Health in All Policies Task Force
Report to the Strategic Growth Council

December 3, 2010

Table of Contents

Acknowledgments …….. 2

Executive Summary…...……... 7

Introduction ..……..…….. 14

Health in All Policies Recommendations …… 25

Health in All Policies Recommendations Narrative …….. 34

I. Promote Healthy Communities ……... 34

A. Active Transportation ……. 34

B. Housing and Indoor Spaces ……..... 47

C. Parks, Urban Greening, and Places to be Active …….. 53

D. Violence Prevention …… 61

E. Healthy Food …… 63

II. Promote Healthy Public Policy …….. 75

A. State Guidance …… 75

B. Embedding Health in Decision-Making …… 78

C. Data and Research ……. 81

D. Cross-Agency Collaboration and Expertise …… 83

E. Community Engagement ……... 85

F. Continue Health in All Policies Task Force ……. 86

Next Steps …… 88

Appendices …….. 109

1. Executive Order S-04-10 ……... 110

2. HiAP 2010 Public Workshops Summary and Participants ……. 113

3. Condensed List of Collected Recommendations …….. 116

4. Issue Briefs …….. 148

Acknowledgments

The Health in All Policies staff thank the Task Force members for their commitment to engaging in this challenging cross-sectoral work, responsiveness to short deadlines and multiple questions, and countless hours of discussion, meetings, and review. This is truly their work.

The Task Force is grateful to The California Endowment and the California Tobacco Control Branch for their generous financial support.

Staff from numerous programs within the Department of Public Health contributed their invaluable subject matter expertise to the development of this report.

Finally, the Health in All Policies Task Force is grateful for those members of the public who supported its work and provided thoughtful feedback at public workshops and during public comment periods.

Health in All Policies Task Force Members

Air Resources Board
- Lynn Terry, Deputy Executive Officer
- Jamesine Rogers, Air Pollution Specialist, State Implementation Plan and Local Government Strategies Section

Business, Transportation, and Housing Agency
- Gregg Albright, Deputy Secretary, Environmental Policy and Integration
- Kathryn Lowell, Deputy Secretary, Health Systems and Life Sciences

Department of Community Services and Development
- Maria Caudill, Legislative and External Affairs

Department of Education
- Cindy Cunningham, Deputy State Superintendent
- Mary Prather, Education Administrator

Department of Finance
- Karen Finn, Program Budget Manager

Department of Food and Agriculture
- AG Kawamura, Secretary
- David Pegos, Deputy Secretary, Communications and External Affairs

Department of Forestry and Fire Protection (CAL FIRE)
- Russ Henly, Assistant Deputy Director, Resource Protection and Improvement
- John Melvin, State Urban Forester

Department of Housing and Community Development
- Linda Wheaton, Assistant Director of Local Government Affairs
- Cathy Creswell, Deputy Director, Division of Housing Policy Development

Department of Justice
Claudia Polsky, Deputy Attorney General

Department of Parks and Recreation
Nina Gordon, Senior Policy Coordinator
Donna Pozzi, Chief, Interpretation and Education Division
Eileen Hook, State Park and Recreation Commission Staff

Department of Social Services
Pete Cervinka, Program Deputy Director, Benefits and Services
Charr Lee Metsker, Deputy Director, Welfare to Work Division

Department of Transportation (Caltrans)
Garth Hopkins, Office Chief, Division of Transportation Planning
Marilee Mortenson, Senior Environmental Planner

Environmental Protection Agency
Cindy Tuck, Undersecretary
Andrew Altevogt, Senior Manager Climate Programs

Governor's Office of Planning and Research
Julia Lave Johnston, Deputy Director
Seth Litchney, Senior Planner

Health and Human Services Agency
Peter Barth, Assistant Secretary

Labor and Workforce Development Agency
Douglas Hoffner, Undersecretary
Jeff Wyly, Assistant Secretary, Governor's Initiatives

Office of Gang and Youth Violence Policy
Nancy Lyons, Chief Deputy Director

Office of Traffic Safety
Leslie Witten-Rood, Assistant Director
Lisa Dixon, Regional Coordinator

Strategic Growth Council Staff

Heather Fargo, Executive Policy Officer

Governor's Office of Planning and Research
Anna Marie Young, Assistant Planner, State Clearinghouse

Report Authors

California Department of Public Health
Linda Rudolph, Deputy Director
Aimee Sisson, Public Health Medical Officer
Julia Caplan, Project Lead
Lianne Dillon, Research Scientist
Karen Ben-Moshe, Project Coordinator

University of California, San Francisco
Mina Mohammadi, Research Assistant
Sarah Sattelmeyer, Research Assistant
Miranda Walker, Research Assistant

Stakeholder Advisory Group

Bay Area Regional Health Inequities Initiative (BARHII)
Bob Prentice

Breakthrough Communities
Carl Anthony, Paloma Pavel

California Pan-Ethnic Health Network
Marty Martinez, Ellen Wu

California Rural Legal Assistance
Phoebe Seaton

Central California Regional Obesity Prevention Program
Genoveva Islas-Hooker

Partnership for the Public's Health
Julie Williamson

PolicyLink
Judith Bell, Jme McLean

Prevention Institute
Manal Aboelata, Jeremy Cantor, Larry Cohen, Leslie Mikkelsen

Public Health Institute
Matthew Marsom

Public Health Law & Policy
Marice Ashe, Robert Ogilvie, Heather Wooten

Regional Asthma Management and Prevention
Joel Ervice, Anne Kelsey-Lamb

The California Endowment
George Flores, Judi Larsen, Marion Standish

Key Informants and Contributors

American Farmland Trust, Serena Unger
California Coalition for Rural Housing, Rob Wiener
California Department of Mental Health, Penny Knapp
California Department of Public Health, Kathy Dervin
California Food Policy Advocates, Ken Hecht, George Manalo-LeClair
California Park and Recreation Society, Jane Adams
California ReLeaf, Joe Liszewski
California State Controller's Office, Ruth Holton-Hodson
Center for Civic Partnerships, Nicole Hara
California WALKS, Wendy Alfsen
California WIC Association
Center for Civic Partnerships, Joan Twiss
Center for Urban Forest Research, Greg McPherson
City of Berkeley, Public Health Division, Kate Clayton
City of Fullerton, Al Zelinka
Clean Water Action
Community Alliance with Family Farmers, Dave Runsten
Domus Development, LLC, Meea Kang
Healthy Places Coalition, Heather Kuiper
Institute for Local Government, Yvonne Hunter, Steve Sanders
Local Government Commission, Scott Clark, Judy Corbett
Marin County Department of Health and Human Services, Rochelle Ereman
Pesticide Watch
PolicyLink, Chione Flegal, Rubén Lizardo, Shireen Malekafzali, Marc Philpart
Prevention Institute, Rachel Davis, Xavier Morales, Sandra Viera
Public Health Law & Policy, Robin Salsburg, Nicole Schneider
Rails to Trails Conservancy, Laura Cohen
Regional Asthma Management and Prevention, Brandon Kitagawa
Sacramento Food Bank and Family Services, Jeremiah Rhine
Safe Routes to School National Partnership, Deb Hubsmith, Jessica Meaney
Samuels and Associates, Rajni Banthia
San Mateo County Health System, Edith Cabuslay
San Mateo Public Health Department, Scott Morrow
Selma Abinader & Associates, Selma Abinader, Suzanne del Mazo
Soil Born Farms, Jared Clark
TransForm, Stuart Cohen
University of California, Berkeley, University of California, San Francisco, Laura Gottlieb
University of California, Berkeley Center for Cities and Schools, Deborah McKoy, Jeff Vincent
University of California, Davis Sustainable Agriculture Research and Education Program, Gail Feenstra

Photo Credits

freephoto.com
freestockphoto.com
pedbikeimages.com
phil.cdc.gov

Executive Summary

Background

California faces critical problems that will shape the futures of our children and grandchildren. Climate change, water shortages, fiscal challenges, an aging population, and increasing health inequities are but a few examples of the compelling issues facing the state. At the same time, California – and the nation – faces unprecedented levels of chronic disease, which now accounts for over 75 percent of all deaths in California[1] and 75 percent of all U.S. health care expenditures.[2] Obesity and overweight, which increase chronic disease risk and contribute to lost productivity, cost California an estimated $21.0 billion in 2006.[3]

Health is a critical component of sustainable communities, and is directly linked to the goals of the Strategic Growth Council (SGC). For example, when Californians consume local produce they enhance their own health through consumption of fruits and vegetables and help preserve California's agricultural lands. Policies that support active transportation help Californians incorporate more health-promoting physical activity into their lives, while also reducing greenhouse gas emissions and other harmful co-pollutants. Infill development can help to reduce urban sprawl, reduce greenhouse gas emissions, and support location-efficient housing that promotes active transportation and allows workers to reap both economic and health benefits. Good health is also critical for economic sustainability, increasing workforce participation and productivity, and slowing the ongoing rise in medical care expenditures, which diverts resources from other State priorities such as education or investments in green energy.

