicycle parking, and where appropriate and feasible, provide amenities such as showers and lockers. Support the installation of full- and self-service bicycle storage centers in or near large parking garages, available public plazas and parks, and transit stations.
- HE-D.12 **Bicycle share.** Support the expansion of the regional bicycle share program, helping to identify appropriate locations for system expansion, particularly neighborhoods with limited transportation options.
- HE-D.13 **Way-finding signage and information.** Promote a comprehensive countywide, consistent bicycle and pedestrian signage and information system for the most-used trails, paths, streets, and bicycle corridors connecting major destinations and places of interest.
- HE-D.14 **Safe and active transportation for school-aged youth.** Promote walking, bicycling, and use of public transportation by youth through collaboration with appropriate partners and stakeholders, including, the Safe Routes to School program.

***Strategy #3: Provide balanced, innovative, and equitable transit systems and services.***

Transit system improvements are increasingly important to growing, denser cities. Because public transit has traditionally served those unable to drive or afford personal transportation, equitable, convenient, and affordable service is especially important for those populations. It is also important for the elderly, the growing numbers of employees who eschew driving alone, and those who desire convenient alternatives to driving for every need. A frequent, interconnected transit network links residents to employment centers, medical facilities, schools, government services, and other community assets. Innovative improvements such as bus rapid transit, alternative fuel vehicles, along with enhanced rider comforts and amenities, can increase the appeal of public transit as a viable option. These in turn can increase transit use, improve health outcomes, reduce greenhouse gas emissions, and meet diverse community needs.

**Policies:**

- HE-D.15 **Transit services.** Support efforts to provide an appropriate type and mix of transit services in the urban areas of the County and for regional and inter-city service needs, including light rail, bus rapid transit,

traditional bus, and supplementary services, to improve service, user experience and address “first mile/last mile” transit connectivity needs.

- HE-D.16 **Supporting densities and facilities.** Promote sufficient urban density and mixes of uses within transit service corridors, emphasizing appropriate retail and service uses, and increased numbers of employment locations within walking distance to transit. Provide complementary bicycle/pedestrian networks and facilities.
- HE-D.17 **Transit advocacy for underserved communities.** Advocate for increased levels of transit service in areas of the County that lack transit access. Support increased service in routes with high ridership, and encourage service providers to engage in robust public outreach and education efforts to obtain input regarding transit-related capital investment and operations priorities.
- HE-D.18 **Coordination with transit agencies.** Coordinate and collaborate with transit agencies and service providers to improve transit service and equitable access in the County. Improve integrated land use and transportation, and promote efficient investment that supports development in Priority Development Areas (PDAs).
- HE-D.19 **Transit to essential needs/services.** Promote collaboration with the Valley Transportation Authority (VTA) and other transit providers to review and improve transit service to medical and social service facilities in the County.
- HE-D.20 **Transit stop amenities.** Support the installation of various transit stop amenities, including shelters, benches, real-time information panels, lighting, bicycle parking, and bike share stations.
- HE-D.21 **Senior/disabled mobility and transit needs.** Promote expanded affordable and reliable transportation options for older adults and persons with disabilities, focusing on neighborhoods with high concentrations of the elderly and low walkability. Support development of community and neighborhood-level organizations for ride-sharing and meeting needs of those who no longer drive.
- HE-D.22 **Employee shuttles and bus services.** Support coordination between private shuttle providers, major employers, and local agencies to minimize shuttle impacts, improve efficiency, and increase ridership. Support possible detailed studies of shuttle systems, and their use where demand is greatest.

## E. RECREATION AND PHYSICAL ACTIVITY

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### Background

Physical activity has multiple benefits for overall health. Researchers have found that physical activity reduces the risk of disease, and other health risks including heart disease, stroke, type 2 diabetes, depression, anxiety, and some cancers. In addition, physical activity helps control weight, strengthens bones, prevents falls among older adults, increases chances for a longer life, and may improve academic achievement among students.<sup>54 55</sup> However, physical inactivity remains a problem for much of the population.

Sedentary jobs and leisure activities, long commutes, financial and work stresses, and long distances to parks and schools make it challenging for many adults and children to integrate physical exercise into their daily routines. Among school children, only 28 percent of fifth graders, 34 percent of seventh graders, and 44 percent of ninth graders meet physical fitness standards, with Hispanic/Latino and Black students being the least likely to be physically fit.<sup>56</sup> Only 57 percent of adults meet CDC recommendations for physical activity.<sup>57</sup>

According to the Institute of Medicine, there are many ways to address the prevalence of chronic disease, including childhood obesity. These include building and maintaining safe, attractive parks and playgrounds in close proximity to residential areas and improving access to recreational facilities through reduced costs, increased hours, and the development of culturally appropriate activities.<sup>58</sup> Adults and children with safe, easy access to appealing, convenient parks, playgrounds, trails, and recreation facilities are more likely to engage in regular physical activity.<sup>59 60 61</sup> In addition, park users are more inclined to participate in higher levels of physical activity where there are various facilities such as ball courts, playgrounds, and amenities such as bicycle racks.<sup>62</sup>

Children are more likely to be active outdoors than indoors,<sup>63</sup> and physical activity is more vigorous in outdoor settings.<sup>64</sup> Parks and green spaces also provide opportunities for contact with nature, and proximity to nature is associated with health and a sense of well-being which may reduce the frequency and severity of symptoms of Attention Deficit Hyperactivity Disorder in children.<sup>65 66</sup>

The regional and urban park system provides outdoor recreational facilities that encourage physical activity. However, distribution and access to these facilities varies by jurisdiction and neighborhood. Within urbanized areas of the County, the average walking distance to the nearest park is 1,071 feet (approximately one-quarter mile). Some areas (Campbell, Sunnyvale, and Santa Clara) have similar accessibility, but generally lower park levels of service, with under three acres per 1,000 residents.<sup>67</sup>

Low-income areas in many cities have fewer areas of parkland than the jurisdiction-wide average, and neighborhoods with higher concentrations of non-White residents also had disproportionately less park land.<sup>68</sup> When surveyed, a lower percentage of Latinos (75 percent) than Whites (85 percent) reported having access to safe public indoor and outdoor exercise facilities in their neighborhoods.<sup>69</sup>

In addition to having adequate, accessible park spaces, convenience and proximity to recreation opportunities promotes physical activity and use. Consequently, completing trail and pathway connections, making more accessible bicycle paths, and maintaining sidewalks are important for encouraging and enabling residents to walk in neighborhoods, in parks, and along urban and regional trails.

More residents should be encouraged to walk, the most basic and lowest impact form of moderate exercise with benefits equal to more vigorous exercise. Increasingly, research indicates sitting too much at work, in front of the television, at computers, or in cars, puts people at higher risk for disability, cardiovascular disease, cancer, and type 2 diabetes.<sup>70</sup>

### Major Strategies and Policies

This section includes a series of park and recreation strategies and policies that encourage physical activity. The strategies and policies are organized by various subtopics, including: park provision and location; park safety and quality; park access; and physical activity programs.

*Strategy #1: Create opportunities for physical activity, recreation, and relaxation.*

*Strategy #2: Improve the usability/connectivity, aesthetics, and safety of existing parks, trails, and open space.*

*Strategy #3: Enhance use of programs in cities, school districts, the County, other agencies, and workplaces that promote physical activity and wellness at all ages.*

### ***Strategy #1: Create opportunities for physical activity, recreation, and relaxation.***

Santa Clara County has numerous regional parks, regional trails, bike paths, and city parks, as well as a climate that encourages outdoor activities. Many of these community assets are a result of decades-long efforts and support for dedicated funding, such as the County's regional parks system and regional trails plan. Where need and opportunities are present, cities, local agencies, and the County should enhance opportunities for activity and recreation within existing facilities and remedy park area deficiencies.

Existing neighborhoods can be improved by creating safe, diverse, and attractive places for physical activity, recreation and relaxation. New development can provide recreation facilities and public amenities through good design, site planning, and connection to surrounding areas. Another important element is meeting residents' needs to quickly, safely, and affordably access recreational opportunities close to where they live and work. In areas lacking parks and green spaces, playgrounds, and recreation facilities, neighborhood input and coordination are needed to determine how best to meet the particular area's needs and promote more active lifestyles.

**Policies:**

- HE-E.1 **Park distribution.** Support efforts to have all County residents within a 15-20 minute walk (approximately one mile) of a park or recreational facility.
- HE-E.2 **Parks and services for communities with special needs.** Support the development of new parks and other recreational services for those with special needs, including specialized facilities and equipment for older adults and people with disabilities. Enhance services in underserved neighborhoods, and areas experiencing higher rates of chronic disease and community safety issues.
- HE-E.3 **Proximity to recreational facilities.** Encourage the development of recreational facilities, parks, and loop trails near employment centers, existing neighborhoods, and community facilities, such as schools, senior centers, and recreation centers, to promote ease of access and use.
- HE-E.4 **Shared-use agreements.** Encourage shared-use agreements between jurisdictions and school districts that allow their properties to be used safely and securely during non-school hours for community recreation needs.
- HE-E.5 **Concurrent development.** Encourage development of new parks, plazas, gardens, trails and paths, and open space amenities concurrent with approvals for new development, particularly in denser urban areas, to increase opportunities, encourage physical activity, and help mitigate urban heat island effects.

***Strategy #2: Improve the usability/connectivity, aesthetics, and safety of existing parks, trails, and open space.***

Public agencies can increase the use and desirability of existing parks and recreational facilities by upgrading infrastructure, providing additional amenities such as water stations, and improving safety for park users. Partnering with businesses, community groups, foundations, and non-profits offers opportunities for increasing public presence and safety, improving maintenance, and creating new facilities. Space definition, lighting, and other strategic improvements, including signage along trails, are also important for increasing overall activity for the public.

The more accessible parks, trails, and open spaces are to the public, the more likely they are to be used for recreation and commuting. Public agencies can promote greater accessibility to parks and recreational areas by improving access points for users and enhancing connections.

**Policies:**

- HE-E.6 **Multiple use facilities.** Encourage the renovation and expansion of facilities and amenities in existing parks, considering multiple uses and needs. Promote well-designed active play structures and areas, with drought-tolerant shade landscaping and shade structures where suitable to promote sun protection, amenities to accommodate a range of users, water stations, pet-friendly areas or dog parks, perimeter paths and/or other improvements.
- HE-E.7 **Design features.** Support the inclusion of features in the multi-use open space areas and networks to reflect the history, culture, sense of place, and unique characteristics of the community.
- HE-E.8 **Safety concerns.** Address actual and perceived safety concerns that create barriers to physical activity by means of adequate park lighting, appropriate landscaping, and maintenance. Avoid isolated spaces where users could be vulnerable.
- HE-E.9 **Smoke-free parks.** Encourage and support local jurisdictions in establishing smoke-free parks and recreational areas.
- HE-E.10 **Trails and parks network.** Support efforts to create a completely connected network of trails and parks throughout the County that link housing, work, commercial centers, public transit, and community facilities. Partner with cities, open space agencies, and other organizations to complete a gap analysis of the current trail system and

make needed improvements to connect trails in cities and unincorporated areas.

- HE-E.11 **Transit access.** Support efforts by the Santa Clara Valley Transportation Authority (VTA) and other providers to ensure all communities, particularly those with a larger proportion of low-income households, have adequate transportation access to parks and recreational facilities.

***Strategy #3: Enhance programs in cities, school districts, the County, other agencies, and workplaces that promote physical activity and wellness at all ages and physical abilities.***

Innovative recreational programs can enliven park and recreational spaces by encouraging participation and physical activity for a diverse range of park users. Such programs can increase interest in the use of parks and trails as alternatives to indoor facilities, and increase appreciation of natural surroundings. Employers can also increase employee activity levels and improve health through incentives and benefits programs that directly reward employees financially and improve productivity.

**Policies:**

- HE-E.12 **Expanded programs for enhanced use and enjoyment.** Promote the expansion of innovative programs for active use and appreciation of parks and other recreation facilities, through parks and recreation departments, local agencies, and non-governmental partners.
- HE-E.13 **Use by underserved communities and those with health needs.** Promote and support the development of programs that encourage underserved communities and people with health issues to use parks and recreational facilities.
- HE-E.14 **School district activities and programs.** Encourage school district activities and related programs that support physical activity and wellness.
- HE-E.15 **Multiple park uses.** Promote multiple uses within parks for active and passive recreational pursuits, including fitness classes, recreation, arts, cultural events, community gardening, and environmental conservation and appreciation.