The health of California's population is largely determined by the social, physical, economic, and service environments in which people live, work, study, and play. These environments shape the choices that people make every day, as well as their opportunities and resources for health. People in disadvantaged communities often have fewer resources for health, which is reflected in significantly worse health outcomes.

The types of complex problems addressed in this report have been described as "wicked" problems.[4] They are multi-factorial with many interdependencies, difficult to fully define, lacking a clear solution, and not the responsibility of any single organization or government department. Such problems require a new policy paradigm and innovative solutions that reach across organizational silos and promote co-benefits, which create incentives for coordinated policy approaches. Health in All Policies, or HiAP, is a collaborative approach that has been used internationally to address just these kinds of issues. A HiAP approach recognizes that health and prevention are impacted by policies that are managed by non-health government and non-government entities, and that many strategies that improve health will also help to meet the policy objectives of other agencies. The World Health Organization, European Union, South Australia, Finland, and other Western nations are all exploring ways to implement HiAP. Although it does not use the term HiAP, the Surgeon General's National Prevention,

Health Promotion, and Public Health Council also brings together cross-sectoral agency leaders to address health and prevention.

The Health in All Policies Task Force

California's Health in all Policies Task Force was established by Executive Order S-04-10 of Governor Arnold Schwarzenegger on February 23, 2010, under the auspices of the SGC. The Task Force was charged with identifying priority actions and strategies for state agencies to improve community health while also advancing the other goals of the SGC. Between April and November of 2010, representatives from 19 California agencies, departments, and offices came together in multiple individual and Task Force meetings, participated in public workshops, and received written comments from a diverse array of stakeholders. These State leaders have developed a broad-ranging set of recommendations on feasible strategies and actions to promote health while also meeting other objectives of the SGC.

The Task Force defined a healthy community as one that meets the basic needs of all residents, ensures quality and sustainability of the environment, provides for adequate levels of economic and social development, achieves health and social equity, and assures social relationships that are supportive and respectful. The Task Force also identified the following aspirational goals, which provide a structure for the recommendations contained in this report:

- Every California resident has the option to safely walk, bicycle, or take public transit to school, work, and essential destinations.
- All California residents live in safe, healthy, affordable housing.
- Every California resident has access to places to be active, including parks, green space, and healthy tree canopy.
- Every California resident is able to live and be active in their communities without fear of violence or crime.
- Every California resident has access to healthy, affordable foods at school, at work, and in their neighborhoods.
- California's decision makers are informed about the health consequences of various policy options during the policy development process.

Recommendations

The recommendations put forth in this report are geared at improving the efficiency, cost-effectiveness, and collaborative nature of State government, while promoting both health and other goals of the SGC. They address two strategic directions:

1. Building healthy and safe communities with opportunities for active transportation; safe, healthy, affordable housing; places to be active, including parks, green space, and healthy tree canopy; the ability to be active without fear of violence or crime; and access to healthy, affordable foods.
2. Finding opportunities to add a health lens in public policy and program development and increase collaboration across agencies and with communities.

Executive Order S-04-10 calls for the Task Force to "identify priority programs, policies, and strategies to improve the health of Californians while advancing the SGC's goals of improving air and water quality, protecting natural resources and agricultural lands, increasing the availability of affordable housing, improving infrastructure systems, promoting public health, planning sustainable communities, and meeting the state's climate change goals."

All of the recommendations in this report address public heath. The table below summarizes the recommendations of this report and identifies the linkages between the recommendation and the other goals of the Strategic Growth Council. The full text of each recommendation can be found beginning on page 25.

Identifier	Abbreviated Recommendation	Strategic Growth Council Goals					
		Air and water quality	Affordable housing	Infrastructure systems	Natural resources and agricultural land	Sustainable communities planning	Climate change
I. PROMOTE HEALTHY COMMUNITIES							
I.A. Active Transportation							
I.A1	Utilize data to improve community planning and increase active transportation.	X	X	X		X	X
I.A2	Support active transportation through implementation of "complete streets."	X		X		X	X
I.A3	Incorporate safety considerations of all roadway users into programs, policies, and community designs.	X		X		X	X
I.A4	Highlight the opportunities presented by SB 375 to promote active transportation.	X		X		X	X
I.A5	Incorporate trails and greenways as part of an active transportation system.	X		X	X	X	X
I.A6	Promote and encourage active transportation and physical activity for State employees.	X		X			X
I.B. Housing and Indoor Spaces							
I.B1	Encourage sustainable development through healthy housing by offering incentives and providing State guidance.	X	X			X	X
I.B2	Explore secure and permanent funding for affordable housing.		X				

Identifier	Abbreviated Recommendation	Strategic Growth Council Goals					
		Air and water quality	Affordable housing	Infrastructure systems	Natural resources and agricultural land	Sustainable communities planning	Climate change
I.B3	Promote sustainable development through smart housing siting.	X	X	X	X	X	X
I.B4	Ensure that all workers and school-children enjoy smoke-free environments.	X					
I.C. Parks, Urban Greening, and Places to be Active							
I.C1	Support urban greening and access to green spaces.	X			X	X	X
I.C2	Improve wildfire-related air quality and safety.	X			X	X	X
I.C3	Take stronger actions to prevent and control invasive species which pose a threat to all ecosystems, including agriculture and forests.	X			X		X
I.C4	Encourage joint use of facilities throughout communities in California.				X	X	
I.C5	Reduce the environmental impact of tobacco waste.	X			X		
I.D. Violence Prevention							
I.D1	Build violence prevention capacity statewide by supporting community-level efforts to engage and convene stakeholders to develop data-informed prevention actions, including through training to promote effective community engagement and joint action.					X	
I.D2	Disseminate existing guidance on Crime Prevention through Environmental Design.					X	
I.D3	Analyze State violence prevention spending in the ten California communities that have the highest rates of violence and develop recommendations for State agency action in those ten communities, drawing from evidence-based approaches.					X	

Identifier	Abbreviated Recommendation	Strategic Growth Council Goals					
		Air and water quality	Affordable housing	Infrastructure systems	Natural resources and agricultural land	Sustainable communities planning	Climate change
I.D4	Expand the Governor's Office of Gang and Youth Violence Policy to become a comprehensive clearinghouse on violence prevention that will develop and distribute crime prevention education and training materials as well as provide training and technical assistance to communities.					X	
I.D5	Work with foundation, private sector, and State agency partners to increase resources for a Probation Resource Center to support probation departments' efforts to implement evidence-based practices.					X	
I.E. Healthy Food							
I.E1	Encourage and expand the availability of affordable and locally grown produce through "farm-to-fork" policies and programs.	X			X	X	X
I.E2	Better utilize State-administered food assistance programs to increase consumption of healthy foods, decrease consumption of low-nutrient, high-calorie foods, reduce hunger, and add dollars to the local economy.				X	X	
I.E3	Establish a California Food Policy Council comprised of State agencies and other relevant stakeholders involved with food production, distribution, purchase, promotion, provision, and health, in order to build a more robust, sustainable food system, alleviate hunger, and promote consumption of healthy foods.	X			X	X	X
I.E4	Leverage government spending to support healthy eating and sustainable local food systems.	X			X		X

Identifier	Abbreviated Recommendation	Strategic Growth Council Goals					
		Air and water quality	Affordable housing	Infrastructure systems	Natural resources and agricultural land	Sustainable communities planning	Climate change
II. PROMOTE HEALTHY PUBLIC POLICY							
II.A. State Guidance							
II.A1	Incorporate a health and health equity perspective into State guidance, surveys, and technical assistance documents where feasible and appropriate.	X	X	X	X	X	X
II.A2	Identify and publicize a comprehensive set of state resources for communities to use in healthy community planning.	X	X	X	X	X	X
II.B. Embedding Health in Decision Making							
II.B1	Incorporate health and health equity criteria into State grant Requests for Applications, review criteria and scoring, technical assistance, and monitoring/performance measures, where feasible and appropriate.	X	X	X	X	X	X
II.B2	Continue to provide integrated comments on federal legislative and policy proposals from multiple California agencies, including incorporation of a health and health equity lens (e.g., Transportation Reauthorization, Child Nutrition Reauthorization, Environmental Protection Agency Greenhouse Gas Regulation).	X	X	X	X	X	X
II.B3	Explore appropriate ways to integrate health analysis into existing State projects and plans.	X	X	X	X	X	X
II.C. Data and Research							
II.C1	State agencies and their contractors, where feasible and appropriate, should incorporate health and health equity indicators into data collection tools and accountability measures, and endeavor to standardize data elements and indicators to facilitate data collection, sharing, and accessibility.	X	X	X	X	X	X

Identifier	Abbreviated Recommendation	Strategic Growth Council Goals					
		Air and water quality	Affordable housing	Infrastructure systems	Natural resources and agricultural land	Sustainable communities planning	Climate change
II.C2	Increase use of evidence-based practices.	X	X	X	X	X	X
II.D. Cross-Agency Collaboration and Expertise							
II.D1	Foster deeper understanding and collaboration across State agencies.	X	X	X	X	X	X
II.E. Community Engagement							
II.E1	Improve opportunities for substantive community engagement in State agency decision-making.	X	X	X	X	X	X
II.F. Continue the Health in All Policies Task Force							
II.F1	Continue the Health in All Policies Task Force in order to foster continued dialogue on the impact of decisions on health and health equity, and to pursue implementation of recommendations. Expand participation to additional relevant agencies.	X	X	X	X	X	X

Challenges, Successes, and Next Steps

The Task Force has faced the same challenges that often make collaborative work difficult, such as restricted financial and staff resources, limited initial knowledge of each other's policy areas, and competing critical priorities. The Task Force made great strides in building trust, developing working relationships, establishing a baseline of knowledge about each other's policy areas, and identifying the multiple links between each policy area, strategic growth, equity, and health. The Task Force also collected and sifted through an enormous body of information and identified specific areas for further work to advance these co-benefits.

This report is a starting point; much work remains to guide implementation of these recommendations. The Task Force intends to work with the SGC in the coming year to identify priorities among this set of recommendations and to develop action plans and implementation strategies. The discussions and work of the Task Force have been exciting and challenging, and have demonstrated the power of deeper cross-sectoral engagement to address the interconnected wicked problems that we confront.

Introduction

California faces critical problems that will shape the futures of our children and grandchildren, such as climate change, water shortages, structural economic and fiscal challenges, threats to natural resources and agricultural lands, an aging population, communities with low educational attainment, immigration changes, and increasing inequities. These have been described as "wicked" problems – socially complex, multi-factorial with many interdependencies, difficult to fully define, lacking a clear solution, and not the responsibility of any single organization or government department.[5] Such problems require innovative solutions that reach across organizational silos. They require a new policy paradigm, and structures that advance trans-disciplinary and cross-sectoral thinking.[6] With the establishment of the Climate Action Team and the Strategic Growth Council (SGC), California is a leader in tackling wicked problems by providing formal opportunities for collaboration and coordination among leaders from across government. The SGC's Health in All Policies (HiAP) Task Force provides a unique opportunity to address another wicked problem – health, or what some experts have more aptly termed "illth."[7]

The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[8] Health is a fundamental component of quality of life, and a healthy population is a critical building block for a sustainable and thriving economy. Health increases workforce participation and productivity, while illness and injury impact the productivity not only of the individual, but also of family members who provide care for loved ones. Rising medical care expenditures, now estimated at 17 percent of U.S. gross domestic product,[9] sap resources that could be directed to other priorities such as education or investments in green energy. In the words of Ralph Waldo Emerson, "The first wealth is health."[10]

There is an intrinsic interdependence between the sustainability of the environment and the sustainability of the human species.[11] Global environmental challenges not only have direct impacts on health (e.g., extreme heat events), but also threaten the life supporting systems on which human beings depend – air, water, food, and shelter. The health effects of air pollution, crop loss, stratospheric ozone depletion, sea level rise, and collapse of fisheries – to name but a few – all suggest that environmental sustainability must itself be a key health goal.

Health and illness are influenced by the interaction of many factors including genetics, biology, individual behavior, access to health care, and the environment.[12] The socio-economic conditions that shape the health of individuals, communities, and jurisdictions as a whole – for example, income and social status, education, employment, social networks, early childhood experiences, the natural and built environments, and living conditions – are collectively referred to as the social determinants of health.[13] The social determinants of health have a far greater impact on how long and how well we live than medical care.[14,15,16] The inter-relationship between social determinants and health is complex. For example, education impacts poverty, poverty impacts health,

and health impacts workforce participation and productivity, which in turn impact income.

Environments impact health both directly – for example, through air pollution or contaminated soil or drinking water – and indirectly. Neighborhood resources and economics strongly influence the adoption of healthy lifestyles by making it more or less difficult for individuals to choose behaviors that promote or diminish health.[17] Efforts to change health behaviors are most effective when they address the environments in which people make their daily choices.[18] For example, people in park-poor or high-crime neighborhoods have less access to safe places to play or walk;[19] those in neighborhoods with fewer healthy food retail options and more fast-food outlets have fewer healthy food choices.[20] Higher levels of educational attainment and income are consistently associated with lower risks for a wide array of illnesses, and with significant increases in life expectancy. Race and ethnicity also impact health, and people of color in California experience significantly higher illness and injury rates than Whites, regardless of income level.[21] Californians who live in neighborhoods characterized by racial segregation, a high presence of stores selling fast foods, alcohol, and tobacco, and toxin exposure, will have life expectancies that are ten to fourteen years shorter than those who live in better neighborhoods.[22,23]

Public health agencies alone cannot change the environments that largely determine the health of California's residents, since responsibility for the determinants of health generally falls under the realms of housing, transportation, education, air quality, parks, criminal justice, and employment agencies, to name just a few.[24,25,26] Thus, for public health agencies to achieve their mission – to improve the health of the population – they must work collaboratively with the many government agencies, businesses, and community-based organizations which are best positioned to create healthy communities. Across policy areas, government agencies are finding that the more complex the issues they confront, the less able they are to address them within their own silos. Addressing wicked problems – including health – will clearly require partnerships across all levels and sectors of government, and with residents, businesses, and community-based organizations.

Fortunately, there are many opportunities for co-benefits – strategies that can simultaneously improve health, increase our ability to adapt to climate change, reduce greenhouse gas emissions, improve air quality, conserve our natural resources and agricultural lands, and support our transition to a clean energy future. Identifying these win-win opportunities is critical. However, because of the complex interdependencies of wicked problems, win-win solutions are not always possible; "the effort to solve one aspect of a wicked problem may reveal or create other problems."[27] Identifying and reconciling these tensions is another critical task for collaboration across silos.

The HiAP Task Force provides a venue for people with many different perspectives to come together and ask: How can California's health sector help to advance the goals of other sectors whose work will have a huge impact on ecosystem and economic sustainability and thus on human health and survival? And simultaneously, how can

other sectors incorporate a health lens as they address their own wicked problems, so that California's population is as healthy, productive, and resilient as possible? HiAP harnesses the power that agencies and departments can bring through their areas of expertise, focuses on co-benefits and win-win strategies, and explores and uses health as a linking factor in bringing people together from across sectors to address some of the biggest issues that face our society.[28]

The Health in All Policies Task Force

The establishment of the HiAP Task Force was a natural outgrowth of the increasing recognition of the inter-relatedness of the multiple complex problems facing California, their relationship to health, and the need for inter-sectoral action for health. The obesity epidemic is a good example of a wicked problem, and one that requires urgent attention. Over 50 percent of California adults and 25 percent of adolescents are now overweight or obese.[29] Obesity is associated with heart disease,[30] type 2 diabetes,[31] and a number of forms of cancer including colon, kidney, esophageal, endometrial, and postmenopausal breast cancer.[32] Nearly 10 percent of all national medical costs are obesity-related.[33] Since 1980, obesity rates have tripled among youth aged 2-19 and between 40-80 percent of overweight children will become overweight adults.[34,35,36] If these trends are not reversed, this may be the first generation of U.S. children with life expectancies shorter than those of their parents.[37] A public health framework for addressing obesity includes improving individual eating and physical activity behaviors, providing supportive health services and clinical interventions, and advocating for policy actions to change food, physical activity, and broader socioeconomic environments known to influence eating and physical activity behavior. (See "California's Health Status" for more on current public health issues in California.)

In February, 2010, Governor Arnold Schwarzenegger convened the "Summit on Health, Nutrition and Obesity: Actions for Healthy Living," building on a 2005 obesity summit, with the theme of action to promote environments that encourage healthy eating, regular physical activity, and responsible individual choices.[38] Promoting healthier eating and physical activity environments clearly requires actions beyond those that lie within the purview of the Department of Public Health. For example, increasing the availability of fresh fruits and vegetables in low-income schools and neighborhoods may involve actions by the Departments of Education, Social Services, Food and Agriculture, as well as local redevelopment agencies and others. Creating more walkable communities may benefit from actions taken by Caltrans, the Governor's Office of Planning and Research, Parks and Recreation, Forestry and Fire Protection, and others.

The Governor thus issued Executive Order S-04-10, which established a Health in All Policies Task Force under the auspices of the SGC.[39] As a cabinet-level body established to enhance collaboration between State agencies in their work to advance sustainable communities, the SGC seemed a natural home for a multiagency task force addressing the role of community environments in shaping the health of Californians. The cabinet-level SGC, established in 2008 by SB 732, aims to improve coordination

across state agencies "to improve air and water quality, improve natural resource protection, increase the availability of affordable housing, improve transportation, meet the goals of the California Global Warming Solutions Act of 2006, encourage sustainable land use planning, and revitalize urban and community centers in a sustainable manner."[40] The SGC is also charged with recommending "policies and investment strategies and priorities to the Governor, the Legislature, and to appropriate State agencies to encourage the development of sustainable communities, such as those communities that promote equity, strengthen the economy, protect the environment, and promote public health and safety."[41] The full text of the Executive Order is included in Appendix 1.