Health Element – Recreation and Physical Activity

- HE-E.16 **Public information to diverse populations.** Promote awareness and access to programs and activities in a culturally and linguistically competent manner for the County’s diverse populations.
- HE-E.17 **Innovative funding and incentive programs.** Work with non-profit groups and large employers to explore innovative funding approaches and development of incentive programs to increase physical activity, participation in programs, and improve facilities.

## F. HEALTHY EATING, FOOD ACCESS, AND SUSTAINABLE FOOD SYSTEMS

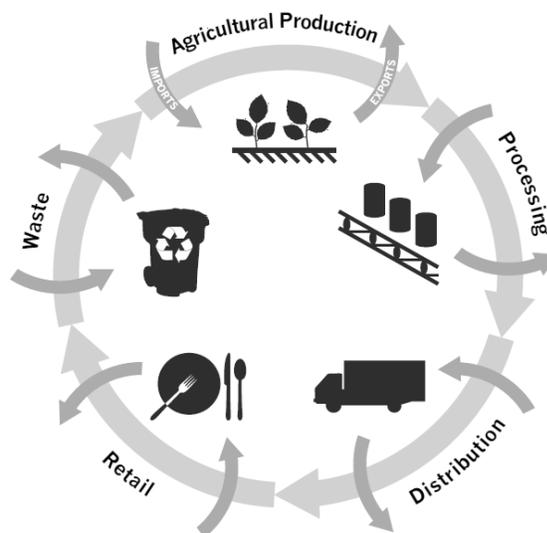
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### Background

Community health is affected by many factors related to food, including healthy food access and sustainable food systems. Diet and exercise, for example, have become one of the most effective means of preventing and treating significant chronic diseases, such as heart disease. How our communities and regions function to promote healthy eating, variety of healthy choice, and complementary activities, such as nutrition education and food literacy, are increasingly important to public health. Improving our diets, nutrition, and exercise are critical for ensuring society's long-term health goals, including the need to manage costs associated with serious increases in diet-related chronic diseases such as diabetes.

The food system is composed of five main sectors: agricultural production, processing, distribution, retail (or consumption), and waste. Figure 1, provides a conceptual framework for understanding these sectors and their linkages.

Santa Clara County's food system is part of a larger regional Bay Area food system, which is part of a national and global system linking people and food. A healthy food system promotes access to affordable, healthy, fresh, and culturally appropriate foods by a variety of venues and businesses. It also supports the livelihoods of local farmers and ranchers and the economic viability of farmland and other working landscapes, which contribute to open space and agricultural land preservation. Local food systems can also reduce the environmental impact of the global food production and distribution system we rely upon, and potentially provide a resource in the event of long-term shortages and increased costs. Lastly, farms and open spaces contribute much in ecosystem services through food provision, climate and disease regulation, groundwater recharge, nutrient cycles and crop pollination, habitat, aesthetics, and other benefits.



**Figure 1: The Food System, from *Locally Nourished: How a Stronger Regional Food System Improves the Bay Area* (2013). [www.spur.org/files/spur-reports/SPUR\\_Locally\\_Nourished.pdf](http://www.spur.org/files/spur-reports/SPUR_Locally_Nourished.pdf)**

The food landscape in Santa Clara County provides both opportunities and challenges for achieving a healthy food system. Key assets and opportunities include:

- **Strong traditions.** The County has a rich tradition of agriculture with over 31,000 acres of important agricultural lands located on 1,068 farms and ranches (State Farmland Mapping Program definitions). In 2012, the County produced over \$260 million worth of agricultural products.
- **Diversity.** There is a growing diversity of food businesses and local food resources, with over 30 active community gardens, 43 farmers' markets, and 22 Community Supported Agriculture (CSA) programs in Santa Clara County (2012). Thousands of residents, businesses, and organizations utilize these local-food resources.
- **Support networks.** There is an increasing culture and network of residents and community groups/organizations supporting urban agriculture, local food, healthy food access, and food security.
- **Policy framework.** The County, cities, other partner agencies, and organizations rely on a countywide system of urban growth management and rural land stewardship policies that have been successful since the 1970s (see also Section C: Land Use and Urban Design).

Key challenges include the following:

- **Agriculture viability and land preservation.** There are many challenges to maintaining farming and ranching as viable businesses in close proximity to a metropolitan area; furthermore, some organizations estimate up to 63,400 acres of farmland and rangeland countywide, including up to 55 percent of the County's remaining important farmland (17,000 acres of the 31,000), are at varying risks for conversion or development -- especially along Highway 101 near San Jose, Morgan Hill, and Gilroy.
- **Economic barriers to food access.** Among those living in poverty, about one-third of County adults and over half of Latino adults live in "food insecure" households, while government programs that supplement food resources for families, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and CalFresh, are undersubscribed and vulnerable to cutbacks.
- **Unequal access to healthy food sources.** In general, low-income areas have unhealthier retail food environments than high-income areas. Furthermore, the lower-income areas within certain cities contain fewer healthy food stores such as supermarkets, grocery and produce stores and farmer markets than the average for these cities.
- **Preponderance of unhealthy options.** Only 16 percent of all food retailers in the County are "healthy," as defined by the Centers for Disease Control and used

in the Modified Retail Food Environment Index (MRFEI) of the Existing Conditions Report. Jurisdictions offering the highest percentage of healthy food retail include Los Altos (32 percent), Milpitas (28 percent), Saratoga (29 percent), Palo Alto (22 percent), Cupertino (21 percent), and Mountain View (18 percent).

- **Marketing and media influences.** Unhealthy food advertising inundates the media, particularly television. Combatting this barrage of information about fast food and diet choices requires effective education and strategies targeting families, young adults, and children.

## Major Strategies and Policies

This section of the Health Element includes strategies, policies, and actions designed to respond to these challenges and capitalize on opportunities in the food system. The general strategies outlined for each are as follows:

*Strategy #1: Preserve and enhance local agriculture and agricultural lands as part of the local/regional food system.*

*Strategy #2: Promote urban agriculture.*

*Strategy #3: Support a variety of healthy food outlets within neighborhoods and communities.*

*Strategy #4: Reduce food insecurity and hunger.*

*Strategy #5: Promote healthy eating and food literacy.*

***Strategy #1: Preserve and enhance local agriculture and agricultural lands as part of the local/regional food system.***

Local food production benefits Santa Clara County in a variety of ways. Agriculture and agricultural land preservation are integral to the County's urban growth management policies. State laws (AB 32 and SB375) and recently adopted regional plans, such as Plan Bay Area, focus future urban growth within cities, and curtail urban expansion into rural lands as part of a major strategy to meet housing needs, reduce greenhouse gas emissions, and improve transportation. Local agricultural land supplies and food production can also enhance food security in the face of disruptions in our global food supply caused by climate issues, transportation costs, or other problems.

**Policies:**

- HE-F.1 **Agriculture support.** Encourage and support sustainable, local agriculture as an integral part of healthy communities and as an engine of economic activity.
- HE-F.2 **Agricultural land preservation.** Promote the preservation of agricultural and open space land by maintaining and implementing growth management policies that limit urban development outside urban areas while supporting farming and ranching.
- HE-F.3 **Multi-use agricultural preserves.** Explore the creation of agricultural parks and preserves, and similar programs, for preserving agricultural lands in proximity to urbanized areas. Integrate agricultural production and educational, environmental, and recreational values.
- HE-F.4 **Environmentally-sustainable agriculture.** Promote agricultural practices that maximize sustainability, including soil conservation, water and energy efficiency, waste reduction, and reduced chemical use. Acknowledge and enhance ecosystem services provided by agricultural lands.
- HE-F.5 **Agricultural viability.** Support local farmers by promoting on-site activities and uses that enhance its economic viability but do not interfere with agricultural use, such as processing facilities, farm stands, and agricultural tourism.
- HE-F.6 **Local food sourcing, distribution and marketing.** Promote local food sourcing through procurement preferences and policies among local governments, schools, businesses and institutions. Expand existing marketing and distribution initiatives that connect local agriculture to new markets such as retailers, restaurants, schools, hospitals, food banks and other businesses.

***Strategy #2: Promote urban agriculture.***

Integrating food production into places where we live, work, and play provides a myriad of health benefits, including access to fresh produce, activating and enhancing green spaces, physical activity, community and social connection, and nutrition education. Urban agriculture, such as cultivating food in backyards, community gardens, and small-scale urban farms, can improve healthy food access and promote healthier eating.

Interest in urban agriculture is on the rise throughout the U.S., and concerted efforts should be made to provide opportunities for it.

**Policies:**

- HE-F.7 **Urban agriculture.** Support the expansion of various forms of urban agriculture, including home and community gardens, and urban farms and cooperatives.
- HE-F.8 **Urban agricultural zoning.** Promote small-scale agricultural use and food production in appropriate urban zoning districts within cities and urban unincorporated areas and address other barriers to community gardening and urban farming.
- HE-F.9 **Public land for growing food.** Encourage the use of available public land for growing food at schools, parks, public easements and right-of-ways, where appropriate, and not in conflict with other uses, utility infrastructure, or needs of property owners.
- HE-F.10 **Equitable access to safe food-growing opportunities.** Encourage the development of new urban agriculture sites in low-income and underserved neighborhoods and coordinate efforts with parks and open space organizations. Combine programs on urban agriculture with food production safety, food literacy, and nutritional education.
- HE-F.11 **School/community gardens.** Collaborate with school districts to integrate and expand agriculture in curricula and allow community gardens on school property.

***Strategy #3: Support a variety of healthy food outlets within neighborhoods and communities.***

Varied, healthy food environments contribute to community health. Healthy food outlets include supermarkets, grocery stores (including ethnic markets), farmers' markets and Community Supported Agriculture (CSA), due to the variety of choices offered.

**Policies:**

- HE-F.12 **Healthy food access.** Promote healthy food access throughout the County, particularly in underserved neighborhoods.

- HE-F.13 **Healthy food retail establishments.** Promote improved access to healthy food options in areas with a high concentration of less healthy options, such as fast food chains, liquor stores, and convenience stores.
- HE-F.14: **Collaborative efforts.** Continue to support and collaborate with organizations that implement practices, education, and policies to increase access to healthy food and beverages, such as schools/after school programs, childcare centers, retail establishments, churches, non-profits, and community-based organizations.
- HE-F.15 **Water bottle-filling stations.** Support and promote the availability and accessibility of clean drinking water and water bottle-filling stations in public facilities, businesses, and schools.

***Strategy #4: Reduce food insecurity and hunger.***

Food security means ensuring access by all people at all times to enough food for an active, healthy life. Low-income neighborhoods suffer from disproportionately worse access to outlets that sell fresh produce, and they have disproportionately higher concentrations of restaurants and retail establishments that typically feature fewer healthy foods<sup>71</sup> Food assistance programs and policy changes to increase access to affordable, healthy foods can help increase community food security.

**Policies:**

- HE-F.16 **Food assistance programs.** Support expanded participation in federal food assistance programs through partnerships with public agencies, food banks, and community-based organizations.
- HE-F.17 **Healthy food for low-income shoppers.** Encourage farmers markets, community-supported agriculture, and all healthy food retail outlets to accept payment mechanisms from federal, state, and local food assistance programs.
- HE-F.18 **Reduced food waste through recovery and distribution networks.** Support the development of organizations and networks that promote safe and healthy food recovery and distribution, to reduce waste and food insecurity.
- HE-F.19 **Older adult nutritional needs.** Support efforts to meet the nutritional needs of older adults, especially for the isolated or ill;

improve access to food services in living facilities, community centers, and neighborhood locations.

***Strategy #5: Promote healthy eating and food literacy.***

Food literacy refers to a fuller, more holistic understanding of the impact our food choices make on our health, environment, and communities. Santa Clara County has the opportunity to make healthy choices the norm by offering healthy food and beverages in public spaces. Information and knowledge about nutrition, food labels, and food preparation skills can help residents make healthier and more informed food choices.