On March 17, 2010, the SGC convened the HiAP Task Force, designating 19 State agencies, departments, and offices to participate:

- Air Resources Board
- Business, Transportation and Housing Agency
- Department of Community Services and Development
- Department of Education
- Department of Finance
- Department of Food and Agriculture
- Department of Forestry and Fire Protection
- Department of Housing and Community Development
- Department of Parks and Recreation
- Department of Social Services
- Department of Transportation
- Environmental Protection Agency
- Governor's Office of Gang and Youth Violence Policy
- Governor's Office of Planning and Research
- Health and Human Services Agency
- Labor and Workforce Development Agency
- Natural Resources Agency
- Office of the Attorney General
- Office of Traffic Safety

Each designated entity was asked to identify a representative familiar with the breadth of their agency's activities, connected to staff with in-depth expertise, empowered to speak on their agency's behalf, and able to engage agency leadership in discussions about the Task Force's work.

Purpose and Charge of the Task Force

The HiAP Task Force was established to "identify priority programs, policies, and strategies to improve the health of Californians while advancing the other goals of the SGC. The SGC's goals include: improving air and water quality, protecting natural resources and agricultural lands, increasing the availability of affordable housing, improving infrastructure systems, promoting public health, planning sustainable communities, and meeting the state's climate change goals."[42]

The Task Force is charged with submitting a report to the SGC recommending "programs, policies, and strategies to improve the health of Californians while advancing the SGC's goals," and describing the benefits for health, climate change, equity, and

economic well-being that may result if the recommendations are implemented. In developing its recommendations, the Task Force was tasked to "review existing state efforts, consider best/promising practices used by other jurisdictions and agencies, identify barriers to and opportunities for interagency/inter-sector collaboration, and

Health in All Policies Nationally and Internationally

The United States federal government has recently begun to engage leaders from multiple policy arenas in developing strategies for a healthier America. The 2010 Affordable Care Act (Act) created the National Prevention, Health Promotion, and Public Health Council (Council) in the Department of Health and Human Services. The Council is chaired by the Surgeon General and is tasked with creating a National Prevention and Health Promotion Strategy. Members include the Secretaries of Agriculture, Homeland Security, Transportation, Labor, Education, Health and Human Services, the Chairman of the Federal Trade Commission, the Administrator of the Environmental Protection Agency, the Directors of the Office of National Drug Control Policy and of the Domestic Policy Council, and the Assistant Secretary of Indian Affairs.[43] The Act also created a Prevention and Public Health Fund to invest in "proven prevention and public health programs," including through Community Transformation Grants that will focus on impacting the social, physical, economic, and service environments that foster health disparities.[44]

In another federal multiagency effort, the U.S. Department of Housing and Urban Development, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency jointly created the Partnership for Sustainable Communities to "protect public health and the environment, promote equitable development, and help address the challenges of climate change."[45]

Health in All Policies has been employed outside the United States since 1986, when the World Health Organization's Ottawa Charter for Health Promotion recommended that health be "on the agenda of policy makers in all sectors and at all levels."[46,47] HiAP was the major theme of the 2006 Finnish Presidency of the European Union[48] and since then HiAP has been implemented in various ways across the rest of the developed world.

propose action plans." Additionally, the Task Force was asked to "convene regular public workshops to present its work plan" and "solicit input from stakeholders in developing its report."[49]

Activities of the Health in All Policies Task Force

The HiAP Task Force is staffed by the California Department of Public Health (CDPH), which developed meeting agendas, facilitated meetings, collected and sorted best practices and public comment, convened public workshops, reviewed literature, proposed strategies for approaching tasks, and prepared this report, with continual consultation and input from Task Force members and key staff from the SGC. CDPH

drew on health expertise within the Department, and organized a multi-division review of over 600 potential recommendations in order to provide Task Force members with those recommendations' potential health impact.

Task Force Membership Meetings

The entire membership of the Task Force met in person five times between June and November 2010, and met once by phone in November 2010. Time together was initially spent exploring how the key risks that drive population health burden and inequities can be addressed through the policies and programs of Task Force member agencies. Task Force members refined the Healthy Communities Framework (see "What is a Healthy Community?" on page 21), participated in a "root cause mapping" exercise, learned about each other's work, developed a greater understanding of the relationship between their work and health, discussed the need for collaboration, explored opportunities for "win-wins" (where pursuing health and pursuing other agencies' own goals provide co-benefits), and identified needs for reconciling apparently conflicting policy strategies that may both promote health. Task Force members also used meeting time to review criteria for prioritization of recommendations, collaborative opportunities, best practices, aspirational goals, and recommendations.

Task Force Individual Member Meetings with CDPH

CDPH held three to five individual meetings with each Task Force member, focused on (1) briefing Task Force members on the Task Force purpose and goals, and working together to identify intersections between the member's agency or department, SGC goals, and health; (2) reviewing potential recommendations; (3) discussing potential strategies through which each agency's actions might create healthier and more sustainable communities, and through which health agencies could help advance the agencies' own goals; (4) identifying possible areas for interagency collaboration; (5) identifying issues that were important but particularly difficult to address; and (6) securing commitments from Task Force members regarding recommendations relevant to their particular agency, while recognizing the resource constraints of all agencies.

California's Health Status

Chronic Disease and injury are the leading causes of death and disability.[50]

- Chronic diseases and injuries account for over 75% of all deaths in California.[51]
  - In 1900, infectious diseases accounted for 40% of American deaths and chronic disease accounted for only 16%.[52]
  - Heart disease, cancer, and stroke alone account for 56% of deaths in California.[53]
  - Over a third of California adults report having at least one chronic health condition;[54] this number will grow rapidly as the population over age 65 is expected to more than double by 2030.[55]
- Chronic disease accounts for over 75% of all U.S. health care expenditures.[56]

- Injuries are the leading cause of death for people age 1-44.[57]

Tobacco, poor diet, and physical inactivity are the actual cause of one-third of deaths.[58]

- Eliminating these three risk factors would prevent 80% of heart disease and stroke, 80% of type 2 diabetes, and 40% of cancer in the United States.[59]

Health and social inequities are pervasive, persistent, and preventable.[60]

- Significant and preventable differences among socio-economic and racial/ethnic groups in the rates of chronic disease and injury are pervasive.
  - Californians with type 2 diabetes are more likely to be low-income, Latino, or African-American.[61]
  - People with diabetes are more likely to live in neighborhoods with high concentrations of fast food restaurants.[62]
  - Hypertension rates in Blacks are almost 1 1/2 times greater than in Whites.[63]
- Latino adults are almost five times more likely than Whites to have no high school diploma.[64]
- African Americans and Latinos are more than twice as likely as Whites to have an income below the federal poverty level.[65]
  - Children growing up in poverty are more likely to develop chronic conditions and have higher hospitalization rates than those not growing up in poverty.[66]
  - California now has no ethnic majority,[67] and Whites are expected to make up only 26% of the population by 2040.[68]

Obesity is highly prevalent in California.

- California has an adult obesity rate of 24.4% and a childhood obesity rate of 15%, with unequal burdens of obesity borne by Hispanic and Black Californians.[69] Obesity increases chronic disease risk, health care costs, and contributes to lost productivity.
  - Data from 2006 estimate that the California costs for overweight and obesity were $21.0 billion, with $12.8 billion in health care costs alone and $8.2 billion in lost productivity costs.[70]
  - Obesity-attributable Medicare and Medicaid costs for California are estimated at $1.7 billion each.[71]

Poor health is extremely costly.

- Poor health results in direct medical expenditures and indirect costs due to lost productivity.
  - The economic costs of obesity, overweight, and physical inactivity are estimated to exceed $28 billion annually.[72]
- Even $10 per person per year invested in prevention would yield $1.7 billion in health care savings in California within 5 years, a return of $4.80 for every $1 spent.[73]

Issue Briefs

Task Force members worked with CDPH to develop short issue briefs that articulate the links between various policy areas and health. While intended primarily to be a tool for Task Force members to develop knowledge of each other's policy areas, these briefs can also be a useful tool for moving forward other collaborative efforts related to health. (See Appendix 4.)

What is a Healthy Community?

A Healthy Community provides for the following through all stages of life:

- Meets basic needs of all
  - Safe, sustainable, accessible and affordable transportation options
  - Affordable, accessible and nutritious foods and safe drinkable water
  - Affordable, high quality, socially integrated and location-efficient housing
  - Affordable, accessible and high quality health care
  - Complete and livable communities including quality schools, parks and recreational facilities, child care, libraries, financial services and other daily needs
  - Access to affordable and safe opportunities for physical activity
  - Able to adapt to changing environments, resilient, and prepared for emergencies
  - Opportunities for engagement with arts, music and culture

- Quality and sustainability of environment
  - Clean air, soil and water, and environments free of excessive noise
  - Tobacco- and smoke-free
  - Green and open spaces, including healthy tree canopy and agricultural lands
  - Minimized toxics, greenhouse gas emissions and waste
  - Affordable and sustainable energy use
  - Aesthetically pleasing

- Adequate levels of economic, social development
  - Living wage, safe and healthy job opportunities for all, and a thriving economy
  - Support for healthy development of children and adolescents
  - Opportunities for high quality and accessible education

- Health and social equity

- Social relationships that are supportive and respectful
  - Robust social and civic engagement
  - Socially cohesive and supportive relationships, families, homes and neighborhoods
  - Safe communities, free of crime and violence

Opportunities for Public Input

The Task Force sought a variety of opportunities for public input including public workshops, public input in the recommendation-collecting period, and an opportunity for public comments on this document, both in writing and at the meetings of the SGC. All recommendations received throughout this process are reflected in Appendix 3.

Public Workshops

Three community workshops were held during the first two weeks of September 2010 in Los Angeles, Fresno, and Oakland. The Los Angeles and Fresno workshops averaged 30 participants each and the Oakland workshop had approximately 70 participants. Participants included representatives from local health departments, public health advocacy organizations, academic institutions, health care organizations, and other government and non-government organizations representing forestry, housing, environmental justice and quality, nutrition, redevelopment, and planning.

Several themes were raised across all workshops, including access to fruits, vegetables, and other fresh, quality food; farm-to-institution programs and policies (schools and others); healthy transportation (walkability, bicycle lanes); and public transportation to parks and essential destinations. Cross-cutting themes that emerged as priorities across the three workshops included equity and addressing the concerns of vulnerable and disadvantaged communities, embedding health as a consideration in policy-making processes; government engagement of community members in decision-making processes; and interagency collaboration. Rural stakeholders also emphasized the importance of access to affordable, drinkable water and opportunities for substantive rural community input to state agencies. A more detailed description of the public workshops and list of participating agencies is included in Appendix 2.

Key Informants and Stakeholder Advisory Group

CDPH consulted with a variety of key informants to help guide the process and suggest recommendations for consideration. An advisory group of policy experts came together periodically and informally to advise CDPH on pressing health policy concerns and to provide evidence for potential solutions. Additionally, CDPH contacted approximately 30 experts in various policy areas to gain better understanding of the issues raised by both the public and Task Force members, and to identify potential policy solutions. Both the advisory group and other key informants played an important role in helping ensure active community participation in the Task Force's three public workshops.

Recommendations

Staff carefully noted any recommendations for possible actions or strategies to improve health as they met with the Task Force, individual Task Force members, the stakeholder advisory group, key informants, stakeholders, and at public workshops. Task Force members and stakeholders also shared documents that contained

recommendations for improving community health. Additionally, staff reviewed recent reports and published literature that address strategies to build healthier communities, and convened meetings of CDPH staff with expertise in relevant areas. Through this process, CDPH collected over 1,200 recommendations, although many were redundant. Recommendations were initially sorted into five categories:

1. Actions that affect the health of State employees
2. Actions that require implementation by individual agencies
3. Actions that require interagency collaboration
4. Actions that could be taken by all agencies
5. Actions that embed health concepts into policy-making

Recommendations were subsequently coded according to topic and informally rated by health experts on their potential impact on health.

Because the Task Force faced an immense body of recommendations under a very short timeline, the analysis of recommendations was informal. The Task Force hopes that the larger set of recommendations might be examined in a more formal, in-depth manner in the future, in order to identify others likely to have significant impact. To that end, we have included a condensed set of the recommendations received in Appendix 3.

The Task Force agreed on the following criteria for considering which recommendations to include in the final report:

- Population health impact
- Co-benefits and nexus with other SGC objectives
- Evidence-informed
- Ability to foster collaboration among State agencies and stakeholders
- Equity impact
- Ability to measure
- Feasibility
- Ability to transform State government culture

Due to time and resource constraints, these criteria were not formally applied to each recommendation, but were informally considered in Task Force deliberations. Feasibility was not limited to short-term ease of implementation; thus, the final recommendations include some that may require significant resources or legislation to implement. Many of the recommendations require further specificity prior to action, and will require continued multiagency collaboration to develop concrete action plans. In prioritizing recommendations for inclusion in this report, the Task Force used a consensus decision-making model and deferred to individual agencies for judgment regarding the feasibility of recommendations that only pertained to one agency or department.

Highlighted with the recommendations below are a number of examples of *HiAP in Action.* These are descriptions of actions that Task Force members and others are taking now or have recently taken to promote health and advance other SGC objectives.

Health in All Policies Recommendations

I. PROMOTE HEALTHY COMMUNITIES

I.A. Active Transportation

I.A1. Utilize data to improve community planning and increase active transportation.

a. Use available tools and data (e.g., the California Household Travel Survey, California Statewide Travel Demand Model, and regional models) to enhance community and transportation planning and understand health impacts of transportation options and mode shifts.
    i. Map and assess transit and non-motorized transit access to essential destinations (e.g., parks, schools, health care facilities), including inequities in transportation access.
    ii. Determine inequities by demographics such as income, race, and disability and encourage use of this data by Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) in transportation planning models.
    iii. Assess and predict the health impacts associated with increases in active transportation and decreases in motorized transport.

I.A2. Support active transportation through implementation of "complete streets."

a. Encourage all State-funded road infrastructure projects to address safety and mobility of all users, including bicyclists, pedestrians, transit users, and motorists, appropriate to the function and context of the facility.
b. Encourage all State employees involved in roadway design, planning, programming, construction, operations, and maintenance to participate in functionally appropriate "complete streets" training.
c. Explore additional approaches to amending the CEQA Guidelines Environmental Checklist to reflect a development project's impacts on all modes of transportation, including mass transit and non-motorized transportation like walking and biking.

I.A3. Incorporate safety considerations of all roadway users into programs, policies, and community designs.

a. Support an increase in the number of low-resource schools participating in the state and federal Safe Routes to School programs.
    i. Ensure Caltrans District Application Review Committee members are trained in health and environmental justice principles that are impacted by Safe Routes to School, and that each committee has members with experience in the area of health and disadvantaged communities to reinforce these principles.
    ii. Provide additional outreach and assistance to low-resource communities to encourage and enable successful participation in the state and federal Safe Routes to School programs.
b. Analyze the impact of lower speed limits on injuries, air pollution, and greenhouse gas emissions.
c. Explore opportunities to reduce injuries, greenhouse gas emissions, and air

pollution through changes in roadway features to encourage slower speeds (e.g., traffic calming). d. Promote legislation to amend the California vehicle code so that localities can lower speed limits on local roads, where appropriate. e. Convene stakeholders and relevant agencies to discuss lower speed limits on highways.
I.A4. Highlight the opportunities presented by SB 375 to promote active transportation. a. Incorporate health considerations in Strategic Growth Council (SGC) outreach and technical assistance program for the SGC's Sustainable Communities Planning Grant program, and in SGC metrics for grant evaluation. b. Convene regional workshops with local health officers (California Conference of Local Health Officers) and planners (Metropolitan Planning Organizations and Regional Transportation Planning Agencies) to promote and facilitate integration of health considerations in sustainable community planning.
I.A5. Incorporate trails and greenways as part of an active transportation system.
I.A6. Promote and encourage active transportation and physical activity for State employees. a. Develop a bicycle fleet for State employee use. b. Provide ample covered and secure bicycle storage and on-site showers for employee use in all State buildings (leased and owned). c. Require new State buildings or renovations to incorporate designs for health (e.g., prominent/usable stairways). d. Explore shifting parking subsidies to incentives for active transportation and physical activity. e. Facilitate the sharing across agencies of existing resources in support of physical activity, such as exercise areas, showers, bicycle storage, and walking clubs.
I.B. Housing and Indoor Spaces
I.B1. Encourage sustainable development through healthy housing by offering incentives and providing State guidance. a. Develop incentives for healthier new and existing housing developments by promoting universal design, community gardens, siting near grocery stores, parks, and other resources necessary for healthy living, and smoke-free policies in multi-family housing developments.
I.B2. Explore secure and permanent funding for affordable housing. a. Develop a permanent source of funding for affordable housing to succeed Proposition 1C program funds.
I.B3. Promote sustainable development through smart housing siting. a. Develop incentives for sustainable housing development by awarding bonus points in competitive grant programs or giving dedicated or beneficial funding consideration for infill and transit-oriented developments. b. Identify barriers to achieving infill and transit-oriented development and identify strategies to address these barriers. Potential barriers to be evaluated include local zoning and regulations, infrastructure deficiencies, and

multiagency mitigation requirements.

c. Develop recommended processes for balancing multiple public policy objectives affecting air quality and the permit processing and siting of transit-oriented development.
d. Identify research needs and support research and demonstration efforts to mitigate adverse environmental and public health impacts in residential areas proximate to major urban roadways and transportation corridors.