**Policies:**

- HE-F.20 **Healthy food options.** Promote healthy food and beverage standards and procurement policies and practices in government buildings and government-sponsored events. Include nutrition standards and local food origin preferences.
- HE-F.21 **Healthy eating and food literacy.** Support and promote healthy food options, nutrition education, and food literacy through local government services, health care organizations, non-profits, faith-based organizations, and private sector businesses.
- HE-F.22 **Healthy food access in schools.** Support improved nutrition standards and healthy offerings in school food services. Support the development of new farm-to-school programs and similar efforts that promote locally grown foods in school breakfast, lunch, and after-school programs.
- HE-F.23 **Breastfeeding.** Support and promote breastfeeding as a means of providing healthy food as infants grow and develop. Encourage and assist businesses and local governments in creating breastfeeding friendly workplaces.

## G. AIR QUALITY AND CLIMATE CHANGE

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### Background

#### Air Quality

Air quality can have widespread effects on human health and the environment. There are numerous sources of air pollutants in Santa Clara County, including stationary sources, such as manufacturing facilities, dry cleaners, and auto body shops, and mobile sources, such as automobiles, trucks, and trains. Each day these sources emit different pollutants that affect humans, animals, and the overall environment. Air pollution can have a range of negative impacts on health. It can damage the cardiovascular and pulmonary systems and contribute to chronic and acute health impacts, such as asthma and bronchitis.

In response to increasing concerns over industrial and vehicular sources of pollution, Congress adopted the Clean Air Act (CAA) in 1970. The CAA led to the establishment of standards for ambient concentrations of each of the six “criteria” pollutants – ozone (O<sub>3</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), lead (Pb), and particulate matter (PM) – all identified as particularly dangerous to human health. Since then, these criteria pollutants, as they have become commonly known through the documentation on which they were based at the time, have been reduced by more than half in the Bay Area.<sup>i</sup> Due in part to aggressive state and regional programs for stationary and mobile source emissions, the Bay Area achieves, or is close to achieving, national air quality standards. The region’s pollutant levels are well below the applicable standards for lead, carbon monoxide, sulfur dioxide, and nitrogen dioxide. However, the Bay Area does not meet state or national standards for ozone and particulate matter.

Although Santa Clara County has been in conformance with state and federal standards for most criteria air pollutants, it received a grade of “D” by the American Lung Association for the number of days with unhealthy levels of ozone and particulate matter (PM 2.5) between 2010 and 2012.<sup>72</sup> Air pollution concentrations are often worse in lower-income neighborhoods, which are more likely to be located near freeways, other major roadways, and industrial sites.

Most health effects of air pollution are due to ozone and particulate matter.<sup>73</sup> High ozone levels are associated with diminished lung function, increased frequencies of asthma

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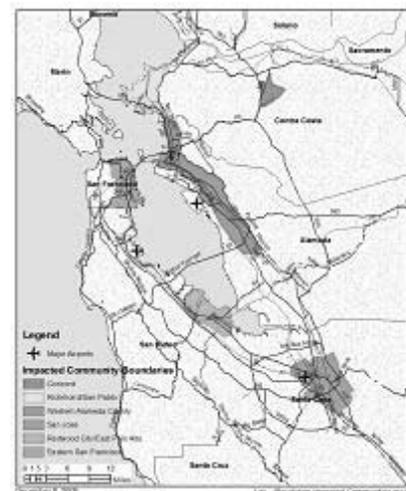
<sup>i</sup> The CAA mandated that standards for ambient concentrations of the criteria air pollutants be established and regulated based upon “criteria documents” – a compilation of scientific information on the formation, concentrations, distribution, and health effects of the pollutants.

attacks, sensitivity to allergens, and premature mortality,<sup>74 75 76</sup> particularly for those who are physically active outdoors, including children, outdoor workers, and athletes.<sup>77</sup> Particulate matter can have a wide range of health effects, including aggravating asthma and bronchitis, contributing to heart attacks, and resulting in increased visits to the hospital for respiratory and cardiovascular issues.

Since the adoption of the CAA, improved Bay Area air quality has reduced air pollution-related health impacts. An analysis of asthma emergency room visits, respiratory hospital admissions, cardiovascular hospital admissions, chronic bronchitis, non-fatal heart attacks, cancer onset, and mortality found that better air quality provides health benefits with a value of approximately \$25 billion per year for the region. Better air quality is credited with increasing life expectancy by an average of six months.<sup>78</sup> Climate change, however, could reverse decades of improvement in air quality for pollutants such as ozone and particulate matter (described below).

The Bay Area Air Quality Management District (BAAQMD, also referred to as the Air District) is the regional agency with regulatory authority over emission sources, including Santa Clara County. The Air District has established specific rules and regulations to limit emissions that can be generated by specific land uses or activities. It has also developed pollution mitigation measures implemented in association with those uses. These rules and regulations form a multi-pollutant policy framework that controls the emissions of ozone precursors, particulate matter, greenhouse gases, and other air toxics.

The Air District started the Community Air Risk Evaluation (CARE) program in 2004, to reduce health risks associated with local exposures to air toxics in highly impacted areas. The program analyzes health risks associated with air pollution, evaluates the exposure of sensitive populations, and identifies significant sources of air pollution to prioritize resources and reduce air pollution in the most highly impacted communities. Portions of east San Jose are located in one of six CARE communities in the Bay Area.



## Climate Change

Climate change, already affecting California, poses a significant threat to the environment, public health, and basic services. Climate change is expected to result in overall warmer weather, more instances of extreme heat and storm events, higher storm surges, reduced snowpack, longer droughts, an increase in wildfires, and sea-level rise.<sup>79</sup>

The impacts of climate change in California vary geographically and depend on such factors as landscape, infrastructure, vulnerable populations, and readiness. A study of climate change vulnerability in California analyzed socio-economic factors, age, housing conditions, isolation, and other indicators such as institutionalized populations, insurance coverage, vehicle ownership, and disabilities. It found that 20 percent of the population of Santa Clara County had high social vulnerability, or elevated susceptibility to harm, due to the effects of climate change.<sup>80</sup>

#### State and Regional Sustainability Efforts

The State of California has been a national leader in enacting climate change legislation to reduce greenhouse gas (GHG) emissions, which trap heat in the atmosphere. **Assembly Bill 32**, passed in 2006, requires California to reduce GHG emissions to 1990 levels by 2020. Amendments to the California Environmental Quality Act (CEQA) Guidelines, adopted in 2009, require the consideration of potential impacts of GHG emissions in project review. **Assembly Bill 1532** requires fees collected from polluters through the cap-and-trade program be used for programs and activities that reduce greenhouse gas emissions. **Senate Bill 375** requires Metropolitan Planning Organizations (MPOs) to develop a Sustainable Community Strategy (SCS) as part of their Regional Transportation Plan, which demonstrates how plans for land use, transportation, and housing will meet regional GHG reduction targets. **Plan Bay Area**, the SCS for the San Francisco Bay Area approved in July 2013, provides a strategy for meeting 80 percent of regional housing needs in Priority Development Areas (PDA's).

Temperature projections show a warming trend across the Bay Area for the rest of the century.<sup>81</sup> Although Santa Clara County has a milder climate than other areas of the state, it is expected to experience an increased number of extreme heat days. Projections for San Jose estimate 71 extreme heat days by 2050.<sup>82</sup> Extreme heat poses severe danger to human health and is one of the most dangerous forms of natural disasters. It can cause a range of health problems, from rashes, dehydration, and cramps, to heat exhaustion or heat stroke, which can result in hospitalization and death. It can also worsen chronic conditions such as cardiovascular and respiratory disease.<sup>83</sup>

As temperatures rise and heat events become more common and prolonged, there will be greater demands on energy and possible brown-outs, particularly during extreme heat events.<sup>84</sup> The increased demand for electricity due to air conditioning use will in turn increase air pollution and greenhouse gas emissions from power plants powered by natural gas or other fossil fuels.

People who live in milder climates such as the Bay Area are not as acclimatized to warmer temperatures as those who live in the central parts of the state. Furthermore, Bay Area residents are less likely to have air conditioning, and some are less familiar with how to reduce exposure and risk of heat-related illnesses than those who live in hotter climates. For example, during a 2006 heat wave, the Central Coast (including

Santa Clara County) experienced far more emergency room visits and hospitalizations than would be expected, based on population.<sup>85</sup>

Particular groups are at greater risk of heat-related health effects, including people living in poverty, seniors, pregnant women, young children, people with chronic conditions, the socially isolated, the disabled, and workers in outdoor jobs.<sup>86 87</sup>

Temperatures will also be greater in the south part of the County, which has higher average temperatures, and in more densely developed urban areas with higher concentrations of materials such as asphalt and glass that intensify the heat. This urban heat island effect can be reduced by planting shade trees, maintaining urban canopy trees or urban forests, and creating cool roofing, including living roofs.

Of critical concern is the likelihood climate change could reverse decades of improvement in air quality for pollutants such as ozone and particulate matter. Higher temperatures increase ozone precursor emissions and ozone formation,<sup>88</sup> resulting in a significant increase in the number of days that exceed the eight-hour regulatory standard for ozone concentrations.<sup>89</sup> Between now and 2050, air quality scenarios suggest increased ozone levels related to climate change may offset at least 10 years of ozone emissions control efforts in the Bay Area.<sup>90</sup>

Climate change is also expected to increase the risk of wildfires and the length of the fire season, which will increase population exposure to particulate matter and other harmful pollutants. Large wildfires have become more regular in the west as spring and summer temperatures have risen.<sup>91</sup> Projections suggest wildfire risk will increase across much of the Bay Area and Santa Clara County.<sup>92</sup> Wildfires can cause ozone and particulate matter levels to increase significantly. Studies have shown particulate matter associated with wildfires is significantly more toxic than the particulate matter ordinarily present in the California atmosphere.<sup>93</sup> An increase in particulate matter from wildfires, mixed with the particulate matter present in the atmosphere, could be dangerous for vulnerable individuals with pre-existing conditions, resulting in an increase in respiratory and cardiovascular hospital admissions.<sup>94</sup>

Like most criteria and toxic air contaminants, much of greenhouse gas emissions come from motor vehicles. The transportation sector in California is the single largest source of GHG emissions at 38 percent, with personal passenger vehicles accounting for 79 percent of the total.<sup>95</sup> In Santa Clara County the transportation sector accounts for 42 percent of GHGs.

**Climate Action Plans and Air Quality**

Adopted by the Board of Supervisors in September 2009, the Santa Clara County Climate Action Plan (CAP) focuses on County operations, facilities, and employee actions to reduce greenhouse gas emissions, energy and water consumption, solid waste, and fuel consumption. The CAP focuses on steps needed to reach a 10 percent greenhouse gas reduction goal by 2015, but also identifies policies and actions that are needed to reduce emissions beyond 2015.

Along with the municipal climate action plan, the Silicon Valley 2.0 project is a countywide effort to minimize the anticipated impacts of climate change and reduce local greenhouse gas emissions. The project uses a risk management framework to evaluate the exposure of populations to climate impacts, examines the potential consequences of this exposure, and develops adaptation strategies that improve community resilience.

Changes in temperature and humidity related to climate change are also expected to affect the timing and severity of many allergens.<sup>96</sup> Warmer temperatures and more precipitation are linked to increased pollen production for many types of trees and grasses.<sup>97</sup> Rising pollen levels and longer seasons increase allergic sensitivity and asthma episodes,<sup>98 99</sup> decreasing economic productivity and increasing the number of school days missed each year.<sup>100</sup> Rising pollen concentrations may also increase the number of individuals who have allergic asthma, triggered by a reaction to pollen or other allergens. Exposure to increased levels of air pollution also increases the risk and severity of asthma attacks.<sup>101</sup> Extreme precipitation events and higher temperatures may also encourage growth of indoor mold and fungi, which may increase respiratory and asthma issues.<sup>102</sup>

Changes in temperature and precipitation may lead to expansion of insect and rodent populations, resulting in increases in vector-borne diseases such as Hantavirus, Lyme disease and West Nile virus.<sup>103</sup> Increases in temperature could lead to larger numbers of salmonella and other bacteria-related food poisoning, since bacteria grow more easily in warm environments. Heavy rainfall, increased run-off, and higher water temperatures could contribute to drinking water contamination by carrying household, industrial, transportation, and agricultural chemicals, sewage, and animal waste into drinking water supplies and further increase the incidence of water and food-borne diseases and the need for careful monitoring.<sup>104</sup>

Sea level rise and heavy winter rainfall occurrences in Santa Clara County are expected to produce storm surges and flooding, which could put health infrastructure and other critical facilities such as roads, waste facilities, and wastewater treatment plants at risk.<sup>105</sup> Forebay levees, baylands, and similar low-lying areas may be affected by sea level rise, such as saltwater intrusion into aquifers where subsidence has occurred. However, Santa Clara County is not subject to the same kind of coastal flooding as other areas. Riverine and urban flooding are of equal or greater concern and can be caused by high

water levels in creeks, backed-up storm drains flooding streets and low lying neighborhoods. South County areas may be subject to greater flooding and ponding where local drainage is inadequate.