I.B4. Ensure that all workers and school-children enjoy smoke-free environments.

a. Amend Health and Safety Code (H&S) Code Section 104420(n)(1) and H&S Code Section 104420(n)(2) to require all school campuses to be tobacco free, expand the definition of tobacco to include other non-prescription nicotine delivery devices, and amend H&S Code Section 104420 to update the definition of a Local Education Agency (LEA) to include direct-funded charter schools.
b. Create smoke-free workplaces that will protect all groups of workers and create an environment that increases smokers' chances of successfully quitting by eliminating provisions in Labor Code Section 6404.5 that permit smoking in hotel lobbies, hotel banquet rooms, tobacco shops and private smokers' lounges, warehouses, break rooms, workplaces with five or fewer employees, and businesses defined as "owner operated."

I.C. Parks, Urban Greening, and Places to be Active

I.C1. Support urban greening and access to green spaces.

a. Promote increases in tree canopy through communication, education, and outreach regarding multiple co-benefits of trees, including promoting use of existing tools and guidance for selection of trees for urban forestry with regard to fire hazard, drought tolerance, water use, allergenicity, and improved air quality.
b. Encourage fruit trees and community gardens, including through the use of grants; investigate the use of specialty crop block grants for this purpose.
c. Conduct a statewide assessment of existing tree canopy cover, then develop achievable targets for each jurisdiction and quantify the anticipated benefits associated with meeting the target, including health benefits.
d. Explore the development of policies to establish markets for the ecosystem services of trees.
e. Explore the use of easements to expand the availability of land for trails and greenways, where appropriate.
f. Expand programs to provide access to parks for disadvantaged communities.

I.C2. Improve wildfire-related air quality and safety.

a. Convene a forum to explore relative risks of controlled burns/fuels management and wildfires.
b. Foster interagency collaboration to strengthen general plan guidance related to wildland fire risks and development in wildland and wildland/urban interface areas; continue to work with local governments and Fire Safe Councils to educate landowners on their responsibilities for addressing wildland fire risks; and continue to seek state and federal funding for fuels reduction projects.

I.C3. Take stronger actions to prevent and control invasive species which pose a threat to all ecosystems, including agriculture and forests. a. Foster interagency collaboration on education and outreach to stakeholders that emphasizes the importance of prevention to reduce the number of invasive species introduced. b. Develop mechanisms that allow for early public health input into response options when an invasive species threat is detected.
I.C4. Encourage joint use of facilities throughout communities in California. a. Provide guidance to school districts/superintendents regarding existing state law that provides liability protection. b. Incorporate incentives for joint use in funding and construction of new schools. Specifically, explore statute changes to allow for the use of State joint use bond funds for outdoor recreational facilities/spaces and to allow local partners more flexibility in fulfilling the required 50 percent local share match for use of these joint use funds. c. Encourage the joint use of parks, open space lands, and recreational facilities between schools and communities for purposes of moderate to vigorous physical activity, gardening, and other recreation opportunities. d. Explore the feasibility of allowing joint use of state properties for community gardens.
I.C5. Reduce the environmental impact of tobacco waste. a. Encourage interagency collaboration to test and develop messaging that raises awareness and motivates policy, system, and environmental level interventions to reduce the harmful public health and environmental impact of tobacco waste in California.
I.D. Violence Prevention
I.D1. Build violence prevention capacity statewide by supporting community-level efforts to engage and convene stakeholders to develop data-informed prevention actions, including through training to promote effective community engagement and joint action.
I.D2. Disseminate existing guidance on Crime Prevention through Environmental Design.
I.D3. Analyze State violence prevention spending in the ten California communities that have the highest rates of violence and develop recommendations for State agency action in those ten communities, drawing from evidence-based approaches.
I.D4. Expand the Governor's Office of Gang and Youth Violence Policy to become a comprehensive clearinghouse on violence prevention that will develop and distribute crime prevention education and training materials as well as provide training and technical assistance to communities.
I.D5. Work with foundation, private sector, and State agency partners to increase resources for a Probation Resource Center to support probation departments' efforts to implement evidence-based practices.
I.E. Healthy Food
I.E1. Encourage and expand the availability of affordable and locally grown produce through "farm-to-fork" policies and programs.

a. Promote farm-to-school programs to increase fresh produce offerings in school breakfast and lunch programs.
    i. Establish a farm-to-school statewide coordinator to facilitate the development of farm-to-school programs.
b. Explore methods to make it easier for small/local farmers to consolidate produce supply in order to sell to institutions.
c. Promote school and community garden and orchard programs (including incorporation into learning curriculum), and explore funding streams to support such programs (e.g., United States Department of Agriculture specialty crop block grants).
d. Encourage labeling of produce origin so that purchasers can select local produce if desired.
e. Identify State and local regulations that pose barriers to access to locally grown or healthy foods, and recommend changes to:
    i. Make it easier for farmers' markets and produce vendors to operate in neighborhoods that lack access to fresh produce.
    ii. Eliminate contracting and other barriers to procurement and use of fresh fruits and vegetables by institutions.
    iii. Make it easier for school cafeterias to serve food grown in school gardens, including through identification of best practices for safe use of school-grown food.

I.E2. Better utilize State-administered food assistance programs to increase consumption of healthy foods, decrease consumption of low-nutrient, high-calorie foods, reduce hunger, and add dollars to the local economy.

a. Modify policies and practices to increase participation of Californians in food assistance programs.
    i. Direct Certification: Address data-sharing issues that pose barriers to automatically enrolling eligible children in free or reduced-price meal programs at school.
    ii. Single Portal for Applications and Eligibility: Review existing structure and options including implementing a single portal for all health and human services programs, new system development, or leveraging an existing county eligibility system.
    iii. Modified Categorical Eligibility for CalFresh (food stamps): Expand Modified Categorical Eligibility to seniors and persons with disabilities.
    iv. Simplified Reporting for CalFresh: Implement a 6-month reporting requirement.
    v. CalFresh Business Process Re-Engineering.
b. Support healthier food choices through food assistance programs.
    i. Limit use of CalFresh funds for purchase of unhealthy foods and beverages, beginning with requesting a waiver from United States Department of Agriculture to allow California to prohibit the purchase of sugar-loaded beverages with CalFresh dollars.
    ii. Implement a healthy food purchase pilot which adds funds to Electronic Benefits Transfer (EBT) cards when fruits and vegetables are purchased.

I.E3. Establish a California Food Policy Council comprised of State agencies and other relevant stakeholders involved with food production, distribution, purchase, promotion, provision, and health, in order to build a more robust, sustainable food system, alleviate hunger, and promote consumption of healthy foods. The Food Policy Council could work toward implementation of the food-related recommendations herein.

I.E4. Leverage government spending to support healthy eating and sustainable local food systems.

a. Adopt a healthy food procurement policy, pursuant to Public Contract Code section 12400-12404, to ensure that foods purchased for consumption or sale on state property (e.g., vending machines, institutions, cafeterias, concessioner contracts) meet minimum nutritional standards.
    i. Establish nutrition standards for foods and beverages available in government-run recreation centers and parks.
    ii. Implement and strengthen existing legislation to promote healthier options in vending machines.
    iii. Enhance vendor and concession policies to support the availability of healthy foods, for example through bid incentives for healthy options and locally-grown produce. Policy revisions should consider potential cost implications.
    iv. Identify existing best practices and provide training and technical assistance on implementation of healthy procurement policies.

II. PROMOTE HEALTHY PUBLIC POLICY

II.A. State Guidance

II.A1. Incorporate a health and health equity perspective into State guidance, surveys, and technical assistance documents where feasible and appropriate.

a. Work with agencies to incorporate a health lens in guidance documents, for example:
    - Office of Planning and Research (OPR) General Plan Guidelines
    - OPR Annual Planning Survey
    - OPR and Caltrans “complete streets” guidelines
    - Caltrans guidance documents:
        i. Regional Transportation Plan (RTP) Guidelines
        ii. System Planning Guidelines
        iii. California Interregional Blueprint
        iv. Project Initiation Documents
    - California Department of Housing and Community Development Building Blocks for Effective Housing Elements
    - Additional opportunities to be identified

II.A2. Identify and publicize a comprehensive set of state resources for communities to use in healthy community planning.