Low-income families spend a larger proportion of their household income on energy, food, and other basic needs than families with higher incomes. Since climate change is projected to cause an increase in the price of necessities, impacts on lower-income residents will become even more severe.<sup>106</sup>

Steps to mitigate and adapt to climate change can produce significant health co-benefits. Efforts to reduce vehicle miles traveled by walking, bicycling, and transit use can also lead to higher rates of daily physical activity, lower numbers of traffic injuries, and improved air quality. A recent study of the health benefits from active transportation in the Bay Area found it has the potential to substantially lower the burden of disease and carbon emissions.<sup>107</sup> Land use and urban design that places housing near services, businesses, and transit with increases in green spaces and community gardens could also increase access to healthy foods and build neighborhood cohesion.<sup>108</sup>

### **Major Strategies and Policies**

The following major strategies and policies are intended to convey a comprehensive approach for improving air quality, protecting the climate, and protecting public health.

*Strategy #1: Strive for air quality improvement through regional and local land use, transportation, and air quality planning.*

*Strategy #2: Reduce health impacts from and increase resiliency to extreme heat events and rising temperatures.*

*Strategy #3: Increase awareness of and reduce vector-borne and other infectious illnesses resulting from climate change.*

*Strategy #4: Increase investment in readiness and coordinated planning to meet expected needs in serving more vulnerable populations.*

### ***Strategy #1: Strive for air quality improvement through regional and local land use, transportation, and air quality planning.***

California and Santa Clara County face significant air quality problems that have a direct impact on human health. Implementing programs and regulations for stationary source, mobile source, vehicle trip reduction, mixed-use compact development, and energy and

climate measures can help to reduce air pollution and maintain the trend towards steadily improving air quality in the County and Bay Area.

**Policies:**

- HE-G.1 **Air quality environmental review.** Continue to utilize and comply with the Air District’s project- and plan-level thresholds of significance for air pollutants and greenhouse gas emissions.
- HE-G.2 **Coordination with regional agencies.** Coordinate with the Air District to promote and implement stationary and area source emission measures.
- HE-G.3 **Fleet upgrades.** Promote Air District mobile source measures to reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment, and by expanding the use of zero emission and plug-in vehicles.
- HE-G.4 **Off-road sources.** Encourage mobile source emission reduction from off-road equipment such as construction, farming, lawn and garden, and recreational vehicles by retrofitting, retiring and replacing equipment and by using alternate fuel vehicles.
- HE-G.5 **GHG reduction.** Support efforts to reduce GHG emissions from mobile sources, such as reducing vehicle trips, vehicle use, vehicle miles traveled (VMT), vehicle idling, and traffic congestion. These efforts may include improved transit service, better roadway system efficiency, state-of-the-art signal timing and Intelligent Transportation Systems (ITS), transportation demand management, parking and roadway pricing strategies, and growth management measures.
- HE-G.6 **Regional/local plans.** Encourage and support regional and local land use planning that reduces automobile use and promotes active transportation.
- HE-G.7 **Sensitive receptor uses.** Promote measures to protect sensitive receptor uses, such as residential areas, schools, day care centers, recreational playfields and trails, and medical facilities by locating uses away from major roadways and stationary area sources of pollution, where possible, or incorporating feasible, effective mitigation measures.
- HE-G.8 **CARE Communities focus.** Promote awareness of geographic areas subject to persistently poorer air quality and assist the Air District in

monitoring and reducing emissions from all sources in CARE communities.

- HE-G.9 **Healthy infill development.** Promote measures and mitigations for infill development to protect residents from air and noise pollution, such as more stringent building performance standards, proper siting criteria, development and environmental review processes, and enhanced air filtration.
- HE-G.10 **Conservation.** Promote energy conservation and efficiency in homes, businesses, schools, and other infrastructure to reduce energy use and criteria pollutant and greenhouse gas emissions.
- HE-G.11 **Renewable energy.** Encourage renewable energy, such as solar and wind turbines, on commercial, industrial, and residential buildings.
- HE-G.12 **Energy technologies.** Support regional and local initiatives that promote integrated building systems, distributed generation, demand response programs, smart grid infrastructure, energy storage and backup, and electric transportation infrastructure.
- HE-G.13 **Fire prevention.** Support state, federal, County, and other local efforts to prevent wildfires. Emphasize prevention cost-efficiency over that of ever-increasing expense of fighting and suppressing wildfires.

***Strategy #2: Reduce health impacts from and increase resiliency to extreme heat events and rising temperatures.***

Temperature increases and extreme heat events require increased preparedness and adaptation of the built environment. Higher temperatures in urban areas are more often seen in neighborhoods with dense land use, paved surfaces, and an absence of trees and parks.

**Policies:**

- HE-G.14 **Extreme heat exposure.** Promote greater awareness of the impacts of extreme heat exposure on the most highly impacted populations, such as seniors, people living in poverty, those with chronic conditions, pregnant women, and young children.
- HE-G.15 **Public information.** Promote coordination among state agencies, the County, employers, health care providers, and the media to

communicate the necessary measures to protect workers and residents at risk to extreme heat.

- HE-G.16 **Heat island mitigation.** Support urban greening and the use of green infrastructure to minimize the urban heat island effect.
- HE-G.17 **Access to emergency cooling.** Promote improved access to cooling during heat events, particularly for the most vulnerable populations. Measures can include on-site cooling, emergency generators, and cooling centers.
- HE-G.18 **Energy and resiliency in homes.** Promote energy retrofits and increase extreme heat resiliency for housing, particularly for lower income and vulnerable populations.

***Strategy #3: Increase awareness of and reduce vector-borne and other infectious illnesses resulting from climate change.***

Public health could be affected by increased cases of vector-borne as well as other infectious diseases (e.g. water and food-borne illnesses), requiring additional funding, control, and monitoring efforts as well as public education.

**Policies:**

- HE-G.19 **Vector control coordination.** Continue coordination between the Department of Environmental Health, the Public Health Department, and other state and local agencies to ensure vector populations are managed to protect public health and maintain ecological integrity.
- HE-G.20 **Monitoring for vectors and infectious diseases.** Continue to monitor specific vector-borne and infectious diseases, such as West Nile virus, Dengue, and Lyme disease, to better understand emerging public health threats due to climate change.
- HE-G.21 **Pre-planning and response to infectious disease outbreaks.** Strive to reduce the risks of vector-borne, food-borne, water-borne and other infectious diseases by planning for emerging diseases and ensuring adequate health care service capacity.
- HE-G.22 **Public education and awareness.** Support and expand existing efforts to build public awareness about vector-borne, food-borne, and water-borne diseases by providing accessible materials and information that promote prevention.

***Strategy #4: Increase investment in readiness and coordinated planning to meet expected needs in serving more vulnerable populations.***

In general, climate change and warming will bring increased demands on health and emergency services for the general population. In addition, some populations have less ability to prepare for, cope with, and recover from the effects of climate change. Identifying these groups, and understanding the characteristics that make them more vulnerable, is critical in developing adequate procedures and programs for adaptation and disaster response.

**Policies:**

- HE-G.23 **Climate change effects in emergency and disaster planning.** Recognize and address the health effects of climate change in Local Hazard Mitigation Plans, Hazard Emergency Plans, General Plans, Specific Plans, and other policies and ordinances of every city in the County, as appropriate.
- HE-G.24 **Public awareness.** Increase public awareness and understanding of climate change impacts on health, and the need to prepare for these changes, including informing the general population and vulnerable communities about severe hazards from local and regional wildfires and health impacts from extreme heat days.
- HE-G.25 **Health facility and hospital readiness.** Work with the healthcare industry to create more sustainable and resilient hospitals and clinics to adapt to climate change. Support improvements that reduce energy and water use, accommodate surges in patient demand, and create climate-proof buildings (e.g. raise ground floors in flood prone areas, include operable windows, and ensure adequate backup power supply).
- HE-G.26 **Health professional preparation.** Prepare County health care workers for climate change and assess the coping capacity of health care facilities and staffing for increased demand during climate change-related extreme events.
- HE-G.27 **Vulnerable populations.** Identify populations (e.g., seniors, pregnant women, children, homeless, mentally ill, people with chronic diseases, and outdoor workers) more vulnerable to, and exposed to, specific climate changes in order to develop targeted population-level mitigation and adaptation strategies.

Health Element – Air Quality and Climate Change

HE-G.28 **Local capacity-building.** Support and encourage the development of local capacity at the neighborhood level among citizens to develop strategies and networks that increase resilience to climate impacts.

HE-G.29 **Emergency housing.** Support and coordinate expanded emergency, transitional and supportive housing services provided by the County, cities, and community organizations to minimize exposure of homeless populations and those potentially made homeless during extreme weather events.

## H. HEALTHY HOUSING

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### Background

Housing can significantly affect individual and community health, directly and indirectly. Over time, the connection between health and housing has become more fully understood, to an extent all levels of government explicitly acknowledge the role housing plays in health outcomes. The Health Element addresses these issues and potential impacts separately from the Housing Element, which focuses on overall housing policies, prescribed housing needs, capacity for new housing, programs, and quantified objectives for housing production over an eight-year cycle.

One of the most well-known direct health impacts of housing conditions is the continued existence of lead paint in older buildings. It continues to be a health threat despite decades of attention and abatement regulations. An increasing concern is indoor air quality from secondhand smoke and other toxics, and proximity to significant sources of particulate matter pollution (freeways, truck terminals, and ports), where diesel fuel emissions are concentrated and pollutant levels are heightened. These impacts often disproportionately affect disadvantaged or vulnerable populations due to their close proximity to freeways, major roads, or other similar sources.

High housing costs reduce disposable income, leaving less available for preventive medical treatment, food, and other necessities. High costs may also require residents to maintain multiple jobs, live in hazardous or overcrowded conditions, and pay higher transportation costs. Housing costs also contribute to overcrowding and homelessness. In 2014, Santa Clara County had the highest percentage of unsheltered homeless in the United States, 75 percent, and the 7<sup>th</sup> largest homeless population of all major cities or metropolitan areas.<sup>109</sup> Chronic homelessness is associated with poor health and a shortened life span.

There are many other ways housing contributes to, or detracts from, community and individual health, including:

- General housing conditions, including substandard housing problems.
- Neighborhood maintenance and decline, which can lead to reduced values, increased crime and public safety issues.
- Overcrowding and noise, which can contribute to increased stress.
- Housing segregation and discrimination.

Moreover, the impacts of housing problems can have a detrimental effect on behavioral as well as physical health. Personal injuries can result from poorly designed or

maintained stairways, bathrooms, and walkways. The potential for serious injury in the home increases as the population ages and more seniors elect to stay in their own homes.

### Major Strategies and Policies

To address the health impacts and benefits of housing, this section focuses on the following major strategies:

*Strategy #1: Acknowledge the significance of health impacts from housing conditions, supply, and affordability.*

*Strategy #2: Inventory and improve housing and neighborhood conditions, and related environmental factors, that contribute to poor health outcomes.*

*Strategy #3: Promote new and innovative forms of urban housing in appropriate locations to accommodate special needs households, intergenerational housing, an aging population, and to improve social integration/cohesion.*

*Strategy #4: Address the housing and social service needs of the homeless in an integrated and cost-effective manner.*

***Strategy #1: Acknowledge the significance of health impacts from housing conditions, supply, and affordability.***

Housing elements and related planning focus largely on overall housing needs, capacity, and programs for addressing particular issues and populations. Housing elements can be especially challenging because needs for an area may prompt changes in other aspects of community planning such as land use, downtown redevelopment priorities, transportation, and community identity. However, where housing affordability and access is a problem, associated health impacts are exacerbated.