a. Collaborate across Task Force agencies to provide and make easily accessible information that allows communities to better understand the multiple and diverse planning processes and funding streams that are available for building healthy communities, including opportunities for

blending funding from different sources to create a more comprehensive healthy communities program. b. Provide technical assistance to local entities to promote and facilitate healthy community planning, policies, and programming, including through the SGC's Sustainable Communities Learning Network.
II.B. Embedding Health in Decision Making
II.B1. Incorporate health and health equity criteria into State grant Requests for Applications, review criteria and scoring, technical assistance, and monitoring/performance measures, where feasible and appropriate. For example, a. Incorporate a health module into the outreach and technical assistance programs of the Strategic Growth Council. b. Add health criteria to the California Environmental Protection Agency's annual Environmental Justice Small Grants program. c. Add per capita VMT reduction and increased active transportation to Office of Traffic Safety grants. d. Incorporate considerations of non-safety-related health benefits into Safe Routes to School grants review processes. e. Develop health criteria for discretionary funds review processes. f. Identify opportunities to incorporate relevant Task Force recommendations as requirements in future State grant guidelines.
II.B2. Continue to provide integrated comments on federal legislative and policy proposals from multiple California agencies, including incorporation of a health and equity lens (e.g., Transportation Reauthorization, Child Nutrition Reauthorization, Environmental Protection Agency Greenhouse Gas Regulation).
II.B3. Explore appropriate ways to integrate health analysis into existing State projects and plans. a. Design and conduct a feasibility study to explore possible methods or approaches for incorporating a health lens into analyses of a subset of legislation and Budget Change Proposals (BCPs), to consider long-term health and State health-care expenditure consequences of short-term financial and policy decisions. b. Use the HiAP Task Force to 1) identify the range of methods (including Health Impact Assessment) for incorporating health perspectives in State planning, review processes, and guidance; 2) explore appropriate integration of these methods, including how and where to incorporate health perspectives; and 3) consider concerns of Agencies and Departments, including the need to reconcile competing policy priorities, enable efficient processes, and provide input early and upstream in planning processes where possible.
II.C. Data and Research
II.C1. State agencies and their contractors, where feasible and appropriate, should incorporate health and health equity indicators into data collection tools and accountability measures, and endeavor to standardize data elements and indicators to facilitate data collection, sharing, and

accessibility.

a. Incorporate health issues into State data collection and survey efforts, where appropriate.
b. Develop uniform data elements, data collection tools, and assessment standards related to health, to allow consistent data collection across State grants. For example:
    i. Review available walkability assessment tools and develop one standardized tool for grantees to use across agencies and grant programs, where appropriate.
    ii. Develop a standard set of measurement indicators for a healthy community so that agencies and grantees measure consistent healthy community goals and objectives.
c. Enhance data collection and availability of data to allow assessment, analysis, and policy-making that address health inequities (e.g., standardized data on race, ethnicity, language, education level, income, and other social factors that influence health).
d. Include a standard set of core data elements in State data products to facilitate linkages across datasets.

II.C2. Increase use of evidence-based practices.

a. Improve efficiency and cost-effectiveness of State-funded programs by providing bonus points to grant and contract applicants using evidence-based practices.
b. Identify programs and policy topics that would benefit from additional research into health impacts and cost-effectiveness.

II.D. Cross-Agency Collaboration and Expertise

II.D1. Foster deeper understanding and collaboration across State agencies.

a. Through the Strategic Growth Council and its State Agency Learning Network, promote and seek resources to facilitate staff-sharing, interagency or inter-department transfers, and temporary placement of staff in a partner agency (e.g., from Caltrans to California Air Resources Board).
b. Agencies should more consciously and consistently invite partner agency staff to participate in training opportunities (e.g., Caltrans Transportation Planning Training Academies, California Department of Public Health training on Health Impact Assessment).
c. Provide opportunities to identify and reconcile important but competing public policy goals (e.g., food safety and use of school garden produce; forest management though controlled burns and air quality; open space and land for affordable housing).

II.E. Community Engagement

II.E1. Improve opportunities for substantive community engagement in State agency decision-making.

a. Provide training for agencies on community engagement, and share best practices, including use of webinars and other technologies.
b. Provide incentives for meaningful community engagement in State grants and contracts.
c. Encourage non-governmental organization (NGO) and citizen participation by

exploring funding opportunities, and increase funding for staff positions/time to support meaningful community engagement processes. d. Look for opportunities for State agencies and departments to coordinate outreach and community engagement efforts. e. Encourage broad community participation in regional and local planning processes to ensure that integrated planning processes consider community and stakeholder needs.
II.F. Continue the Health in All Policies Task Force
II.F1. Continue the Health in All Policies Task Force in order to foster continued dialogue on the impact of decisions on health and health equity, and to pursue implementation of recommendations. Expand participation to additional relevant agencies.

Health in All Policies Recommendations Narrative

I. PROMOTE HEALTHY COMMUNITIES

I.A. Active Transportation

Aspirational goal: Every California resident has the option to safely walk, bicycle, or take public transit to school, work, and essential destinations.

Transportation and Health

Transportation infrastructure is essential for business, economic development, and the welfare of all California residents and indirectly impacts health by influencing the level of access to jobs, medical care, healthy food, educational opportunities, and other necessities. Active transportation (walking, biking, and wheeling to destinations) can reduce the risk of heart disease, improve mental health, lower blood pressure, and reduce risk of overweight and obesity through increased physical activity.[74] Physical activity is protective against the development of heart disease, obesity, type 2 diabetes, some cancers, high blood pressure, osteoporosis, depression, and perception of well-being.[75,76,77] Active transportation also reduces emissions from motor vehicles, which reduce air quality and contribute to impaired lung development, lung cancer, asthma and other chronic respiratory problems, and heart disease.[78] Further, motor vehicle crashes are a leading cause of injury and death for individuals less than 34 years old.[79]

Relationship to Strategic Growth Council Objectives

A sustainable transportation system provides infrastructure to support bicycle, pedestrian, and public transit modes as integral to a system that supports safe and active transportation, allowing sufficient opportunities for daily physical activity, reducing preventable injury and death, providing affordable access for all users, and helping to meet the State's air quality and greenhouse gas emission goals. In 2008, the transportation sector contributed 37 percent of California's total gross greenhouse gas emissions.[80] Sprawling, low-density community developments, coupled with limited public transportation resources and multiple barriers to walking and biking, have contributed to increased vehicle miles traveled and time spent in cars.[81,82] Transportation systems that support multimodal travel – walking, cycling, wheeling, automobile, and public transit – can enhance community economic viability by giving families lower-cost transportation options and by linking residents to job centers.[83] Low-income families pay a higher proportion of their income towards transportation and could benefit from improved active transportation infrastructure that improves the feasibility of less expensive multi-modal trips that involve walking or biking and public transportation.[84]

I.A1. Utilize data to improve community planning and increase active transportation.

a. Use available tools and data (e.g., the California Household Travel Survey, California Statewide Travel Demand Model, and regional models) to enhance community and transportation planning and understand health impacts of transportation options and mode shifts.

i. Map and assess transit and non-motorized transit access to essential destinations (e.g., parks, schools, health care facilities), including inequities in transportation access.
ii. Determine inequities by demographics such as income, race, and disability and encourage use of this data by Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) in transportation planning models.
iii. Assess and predict the health impacts associated with increases in active transportation and decreases in motorized transport.

Transportation and land use planning impact public health in part by influencing access to essential destinations and the availability and safety of active transportation modes. In order to make planning decisions that promote public health and sustainable communities, State, regional, and local planners need an understanding of the links between the plans they develop and health, baseline data relevant for health, and models that incorporate such data. SB 375 presents an opportunity to incorporate health considerations into planning. The SB 375 Regional Targets Advisory Committee provided recommendations to the California Air Resources Board on factors to be considered and methodologies to be used in setting the regional greenhouse gas emission reduction targets. They also discussed the need to evaluate health-related co-benefits of land use and transportation policies adopted to meet greenhouse gas targets.[85]

The Task Force has an opportunity to collaborate with researchers in the Urban Land Use and Transportation Center at the University of California, Davis to capitalize on the data developed for the California Statewide Travel Demand Model and provide critical access data linking residents by socio-economic attributes to activities and services that are essential to public health. Such a project would demonstrate how models can be used to assess health-related benefits, and could be used as a model for baseline assessment and analysis of scenarios of health-related policies in the context of transportation and land use planning. The results of the proposed research will highlight trends, by geographic location and socioeconomic attributes, among Californians with very low to very high active transportation options and health services. Access can be defined as travel time, travel cost, and travel distance by mode (auto, transit, walk, and bicycle) to different destination types (e.g., work, school, and parks/recreation facilities). These results could be used to prioritize policies and funding of discretionary grant funds and infrastructure projects to provide the biggest health impacts for the State of California. Further, the trends that an effort like this would document could be used to make California's applications for federally funded pilot projects and grant opportunities more competitive, increasing the State's ability to bring in resources while serving as a model for other state and local data models.

One example of a similar effort is illustrated in the 2002 *Roadblocks to Health* report,[86] which examined the transportation barriers to accessing health care, healthy food, and physical activity opportunities for low-income communities in the Bay Area. Using Geographic Information Systems mapping analysis, surveys, and demographic data,

the effort identified the number of people in each neighborhood who have transit or pedestrian access to health care facilities and supermarkets and those without access and why in order to better illustrate the problem and identify recommended solutions.