### **Policies:**

- HE-H.1 **Health and housing connection.** Recognize and address the health impacts of high housing costs, limited diversity, and inadequate supply, in the general plans, specific plans, and ordinances of each city in the County.
- HE-H.2 **Unhealthy housing sources.** Encourage the identification and elimination of common sources of unhealthy housing, including mold

and moisture, pests, poor indoor air quality, safety problems, contaminants and toxic substances, and deferred maintenance.

- HE-H.3 **Tobacco-free multi-family housing.** Coordinate with cities and other stakeholders to establish tobacco-free housing, and prohibit smoking in multi-family residential housing.
- HE-H.4 **Retention of affordable housing.** Support and coordinate with cities and other stakeholders to strengthen anti-displacement efforts and policies, particularly for vulnerable populations and those least able to cope with displacement.

***Strategy #2: Inventory and improve housing and neighborhood conditions, and related environmental factors, that contribute to poor health outcomes.***

Over time, cities and counties have struggled to maintain staffing and resources to adequately inventory and monitor housing conditions. Neighborhood conditions, combined with aging housing stock, can contribute to other societal problems such as overcrowding and crime. While some areas naturally attract investment and appreciation, others require more concerted efforts to maintain quality of life, infrastructure, and quality.

**Policies:**

- HE-H.5 **Housing inventories.** Maintain and update neighborhood condition inventories and assessments to evaluate general conditions, housing stock, and needed services.
- HE-H.6 **Housing conditions review.** Promote programs to identify areas and properties where inspections, investments, and attention are needed to address deteriorating housing, code violations, or patterns of substandard conditions.
- HE-H.7 **Staffing and services.** Encourage the provision of staffing levels and resources within housing and planning agencies to provide an adequate level of investigatory and code compliance services.
- HE-H.8 **Neighborhood engagement for housing conditions.** Promote the engagement of residents, neighborhood councils, associations, and community groups to convene and address health and related housing condition issues. Use neighborhood input to identify needed improvements and community investment strategies.

- HE-H.9 **High quality building construction.** Encourage the design and construction of new residential buildings and other rehabilitated or converted buildings to minimize or eliminate hazardous conditions, provide healthy indoor air quality, improved access to natural light, and freedom from pests and adverse conditions.

***Strategy #3: Promote new and innovative forms of urban housing in appropriate locations to accommodate special needs households, intergenerational housing, an aging population, and to improve social integration/cohesion.***

Household types and formation trends indicate a need for more innovation in housing and land use in addition to traditional single-family residences or apartments. With an aging population and increasing single-person households, cities can benefit from housing that promotes social engagement and cohesion, reduces isolation, integrates universal design, and builds communities across age and ethnic barriers.

**Policies:**

- HE-H.10 **Innovative housing types.** Encourage the removal of barriers to, and create opportunities for, innovative/non-traditional housing in urban areas, such as co-housing and inter-generational housing.
- HE-H.11 **Secondary dwelling units.** Continue efforts to promote the development of secondary dwellings in residential districts with appropriate standards, considering the age and context of individual neighborhoods, lot sizes, and parking needs.
- HE-H.12 **Range of housing types.** Encourage a mix of housing types across urban areas of the county by cultivating rental and home-ownership opportunities, increasing availability of units with universal design, and providing housing for all income levels and special needs populations, including older adults.

***Strategy #4: Address the housing and social service needs of the homeless in an integrated and cost-effective manner.***

Homelessness is a continuing problem of growing, affluent regions and can be a significant factor to costs of government social services and assistance. Most programmatic efforts to address homelessness are contained in the Housing Element of

local general plans. The Health Element draws special attention to the individual and community health impacts of homelessness.

**Policies:**

- HE-H.13 **Transitional/supportive housing and services.** Encourage the location of homeless housing near social and medical services as well as transit, and design housing to blend with existing neighborhoods and nearby land uses. Focus on supportive housing to meet the integrated needs of the homeless population.
- HE-H.14 **Homelessness and health connection.** Acknowledge the acute health impacts of homelessness, particularly for children, and the significant correlations between chronic homelessness, mental and physical health, educational attainment, and social integration.
- HE-H.15 **Investment in supportive housing.** Explore all means of increasing the funding for and supply of transitional and permanent supportive housing for homeless persons and families, to coordinate service delivery, reduce agency service costs, and improve health outcomes.

## I. VIOLENCE PREVENTION AND SAFETY

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### Background

Violence is a growing crisis in the United States, and youth, low-income populations, and people of color are disproportionately affected. In the United States, violence accounts for approximately 55,000 deaths annually<sup>110</sup> and is the leading cause of death for young black men.<sup>111</sup> Homicide is the third-leading cause of death for youth aged 10-24 years, and 13 young people are victims of homicide, daily. Significant consequences of non-fatal violence include injuries and disabilities, mental health and behavioral consequences, reproductive health issues, and other health repercussions, in addition to impacts on the social fabric.<sup>112</sup> The economic burden of violence in 2010 totaled \$70.4 billion (\$70.1 billion in work-loss costs and \$335 million in medical treatment).<sup>113</sup> In 2010, the combined cost from medical care and lost work due to homicide among youth aged 10-24 years was estimated to be \$18.1 billion nationally.<sup>114</sup>

Violence and related trauma at all ages takes many forms in the community. At the earliest stage, child maltreatment and bullying can occur. In adolescence, gang activity, cyber-bullying and dating violence may be present. Throughout adulthood, violence can affect intimate partners, the community, and the elderly, through maltreatment and abuse, along with criminal activity, workplace bullying, and hostile work environments.

In Santa Clara County, there have been some improvements in numerous violence-related indicators over the past decade; however, disparities in population subgroups are startling and call for priority action. For example, the largest category of homicide victims annually is young people of color 15-24 years of age. School and cyberspace safety also necessitate heightened attention and action. Local data indicate women are more likely to be physically abused by intimate partners than are men; males are more prone to violence and to experience a violence-related death. African Americans, Latinos, and youth/young adults are disproportionately impacted by violence, and bullying remains a concern for students, parents, and schools.<sup>115</sup>

Violence has health, economic, and emotional impacts on victims and their families. Homicides, physical assaults, rapes, and sexual assaults result in direct and adverse health outcomes for a community. Violent crime can also have a broader impact on the entire community. Fear about safety at home and in the community can lead to chronic stress.<sup>116</sup> Witnessing and experiencing community violence causes longer-term behavioral and emotional problems in youth.<sup>117</sup> When children or adolescents are victims of violence, the experience can affect their scholastic achievement,<sup>118</sup> and it can limit their overall success as adults.<sup>119</sup> Additionally, neighborhood perceptions and fear of crime can modify people's behavior. Such concerns can be a disincentive to walk or

engage in physical activity outdoors. Parents afraid of neighborhood crime may keep their children indoors more, restricting opportunities for play and social interaction.<sup>120</sup>

There is no single cause of violence or one solution to prevent it. A growing body of research indicates violence is influenced by many factors across multiple levels, including individual, relationship, community, and societal factors. At the individual level, past exposure to violence and a history of impulsiveness and poor school achievement are associated with violence. In relationships, peer delinquency, parental conflict, and lack of monitoring and supervision are associated with violence. At the community level, the lack of social connectedness, residential instability, and gang activity are associated with violence. At the societal level, our understanding of national history, cultural norms about violence, and media influences are also associated with varying levels of violence.

Violence is not inevitable. It can be prevented, and its impacts reduced. The factors that contribute to violent responses – whether those of attitude and behavior or related to larger social, economic, political and cultural conditions – can be changed.<sup>121</sup> The World Health Organization (WHO) has identified strategies for evidence-based interventions to prevent interpersonal and self-directed violence: developing safe, stable, and nurturing relationships between children and their parents and caregivers; developing life skills in children and adolescents; reducing availability and harmful use of alcohol; reducing access to guns and knives; promoting gender equality; changing cultural norms that support violence; and ensuring victim identification, care, and support.<sup>122</sup> The Centers for Disease Control and Prevention has summarized a series of best practice actions to prevent youth violence.<sup>123</sup>

## Major Strategies and Policies

In addition to this section, the Social and Emotional Health section includes strategies and policies aimed at improving social emotional wellness and reducing substance abuse, critical in violence prevention. This section promotes violence prevention and overall safety in all communities, with the following primary strategies:

*Strategy 1: Improve neighborhood safety and promote neighborhood development.*

*Strategy 2: Prevent childhood experience/exposure to trauma and violence.*

*Strategy 3: Promote healthy relationships.*

*Strategy 4: Prevent and reduce elder abuse.*

***Strategy 1: Improve neighborhood safety and promote neighborhood development.***

Strong, vibrant neighborhoods are critical to violence prevention. Strategies and policies that promote affordable housing, quality education, and neighborhood resources also support and build resilience in the community and families.

- HE-I.1 **Neighborhood business improvement.** Promote community economic development models and the use of the business improvement districts to reduce violence and crime in affected neighborhoods.
- HE-I.2 **Density and location of alcohol sales outlets close to schools.** Address the association between higher alcohol beverage sales density with higher incidence of violent crime, by supporting the implementation of policies that limit the density of alcohol beverage outlets and restrict sales close to schools.
- HE-I.3 **Built environment and safe passages.** Promote strategies that foster safe passages in neighborhoods and around schools with high crime and gang activity to ensure all residents can travel without fear. Train County and other public agency staff in the principles of “Crime Prevention through Environmental Design,” to evaluate and modify proposed designs for public and private developments.
- HE-I.4 **Housing quality and maintenance.** Promote efforts that improve housing quality and maintenance, encouraging responsible tenant and landlord engagement to address aging housing and improve blighted conditions.
- HE-I.5 **Neighborhood schools.** Support the expansion of high quality early childhood education and K-12 schools with parental engagement.
- HE-I.6 **Effective discipline approaches.** Support policies and practices to limit discipline practices that remove youth from school. Promote trauma-informed healing, and encourage student engagement and achievement.
- HE-I.7 **Community policing.** Support approaches and policies that integrate violence prevention and crime reduction with public health and community policing. Support city and County law enforcement efforts to improve real and perceived safety concerns in communities

most affected by crime and violence, through neighborhood-based strategies to engage residents and youth in problem-solving.

- HE-I.8 **Opportunities for high-risk youth and young adults.** Encourage expansion of public/private partnerships and philanthropic initiatives to provide work opportunities for high-risk youth and young adults.
- HE-I.9 **Restorative justice and healing.** Continue efforts to promote justice through dialogue between victims and offenders. Expand healing, trauma-informed, culturally-based practices in school districts, juvenile and adult criminal justice systems.
- HE-I.10 **Incarceration and re-entry.** Continue to implement and evaluate the County’s Re-entry Program and AB 109 Realignment Plan to ensure formally incarcerated individuals experience healthy re-integration. Implement gender and sexual identity responsive approaches and programs during and post-custody.
- HE-I.11 **Gang prevention/reduction model.** Support ongoing implementation of data-driven, multi-stakeholder strategies in high-crime neighborhoods to reduce gang membership and gang violence. Enhance gang and truancy prevention models with health promotion strategies. Enhance data system infrastructure to assist with evaluation, identification, and replication of effective gang prevention programs.

***Strategy 2: Prevent childhood experience/exposure to trauma and violence.***

A growing body of research shows childhood exposure to trauma contributes significantly to behavioral and physical illness, along with adverse outcomes over a lifetime. Trauma, particularly abuse, also correlates to future behaviors and the potential to inflict similar violence against others.

- HE-I.12 **Trauma-Informed Services.** Continue to train County staff and providers in the development and implementation of trauma-informed models that are culturally relevant.
- HE-I.13 **Parental and caregiver education.** Promote funding and dissemination of best practice parenting education. Expand knowledge

about the impacts of witnessing or experiencing trauma and violence on children in the home, school, and community.

- HE-I.14 **Bullying prevention and school climate.** Encourage positive school climate policies and practices, implementation of evidence-based bullying prevention programs and professional development to increase social/emotional learning and wellness practices.
- HE-I.15 **Health care screening and reporting.** Support the implementation of best practice child abuse health care screening, treatment policies, and training and awareness related to mandatory reporting requirements, including best practice protocols for pediatricians and emergency rooms.

***Strategy 3: Promote healthy relationships.***

Healthy relationships are fundamental to physical and emotional well-being. Within intimate partner relationships, abuse and violence can affect all forms of relationships, spousal and otherwise. Safe, stable and nurturing relationships free of physical, emotional, sexual, and financial abuse contribute to healthy homes and communities. Victims, and those who witness dating or domestic abuse, can experience anger and stress, while persistent exposure can lead to poor health outcomes over a lifetime.

- HE-I.16 **Domestic violence response.** Improve coordination and policies to ensure effective response to incidents of reported domestic violence. Expand outreach and education with immigrant communities on law enforcement protocols.
- HE-I.17 **Intimate partner and dating violence prevention.** Encourage expansion of evidence-based practices, including social norms change strategies to promote healthy relationships and discourage abusive behaviors. Support comprehensive school-based policies and training for middle- and high-school personnel to prevent and respond to dating violence. Support the use of protection orders for youth experiencing dating violence.
- HE-I.18 **Health care screening.** Implement best practice intimate partner violence screening, reporting, and referral policies within the health care and law enforcement systems, including young adult and pediatric settings.

***Strategy 4: Prevent and reduce elder abuse.***

Elder abuse refers to any intentional or negligent act by a caregiver or other person that harms or causes serious risk to a vulnerable adult. It is more common than often realized and especially of concern for the elderly who are dependent on family, friends, or others for their most basic needs. It can take many forms, including neglect or emotional abuse, isolation or abandonment, physical and sexual abuse, and financial exploitation. Many elderly suffer in silence, and the signs of abuse go undetected due to isolation, reduced interaction or opportunities for exposure. With an aging population, increased attention and prevention efforts are needed to prevent and reduce elder abuse of all kinds.

HE-I.19 **Elder abuse awareness.** Promote efforts to educate seniors, mandated reporters, caregivers, healthcare providers, the public, and relevant stakeholders on the prevalence of elder abuse and its impacts.

HE-I.20 **Elder abuse screening and detection.** Promote adoption of best practices and policies to screen, detect, and respond to elder abuse.

HE-I.21 **Social programming and connectivity for older adults.** Support service expansion at senior community centers, adult day care programs, home meal delivery programs, and other social programs for homebound seniors.

WORKS CITED

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- <sup>1</sup> National Institutes of Health. (2014, December 30). Health Disparities. In *Medline Plus*. Retrieved from <http://www.nlm.nih.gov/medlineplus/healthdisparities.html>
- <sup>2</sup> World Health Organization. (2015). Social determinants of health. Retrieved from [http://www.who.int/social\\_determinants/sdh\\_definition/en/](http://www.who.int/social_determinants/sdh_definition/en/)
- <sup>3</sup> Virginia Department of Health. (2013, March 3). What is Health Inequity? Retrieved from <http://www.vdh.virginia.gov/OMHHE/healthequity/unnaturalcauses/healthequity.htm>
- <sup>4</sup> Robert Wood Johnson Foundation. (2014). 2014 County Health Rankings Data Retrieved from <http://www.countyhealthrankings.org/rankings/data>
- <sup>5</sup> Insight Center for Community and Economic Development. (2014). Self Sufficiency Standard for California. Retrieved from <http://www.insightcced.org/calculator.html>
- <sup>6</sup> Olshansky, S. J., Antonucci, T., Berkman, L., Binstock, L., Boersch-Supan, A., Cacioppo, J. T., ... Rowe, J. (2012). Differences in Life Expectancy Due to Race and Educational Differences Are Widening, And Many May Not Catch Up. *Health Affairs*, 31(8).
- <sup>7</sup> County of Santa Clara. (2013). Community Health Existing Conditions Report. Retrieved from [http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC\\_Existing\\_Health\\_Conditions\\_FINAL\\_May\\_2013.pdf](http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC_Existing_Health_Conditions_FINAL_May_2013.pdf)
- <sup>8</sup> County of Santa Clara. (2013). Community Health Existing Conditions Report. Retrieved from [http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC\\_Existing\\_Health\\_Conditions\\_FINAL\\_May\\_2013.pdf](http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC_Existing_Health_Conditions_FINAL_May_2013.pdf)
- <sup>9</sup> Centers for Disease Control and Prevention. (2014, May 9). Chronic Disease and Health Promotion. Retrieved from <http://www.cdc.gov/chronicdisease/overview/index.htm>
- <sup>10</sup> County of Santa Clara. (2013). Community Health Existing Conditions Report. Retrieved from [http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC\\_Existing\\_Health\\_Conditions\\_FINAL\\_May\\_2013.pdf](http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC_Existing_Health_Conditions_FINAL_May_2013.pdf)
- <sup>11</sup> County of Santa Clara. (2010). Santa Clara County 2010 Health Profile Report, 81-82. Retrieved from [http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/SCC\\_Health\\_Profile\\_Report\\_online\\_final.pdf](http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/SCC_Health_Profile_Report_online_final.pdf)
- <sup>12</sup> Santa Clara County Public Health Department. (2012). Roadmap to a Healthier Future: A Strategic Plan, 2012-2015., 18. Retrieved from [http://www.sccgov.org/sites/sccphd/en-us/AboutUs/Documents/SCCPHD\\_StrategicPlan.pdf](http://www.sccgov.org/sites/sccphd/en-us/AboutUs/Documents/SCCPHD_StrategicPlan.pdf)
- <sup>13</sup> Santa Clara County Public Health Department. (2011). Tobacco Use in Santa Clara County, 2. Retrieved from [http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Tobacco/Tobacco%20Use%20in%20Santa%20Clara%20County%20110612\\_FINAL.pdf](http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Tobacco/Tobacco%20Use%20in%20Santa%20Clara%20County%20110612_FINAL.pdf)
- <sup>14</sup> Santa Clara County Public Health Department. (2011). Tobacco Use in Santa Clara County, 4. Retrieved from [http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Tobacco/Tobacco%20Use%20in%20Santa%20Clara%20County%20110612\\_FINAL.pdf](http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Tobacco/Tobacco%20Use%20in%20Santa%20Clara%20County%20110612_FINAL.pdf)
- <sup>15</sup> Santa Clara County Public Health Department. (2013). Status of LGBTQ Health, Santa Clara County 2013, 40. Retrieved from <http://www.sccgov.org/>

## Health Element – Works Cited

- 16 Santa Clara County Executive's Office of Budget and Analysis. (2012). Santa Clara County Fiscal Year 2013 Final Budget. Retrieved from [http://www.sccgov.org/sites/scc/countygovernment/Documents/FY2013\\_Final\\_Budget.pdf](http://www.sccgov.org/sites/scc/countygovernment/Documents/FY2013_Final_Budget.pdf)
- 17 U.S. Department of Health and Human Services, Healthcare Research and Quality. (2012). National Healthcare Disparities Report. Retrieved from <http://www.ahrq.gov/research/findings/nhqrdr/nhqrdr11/qdr11.html>
- 18 Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. (2011). Behavioral Risk Factor Surveillance System Prevalence and Trends Data [Data file]. Retrieved from <http://apps.nccd.cdc.gov/brfss/>
- 19 California Department of Health Services. (2014). Covered California, Individuals Enrolled from October 1, 2013, through March 31, 2014, with Subsidy Status, Across Region. Retrieved from [http://www.coveredca.com/news/PDFs/regional-stats-march/March\\_RegionalEnrollmentTables\\_forWeb\\_ss.pdf](http://www.coveredca.com/news/PDFs/regional-stats-march/March_RegionalEnrollmentTables_forWeb_ss.pdf)
- 20 U.C. Berkeley Labor Center. (2012). Remaining Uninsured in California under the Affordable Care Act: Regional and County Estimates. Retrieved from [http://laborcenter.berkeley.edu/healthcare/aca\\_fs\\_uninsured.pdf](http://laborcenter.berkeley.edu/healthcare/aca_fs_uninsured.pdf)
- 21 County of Santa Clara. (2010). Santa Clara County 2010 Health Profile Report, 46. Retrieved from [http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/SCC\\_Health\\_Profile\\_Report\\_online\\_final.pdf](http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/SCC_Health_Profile_Report_online_final.pdf)
- 22 Santa Clara County Board of Supervisors. (2012). Seniors Agenda: A Quality of Life Assessment. Retrieved from [http://www.sccgov.org/sites/ssa/Department%20of%20Aging%20-%20Adult%20Services/Documents/2012\\_04\\_quality\\_of\\_life.pdf](http://www.sccgov.org/sites/ssa/Department%20of%20Aging%20-%20Adult%20Services/Documents/2012_04_quality_of_life.pdf)
- 23 California's Alzheimer's Disease State Plan Task Force. (2010). California's State Plan for Alzheimer's Disease: An Action Plan for 2011-2021. Retrieved from <http://www.cdph.ca.gov/programs/alzheimers/Documents/California%27s%20State%20Plan%20for%20AD.pdf>
- 24 Alameda County Public Health Department. (2008). Life and Death from Unnatural Causes: Health and Social Inequity in Alameda County. Retrieved from <http://www.acphd.org/media/53628/unnatcs2008.pdf>
- 25 Adler, N., Stewart J., Cohen S., Cullen M., Roux Diez A., Dow W., Williams, D. (2007). Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the United States. The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health. Retrieved from: [http://www.macses.ucsf.edu/downloads/reaching\\_for\\_a\\_healthier\\_life.pdf](http://www.macses.ucsf.edu/downloads/reaching_for_a_healthier_life.pdf)
- 26 Corrigan, P., & Watson, A. (2002). Understanding the Impact of Stigma on People with Mental Illness. *World Psychiatry, 1*(1), 16–20. PMID: PMC1489832.
- 27 Raimi + Associates. (2012). *2012 Quality of Life Survey Report, Santa Clara County, California: A report to inform the County of Santa Clara's General Plan Health Element*. Retrieved from [http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/HealthElement\\_QualityOfLife\\_Surveyreport.pdf](http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/HealthElement_QualityOfLife_Surveyreport.pdf)
- 28 Marmot, M. (2002). The Influence of Income on Health: Views of an Epidemiologist. *Health Affairs, 21*(2), 31-46. Retrieved from <http://content.healthaffairs.org/content/21/2/31.full.html>
- 29 Substance Abuse and Mental Health Services Administration. (2014). Mayors' Resource Guide on Behavioral Health Issues, 4. Retrieved from <http://store.samhsa.gov/shin/content//PEP14-MAYORSRG/PEP14-MAYORSRG.pdf>

## Health Element – Works Cited

- 30 Santa Clara Valley Health and Hospital System, Mental Health Department and Department of Alcohol and Drug Services. (2014). Integration Plan for a New Department of Behavioral Health Services. Retrieved from [http://www.sccgov.org/sites/mhd/AboutUs/LearningPartnershipDivision/Documents/BH%20integration/BH%20Integration%20Plan\\_Final\\_012014%20to%20BOS.pdf](http://www.sccgov.org/sites/mhd/AboutUs/LearningPartnershipDivision/Documents/BH%20integration/BH%20Integration%20Plan_Final_012014%20to%20BOS.pdf)
- 31 National Institute on Drug Abuse. (2014). DrugFacts: Prescription and Over-the-Counter Medications. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/prescription-over-counter-medications>
- 32 National Highway Traffic Safety Administration. (2014). Fatal Crashes and Percent Alcohol-Impaired Driving, by Time of Day and Crash Type, USA, 2012. [Data file]. Retrieved from <http://www.fars.nhtsa.dot.gov/Crashes/CrashesAlcohol.aspx>
- 33 Santa Clara Valley Health and Hospital System, Mental Health Department and Department of Alcohol and Drug Services. (2014). Integration Plan for a New Department of Behavioral Health Services. Retrieved from [http://www.sccgov.org/sites/mhd/AboutUs/LearningPartnershipDivision/Documents/BH%20integration/BH%20Integration%20Plan\\_Final\\_012014%20to%20BOS.pdf](http://www.sccgov.org/sites/mhd/AboutUs/LearningPartnershipDivision/Documents/BH%20integration/BH%20Integration%20Plan_Final_012014%20to%20BOS.pdf)
- 34 Centers for Disease Control and Prevention. (2011). Smoking and Tobacco Use Fact Sheets. Retrieved from [www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm)
- 35 SAMHSA -HRSA Center for Integrated Health Solutions. (2014). Retrieved from <http://www.integration.samhsa.gov/health-wellness/wellness-strategies/tobacco-cessation-2>
- 36 Centers for Disease Control and Prevention. (2009). National Suicide Statistics at a Glance. Retrieved from [http://www.cdc.gov/violenceprevention/suicide/statistics/leading\\_causes.html](http://www.cdc.gov/violenceprevention/suicide/statistics/leading_causes.html)
- 37 Centers for Disease Control and Prevention. (2011). Suicidal Thoughts and Behaviors Among Adults Aged ≥18 years—United States, 2008-2009. Retrieved from [http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6013a1.htm?s\\_cid=ss6013a1\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6013a1.htm?s_cid=ss6013a1_e)
- 38 Ilgen, M., & Kleinberg, F. (2011). The Link between Substance Abuse, Violence, and Suicide. *Psychiatric Times*, 28, 25-27. Retrieved from: <http://www.psychiatrictimes.com/substance-use-disorder/link-between-substance-abuse-violence-and-suicide>
- 39 Santa Clara County Suicide Prevention Advisory Committee. (2010). Giving People Help and Hope, Suicide Prevention Strategic Plan, 17. Retrieved from [http://www.sccgov.org/sites/mhd/Providers/SuicidePrevention/Documents/Suicide-Prevention-Strategic-Plan-Final-Draft-for-BOS-\\_5\\_.pdf](http://www.sccgov.org/sites/mhd/Providers/SuicidePrevention/Documents/Suicide-Prevention-Strategic-Plan-Final-Draft-for-BOS-_5_.pdf)
- 40 Santa Clara County Suicide Prevention Advisory Committee. (2010). Giving People Help and Hope, Suicide Prevention Strategic Plan, 17. Retrieved from [http://www.sccgov.org/sites/mhd/Providers/SuicidePrevention/Documents/Suicide-Prevention-Strategic-Plan-Final-Draft-for-BOS-\\_5\\_.pdf](http://www.sccgov.org/sites/mhd/Providers/SuicidePrevention/Documents/Suicide-Prevention-Strategic-Plan-Final-Draft-for-BOS-_5_.pdf)
- 41 Substance Abuse and Mental Health Services Administration. (2013). Violence and Mental Illness: The Facts. Retrieved from <http://promoteacceptance.samhsa.gov/publications/facts.aspx>
- 42 Substance Abuse and Mental Health Services Administration. (2013). Violence and Mental Illness: The Facts. Retrieved from <http://promoteacceptance.samhsa.gov/publications/facts.aspx>
- 43 Appleby, L., Mortensen, P. B., Dunn, G., & Hiroeh, U. (2001). Death by homicide, suicide, and other unnatural causes in people with mental illness: a population-based study. *The Lancet*, 358, 2110-2112.
- 44 Substance Abuse and Mental Health Services Administration. (2014). Mayors' Resource Guide on Behavioral Health Issues, 4. Retrieved from <http://store.samhsa.gov/shin/content//PEP14-MAYORSRG/PEP14-MAYORSRG.pdf>

## Health Element – Works Cited

- 45 Oja, P., Titze, S., Bauman, A., de Gues, B., Krenn, P., Reger-Nash, B., & Kohlberger, T. (2011). Health Benefits of Cycling: A Systematic Review. *Scandinavian Journal of Medicine and Science in Sports*, 12(4), 496-509. DOI:10.1111/j.1600-0838.2011.01299.x
- 46 Centers for Disease Control and Prevention. (2001). Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services. In *Morbidity and Mortality Weekly Report*, 50(RR18), 1-16. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5018a1.htm>
- 47 Oja, P., Titze, S., Bauman, A., de Gues, B., Krenn, P., Reger-Nash, B., & Kohlberger, T. (2011). Health Benefits of Cycling: A Systematic Review. *Scandinavian Journal of Medicine and Science in Sports*, 12(4), 496-509. DOI:10.1111/j.1600-0838.2011.01299.x
- 48 Rails-to-Trails Conservancy. (2008). Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking. Retrieved from <http://www.railstotrails.org/resourcehandler.ashx?id=2948>
- 49 Besser, L.M., and Dannenberg, A.L. (2005). Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations. *American Journal of Preventive Medicine*, 29(4), 273-80.
- 50 Litman, T. (2010). Evaluating Public Transportation Health Benefits. Victoria Transport Policy Institute for the American Public Transportation Association. Retrieved from [http://www.apta.com/resources/reportsandpublications/Documents/APTA\\_Health\\_Benefits\\_Litman.pdf](http://www.apta.com/resources/reportsandpublications/Documents/APTA_Health_Benefits_Litman.pdf)
- 51 Kim, J. J., Smorodinsky, S., Lipsett, M., Singer, B.C., Hodgson, A.T., & Ostro, B. (2004). Traffic-related Air Pollution near Busy Road: The East Bay Children's Respiratory Health Study. *American Journal of Respiratory and Critical Care Medicine*, 170(5), 520-526.
- 52 Daisa, J. M., & Peers, J. B. (2010). Narrow Residential Streets: Do They Really Slow Down Speeds? Institute of Transportation Engineers. Retrieved from <http://www.ite.org/traffic/documents/AHA97F46.pdf>
- 53 Anderson, R. W., McLean, A.J., Farmer, M.J., Lee, B.H., & Brooks, C.G. (1997). Vehicle Travel Speeds and the Incidence of Fatal Pedestrian Crashes. *Accident Analysis and Prevention*, 29(5), 667-674.
- 54 Centers for Disease Control and Prevention. (2014). Facts about Physical Activity. Retrieved from <http://www.cdc.gov/physicalactivity/data/facts.html>
- 55 Centers for Disease Control and Prevention. (2011). Physical Activity and Health: The Benefits of Physical Activity. Retrieved from <http://www.cdc.gov/physicalactivity/everyone/health/index.html>
- 56 California Department of Education. (2014). 2013-14 California Physical Fitness Report – Overall Meeting Healthy Fitness Zone Summary of Results for Santa Clara County [Data file]. Retrieved from <http://data1.cde.ca.gov/dataquest/page2.asp?Level=County&submit1=Submit&Subject=FitTest>
- 57 Santa Clara County Public Health Department (2013), Obesity, Physical Activity and Nutrition in Santa Clara County, p. 9. Retrieved from: [http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Obesity%202014/Obesity%20report%20final\\_4.15.14.pdf](http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Obesity%202014/Obesity%20report%20final_4.15.14.pdf)
- 58 Institute of Medicine. (2009). Local Government Actions to Prevent Childhood Obesity, Report Brief. Retrieved from <http://www.iom.edu/~media/Files/Report%20Files/2009/ChildhoodObesityPreventionLocalGovernments/local%20govts%20obesity%20report%20brief%20FINAL%20for%20web.ashx>
- 59 Kaczynski, A.T., & Henderson, K. (2007). Environmental Correlates of Physical Activity: A Review of Evidence about Parks and Recreation. *Leisure Sciences*, 29(4), 315-354. DOI: 10.1080/01490400701394865

## Health Element – Works Cited

- <sup>60</sup> Babey, S., Wolstein, J., Krumholz, S., Robertson, B., & Diamant. (2013). Physical Activity, Park Access and Park Use Among California Adolescents. UCLA Center for Health Policy Research. Retrieved from <http://healthpolicy.ucla.edu/publications/Documents/PDF/parkaccesspb-mar2013.pdf>
- <sup>61</sup> Roemmich, J., Epstein, L., Raja, S., Yin, L., Robinson, J., & Winiewicz, D. (2006). Association of Access to Parks and Recreational Facilities with the Physical Activity of Young Children. *Preventive Medicine, 43*(6), 437-441. DOI:10.1016/j.ypmed.2006.07.007
- <sup>62</sup> Kaczynski, A. T., Potwarka, L. R., & Saelens, B. E. (2008). Association of Park Size, Distance, and Features with Physical Activity in Neighborhood Parks. *American Journal of Public Health, 98*(8): 1451-1456. DOI: 10.2105/AJPH.2007.129064
- <sup>63</sup> Cooper, A. R., Page, A. S., Wheeler, B. W., Hillsdon, M., Griew, P., & Jago, R. (2010). Patterns of GPS Measured Time Outdoors After School and Objective Physical Activity in English Children: the PEACH Project. *The International Journal of Behavioral Nutrition and Physical Activity, 7* (31), DOI: 10.1186/1479-5868-7-31
- <sup>64</sup> Dolinsky, D., Namenek Brouwer, R., Evenson, K., Siega-Riz, A. M., & Østbye, T. (2011). Correlates of Sedentary Time and Physical Activity Among Preschool-aged Children. *Preventing Chronic Disease, 8*(6).
- <sup>65</sup> Maas, J., Verheij, R., Groenewegen, P., de Vries, S., & Spreeuwenberg, P. (2006). Green Space, Urbanity, and Health: How Strong is the Relation? *Journal of Epidemiology and Community Health, 60*(7): 587-592.
- <sup>66</sup> Faber Taylor, A., Kuo, F., & Sullivan, W. Coping with ADHD: The Surprising Connection to Green Play Settings. *Environment and Behavior, 33*(1): 54-77. DOI: 10.1177/00139160121972864
- <sup>67</sup> Raimi + Associates. (May 2013). Community Health Existing Conditions Report: For the County of Santa Clara General Plan Health Element
- <sup>68</sup> Raimi + Associates. (May 2013). Community Health Existing Conditions Report: For the County of Santa Clara General Plan Health Element
- <sup>69</sup> California Department of Public Health. (2011). California Dietary Practices Survey, Santa Clara County sample, 2011 [Data file].
- <sup>70</sup> Biswas, A., Oh, P., Faulkner, G., Bajaj, R., Silver, M., Mitchell, M., & Alter, D. (2015). Sedentary Time and Its Association with Risk for Disease Incidence, Mortality, and Hospitalization in Adults. *Annals of Internal Medicine 162*(2), 123-132. doi:10.7326/M14-1651
- <sup>71</sup> County of Santa Clara. (2013). Community Health Existing Conditions Report. Page 7-2. Retrieved from [http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC\\_Existing\\_Health\\_Conditions\\_FINAL\\_May\\_2013.pdf](http://www.sccgov.org/sites/planning/PlansPrograms/GeneralPlan/Health/Documents/SCC_Existing_Health_Conditions_FINAL_May_2013.pdf)
- <sup>72</sup> The American Lung Association. (2014). State of the Air, 2014. Retrieved from <http://www.stateoftheair.org/2014/states/california/>
- <sup>73</sup> Silva, R., West, J., Zhang, Y., Anenberg, S., Lamarque, J. F., Shindell, D., ... Folberth, G. Global Premature Mortality Due to Anthropogenic Outdoor Air Pollution and the Contribution of Past Climate Change. *Environmental Research Letters, 8*(3). DOI:10.1088/1748-9326/8/3/034005
- <sup>74</sup> Kampa, M., Castanas, E. (2008). Human Health Effects of Air Pollution. *Environmental Pollution, 151*(2), 362-367. DOI:10.1016/j.envpol.2007.06.012
- <sup>75</sup> Kinney, P. (2008). Climate Change, Air Quality, and Human Health. *American Journal of Preventive Medicine, 35*(5), 459-467. DOI: <http://dx.doi.org/10.1016/j.amepre.2008.08.025>

## Health Element – Works Cited

- <sup>76</sup> Post, E., Granbsch, A., Weaver, C., Morefield, P., Huang, J., Leung, L., ...Mahoney, H. (2012). Variation in Estimated Ozone-Related Health Impacts of Climate Change due to Modeling Choices and Assumptions. *Environmental Health Perspectives*, 120(11), 1559-1564. DOI: 10.1289/ehp.1104271
- <sup>77</sup> California Environmental Protection Agency, Air Resources Board. (2008). Facts about Ozone and Health. Retrieved from <http://www.arb.ca.gov/research/aaqs/caaqs/ozone/ozone-fs.pdf>
- <sup>78</sup> Bay Area Air Quality Management District. (2010). Bay Area 2010 Clean Air Plan, September 2010. Retrieved from <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/Plans/2010%20Clean%20Air%20Plan/CAP%20Volume%20I%20%20Appendices.ashx>
- <sup>79</sup> California Emergency Management Agency. (2012). California Adaptation Planning Guide: Planning for Adaptive Communities, 3-4.
- <sup>80</sup> Cooley, H., Moore, E., Heberger, M., & Allen, L. (2012). Social Vulnerability to Climate Change in California, 25. Retrieved from <http://www.energy.ca.gov/2012publications/CEC-500-2012-013/CEC-500-2012-013.pdf>
- <sup>81</sup> Ekstrom, J., & Moser S. (2012). Climate Change Impacts, Vulnerabilities, and Adaptation in the San Francisco Bay Area, 19.
- <sup>82</sup> California Climate Action Team, Public Health Workgroup. (2013). Preparing California for Extreme Heat: Guidance and Recommendations, 4.
- <sup>83</sup> Center for Disease Control and Prevention. Climate Change and Extreme Heat Events, p. 4. Retrieved from <http://www.cdc.gov/climateandhealth/pubs/ClimateChangeandExtremeHeatEvents.pdf>
- <sup>84</sup> Ekstrom, J., & Moser S. (2012). Climate Change Impacts, Vulnerabilities, and Adaptation in the San Francisco Bay Area, 11.
- <sup>85</sup> Knowlton, K., Rotkin-Ellman, M., King, G., Marqolis, H., Smith, D., Solomon, G., Trent, R., & English, P. The 2006 California Heat Wave: Impacts on Hospitalizations and Emergency Department Visits. *Environmental Health Perspectives*, 117(1), 61-67. DOI: 10.1289/ehp.11594
- <sup>86</sup> California Climate Action Team, Public Health Workgroup. (2013). Preparing California for Extreme Heat: Guidance and Recommendations, 4.
- <sup>87</sup> Reid, C., O'Neill, M., Gronlund, C., Brines, S., Brown, D., Diez-Roux, A., & Schwartz, J. Mapping Community Determinants of Heat Vulnerability. *Environmental Health Perspectives*, 117(11), 1730–1736. DOI: 10.1289/ehp.0900683
- <sup>88</sup> Environmental Protection Agency. (2009). Assessment of the Impacts of Global Change on Regional U.S. Air Quality: A Synthesis of Climate Change Impacts on Ground-Level Ozone. An Interim Report of the U.S. EPA Global Change Research Program, Washington, DC.
- <sup>89</sup> Bell, M., Goldberg, R., Hogrefe, C., Kinney, P., Knowlton, K., Lynn, B., ...Patz, J. (2007). Climate Change, Ambient Ozone, and Health in 50 U.S. Cities. *Climatic Change*, 82, 61-76. DOI:10.1007/s10584-006-9166-7
- <sup>90</sup> Bay Area Air Quality Management District. (2010). Bay Area 2010 Clean Air Plan, September 2010. Retrieved from <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/Plans/2010%20Clean%20Air%20Plan/CAP%20Volume%20I%20%20Appendices.ashx>
- <sup>91</sup> California Environmental Protection Agency. (2013). Indicators of Climate Change in California, p. v.
- <sup>92</sup> Ekstrom, J., & Moser S. (2012). Climate Change Impacts, Vulnerabilities, and Adaptation in the San Francisco Bay Area, 24.
- <sup>93</sup> Wegesser, T., Pinkerton, K., & Last, J. (2009). California Wildfires of 2008: Coarse and Fine Particulate Matter Toxicity. *Environmental Health Perspectives*, 117(6), 893-897. DOI: 10.1289/ehp.0800166

## Health Element – Works Cited

- <sup>94</sup> Delfino, R., Brummel, S., Wu, J., Stern, H., Ostro, B., Lipsett, M., ...Gillen, D. (2008). The Relationship of Respiratory and Cardiovascular Hospital Admissions to the Southern California Wildfires of 2003. *Occupational Environment Medicine*, 66(3), pp. 189-97. DOI: 10.1136/oem.2008.041376
- <sup>95</sup> Maizlish, N., Woodcock, J., Co, S., Ostro, B., Fanai, A., IMechE, C., & Fairly, D. (2013). Health Cobenefits and Transportation-Related Reductions in Greenhouse Gas Emissions in the San Francisco Bay Area. *American Journal of Public Health*, 103(4), 703–709. DOI:10.2105/AJPH.2012.300939
- <sup>96</sup> Kinney, Patrick L. (2008). Climate Change, Air Quality, and Human Health. *American Journal of Preventive Medicine*, 35(5), 459-467. DOI: <http://dx.doi.org/10.1016/j.amepre.2008.08.025>
- <sup>97</sup> Pinkerton, K., Rom, W., Akpınar-Elci, M., Malmes, J., Bayram, H., Brandli, O., ...American Thoracic Society Environmental Health Policy Committee. (2012). An Official American Thoracic Society Workshop Report: Climate Change and Human Health. *Proceedings of the American Thoracic Society*, 9(1), 3-8. DOI: 10.1513/pats.201201-015ST
- <sup>98</sup> Environmental Protection Agency. (2008). A Review of the Impact of Climate Variability and Change on Aeroallergens and Their Associated Effects.
- <sup>99</sup> Schmier, J., & Ebi, K. (2009). The Impact of Climate Change and Aeroallergens on Children's Health. *Allergy Asthma Proceedings*, 30(3), 229–237.
- <sup>100</sup> Staudt, A, Glick, P., Mizejewski, D., Inkly, D. (2010). Extreme Allergies and Global Warming. National Wildlife Federation and Asthma and Allergy Foundation of America.
- <sup>101</sup> D'amato, G., Cecchi, L., D'Amato, M., & Liccardi, G. (2010). Urban Air Pollution and Climate Change as Environmental Risk Factors of Respiratory Allergy: An Update. *Journal of Investigational Allergology and Clinical Immunology*, 20(2), 95-102.
- <sup>102</sup> Institute of Medicine. (2011). *Climate Change, the Indoor Environment, and Health*. Washington, DC: The National Academies Press.
- <sup>103</sup> California Department of Public Health. (2008). Public Health Climate Change Adaptation Strategy, 16. Retrieved from [http://www.cdph.ca.gov/programs/CCDHP/ Documents/CA\\_Public\\_Health\\_Adaptation\\_Strategies\\_final.pdf](http://www.cdph.ca.gov/programs/CCDHP/ Documents/CA_Public_Health_Adaptation_Strategies_final.pdf)
- <sup>104</sup> California Natural Resources Agency. (2009). California Climate Adaptation Strategy, p. 37.
- <sup>105</sup> Heberger, M., Cooley, H., Herrera, P., Gleick, P., & Moore, E. (2009). The Impacts of Sea-Level Rise on the California Coast. Retrieved from <http://pacinst.org/publication/the-impacts-of-sea-level-rise-on-the-california-coast/>
- <sup>106</sup> Morello-Frosch, R. (2009). The Climate Gap: Inequalities in How Climate Change Hurts Americans and How to Close the Gap, 15. Retrieved from [http://dornsife.usc.edu/assets/sites/242/docs/The\\_Climate\\_Gap\\_Full\\_Report\\_FINAL.pdf](http://dornsife.usc.edu/assets/sites/242/docs/The_Climate_Gap_Full_Report_FINAL.pdf)
- <sup>107</sup> Maizlish, N., Woodcock, J., Co, S., Ostro, B., Fanai, A., IMechE, C., & Fairly, D. (2013). Health Cobenefits and Transportation-Related Reductions in Greenhouse Gas Emissions in the San Francisco Bay Area. *American Journal of Public Health*, 103(4), 703–709. doi:10.2105/AJPH.2012.300939
- <sup>108</sup> Bay Area Regional Health Inequities Initiative. (2013). Health and Equity Co-benefits of Addressing Climate Change. Retrieved from <http://barhii.org/download/info/ccqg02.pdf>
- <sup>109</sup> Henry, M., Cortes, A., Shivji, A, Buck, K., Khadduri, J., & Culhane, D. (2014). The 2014 Annual Homeless Assessment Report (AHAR) to Congress. Retrieved from <https://www.hudexchange.info/resources/documents/2014-AHAR-Part1.pdf>

## Health Element – Works Cited

- <sup>110</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2015). Web-based Injury Statistics Query and Reporting System (WISQARS) [Data file]. Retrieved from <http://www.cdc.gov/ncipc/wisqars>
- <sup>111</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2012). Youth Violence – Facts at a Glance 2012. Retrieved from [http://www.cdc.gov/violenceprevention/pdf/yv\\_datasheet\\_2012-a.pdf](http://www.cdc.gov/violenceprevention/pdf/yv_datasheet_2012-a.pdf)
- <sup>112</sup> Violence Prevention Alliance and Education Development Center. (2011). Why invest in violence prevention? Geneva, Switzerland, and Newton USA. Retrieved from [http://www.who.int/violenceprevention/publications/why\\_invest\\_in\\_violence.pdf](http://www.who.int/violenceprevention/publications/why_invest_in_violence.pdf)
- <sup>113</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2015). Web-based Injury Statistics Query and Reporting System (WISQARS) [Data file]. Retrieved from <http://www.cdc.gov/ncipc/wisqars>
- <sup>114</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2015). Web-based Injury Statistics Query and Reporting System (WISQARS) [Data file]. Retrieved from <http://www.cdc.gov/ncipc/wisqars>
- <sup>115</sup> Santa Clara County Public Health Department. (2012). Santa Clara County Violence Profile, 2012. Retrieved from [http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Final\\_Violence%20Profile%20Report\\_6%2021%2012\\_PHD%20FINAL.pdf](http://www.sccgov.org/sites/sccphd/en-us/Partners/Data/Documents/Final_Violence%20Profile%20Report_6%2021%2012_PHD%20FINAL.pdf)
- <sup>116</sup> Altschuler, A., Somkin, C.P., & Adler, N.E. (2004). Local services and amenities, neighborhood social capital, and health. *Social Science & Medicine*, 59(6), 1219-1229.
- <sup>117</sup> Perez-Smith, A., Albus, K., & Weist M. (2001). Exposure to violence and neighborhood affiliation among inner-city youth. *Journal of Clinical Child Psychology*, 30(4), 464-72.
- <sup>118</sup> Glew, G.M., Fan, M., Wayne, K., & Rivara, F.P. (2008). Bullying and School Safety. *The Journal of Pediatrics*. 152(1), 123-8.
- <sup>119</sup> U.S. Department of Justice, Office of Justice Programs. (2002). Overview of the Research Literature on Consequences of Criminal Victimization. Retrieved from [http://www.ncjrs.gov/html/ojjdp/yv\\_2002\\_2\\_1/page1.html](http://www.ncjrs.gov/html/ojjdp/yv_2002_2_1/page1.html)
- <sup>120</sup> Foster, S., & Giles-Corti, B. (2008). The Built Environment, Neighborhood Crime, and Constrained Physical Activity: An Exploration of Inconsistent Findings. *Preventive Medicine*, 47(3), 241-51.
- <sup>121</sup> World Health Organization. (2010). *Violence Prevention the Evidence: Series of Briefings on Violence Prevention*. Retrieved from [http://www.who.int/violence\\_injury\\_prevention/violence/4th\\_milestones\\_meeting/evidence\\_briefings\\_all.pdf](http://www.who.int/violence_injury_prevention/violence/4th_milestones_meeting/evidence_briefings_all.pdf)
- <sup>122</sup> Violence Prevention Alliance and Education Development Center. (2011). Why invest in violence prevention? Geneva, Switzerland, and Newton USA. Retrieved from [http://www.who.int/violenceprevention/publications/why\\_invest\\_in\\_violence.pdf](http://www.who.int/violenceprevention/publications/why_invest_in_violence.pdf)
- <sup>123</sup> David-Ferdon C., & Simon T. (2014). Preventing Youth Violence: Opportunities for Action. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

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Adopted August 25, 2015**

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