> ***HiAP in Action:* Data-Based Grantmaking**
>
> The Office of Traffic Safety (OTS) is helping local agencies complete their own grant applications by ensuring that a range of data and statistics are easily accessible on their website. This assists these agencies in bringing additional grant funds into California to improve safety. Additionally, evidence of community burden and need is prioritized in OTS grant-making.

In October 2009, the SGC approved transportation modeling incentive awards to improve the modeling capacity of Metropolitan Planning Organizations (MPOs) in order to meet the requirements of SB 375, in part by moving toward models that can assess the "health impacts of land use and transportation infrastructure choices."[87] Models would also be improved by incorporating data on transportation access inequities by demographic factors, in turn allowing plans developed based on such models to improve access for impacted groups. The SGC's modeling incentives included equity as a funding criterion, prioritizing the improvement of transportation models to address "[e]quity and environmental justice sensitivities, such as effects of transportation and development scenarios on low-income or transit-dependent households."[88] One example of a useful model is I-PLACE^{3}S, a web-based modeling platform developed by the California Energy Commission, the California Department of Transportation, and the U.S. Department of Energy, and managed by the Sacramento Council of Governments.[89] Public health and climate change modules have recently been developed for King County, Washington, and the San Diego Association of Governments, incorporating demographic data in order to assess the impacts of land use changes on greenhouse gas emissions, physical activity, and body weight.[90]

Active transportation is associated with numerous health and environmental benefits, especially when non-motorized trips replace trips by private vehicle. A 2009 study estimated the health effects of replacing urban trips in private motor vehicles with active travel in London and predicted significant reductions in heart disease, stroke, dementia, depression, and breast cancer.[91] Replication of this study in California, using baseline California data on transportation modes and health status, would provide planners and other decision makers with California-specific estimates of the health benefits of active transportation.

I.A2. Support active transportation through implementation of "complete streets."

a. Encourage all State-funded road infrastructure projects to address safety and mobility of all users, including bicyclists, pedestrians, transit users, and motorists, appropriate to the function and context of the facility.

b. Encourage all State employees involved in roadway design, planning, programming, construction, operations, and maintenance to participate in functionally appropriate "complete streets" training.
c. Explore additional approaches to amending the CEQA Guidelines Environmental Checklist to reflect a development project's impacts on all modes of transportation, including mass transit and non-motorized transportation like walking and biking.

"Complete Streets"

The California Department of Transportation (Caltrans) defines a "complete street" as "a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. "Complete street" concepts apply to rural, suburban, and urban areas.[92] The intent of the "complete streets" approach is to view all transportation improvements as opportunities to create safer, more accessible streets for a variety of users, not just motorists. Street design impacts physical activity levels; the presence of sidewalks, the perception of safe levels of traffic, and the accessibility of destinations like shops and other facilities are associated with higher rates of walking in adults.[93] Research demonstrates a strong association between bicycling infrastructure, such as bicycle lanes, and frequency of bicycling.[94] While active transportation can improve health, poorly planned streets contribute to pedestrian and bicyclist injury and mortality. Of pedestrians killed in 2007 and 2008, more than 50 percent died on arterial roadways, typically designed to be wide and fast, and more than 40 percent of pedestrian fatalities occurred where no crosswalk was available.[95] Caltrans also notes that "complete streets" can have economic benefits by revitalizing communities and providing options that have lower transportation costs.[96]

Implementing "complete streets" is based in three pieces of California legislation: the California Complete Streets Act of 2008 (AB 1358), which requires that cities and counties identify in their general plans how they will provide for the routine accommodation of all users of the roadway, the California Global Warming Solutions Act of 2006 (AB 32), and Senate Bill 375, the latter two outlining the State's goals of reducing greenhouse gas emissions.[97] The "complete streets" concept dovetails with the Caltrans Office of Community Planning's *Smart Mobility 2010 Framework*, which recognizes the need to encourage transit, carpool, walk, and bicycle travel in order to lower emissions, reduce petroleum consumption and associated household transportation costs, and minimize negative impacts on air quality, water quality, and noise levels.[98] One of the six principles of the *Smart Mobility 2010 Framework* is health and safety, which includes designing, operating, and managing the transportation system to reduce serious injuries and fatalities, promote active living, and lessen exposure to pollution.[99]

Although "complete streets" implementation mostly takes place at the local level, many State-funded roads are important throughways in cities and towns and will connect to locally-funded streets. These roads may not be incorporated in local

general plans and therefore may not receive the same "complete streets" consideration as locally-planned roads. The State should use a "complete streets" approach for such State-funded roads, and communication between the State and local agencies is essential to assure cohesive planning systems.

Transportation planners and engineers do not always have the technical training needed to design multimodal transportation, which is a barrier to implementing "complete streets."[100] Many states with "complete streets" policies have conducted design and procedural training for those involved in roadway design and operation. For example, in Ohio, through their Complete Streets Ordinance, the City of Columbus Division of Mobility Options has conducted "complete streets" training sessions for zoning staff to incorporate the ordinance in site-plan review and for contractors, consultants, and developers to ensure that private development understands "complete streets" provisions in land-use regulations. In addition, the implementation team has offered training to public utilities staff to help them understand the city's expectations when conducting roadwork.[101,102]

"Complete streets" is not a new concept. The Institute of Medicine's Committee on Childhood Obesity Prevention Actions for Local Government recommends that communities "plan, build, and maintain a network of sidewalks and street crossings that creates a safe and comfortable walking environment and that connects to schools, parks, and other destinations."[103] The California Obesity Prevention Plan supports using "planning and zoning processes to promote appropriate design and land uses that support access to healthy foods and encourage walking and bicycling in all neighborhoods."[104]

CEQA Guidelines

The California Environmental Quality Act (CEQA), adopted in 1970 and incorporated in the Public Resources Code Sections 21000-21177, aims to identify, avoid, and mitigate environmental impacts of proposed projects.[105] In addition to identifying potential significant environmental impacts, CEQA requires public agencies to identify and then make provisions to avoid or mitigate the potential health impacts, and to address reasons for proceeding in spite of significant impacts. The CEQA Guidelines, prepared by the Governor's Office of Planning and Research, are drafted to facilitate understanding of the CEQA process, and are regulations that incorporate and interpret the statutory mandates and relevant judicial decisions to explain and interpret CEQA. Located in the California Code of Regulations, Chapter 3 of Title 14, the Guidelines provide evaluation objectives and criteria and procedures necessary to draft reports and declarations for projects.

In order to measure the transportation impacts of a proposed project, level of service (LOS) is the most commonly used transportation performance indicator in CEQA analysis.[106] However, improving LOS measures involves increasing speed and vehicle traffic volumes, which can also increase greenhouse gas emissions, air pollution, and risk of preventable injury and death.[107] Further, current LOS analyses often conclude that projects that support active transportation, like sidewalks, bicycle lanes, and transit

only lanes, may result in adverse environmental impacts.[108] Finally, LOS analysis does not account for modal shift benefits of reduced motor vehicle capacity on streets which can encourage auto trips to shift to other travel times, routes, or modes, with consequent benefits to air pollution, greenhouse gas emissions, and health.

Measuring the impact of all modes of transportation can support sustainable community development by highlighting the environmental and health benefits of active and public transportation. Developing and encouraging the use of new or existing transportation measures that more accurately reflect the impact of multimodal transportation on health, climate change, and economic well-being can help decision makers and the public implement projects based on the projected impacts of their decision.[109] A report by the San Francisco Department of Public Health recommends that transportation metrics and standards should capture impacts of the proposed project on air quality, noise, public transit service, the quality and safety of the environment for pedestrians and bicyclists, physical activity, and social interaction, in order to fully illustrate the environmental and health burden.[110]

Multi Modal Level of Service (MMLOS) has been developed by the National Cooperative Highway Research Program in order to address some of the deficiencies of LOS. Acknowledging that urban streets' (public roads with traffic signal controls at least once every 2 miles) right-of-way is shared by multiple modes, MMLOS is designed to evaluate the quality of service for auto drivers, bus passengers, bicyclists, and pedestrians. The MMLOS method can assess "complete streets," context-sensitive design, and smart growth alternatives from the perspective of all users to identify the tradeoffs and impacts different design strategies have on different uses.[111]

Washington State's King County addresses MMLOS by using outputs of regional traffic demand models to identify mode split (the proportion of total person-trips using various modes of transportation) and vehicle miles traveled (VMT). Mode split and VMT are then used as indicators that relate to the environmental costs of transportation projects including air

***HiAP in Action:* Smart Mobility 2010**

Smart Mobility "moves people and freight while enhancing California's economic, environmental, and human resources by emphasizing convenient and safe multi-modal travel, speed suitability, accessibility, management of the circulation network, and efficient use of land." After a three-year effort, Caltrans, in collaboration with the Governor's Office of Planning and Research and the Department of Housing and Community Development, and in partnership with the U.S. Environmental Protection Agency, developed a planning framework to guide and assess how well future programs, plans, and projects are meeting Smart Mobility goals through integrated transportation and land use. A major goal of the agencies has been to provide new tools and techniques while ensuring usefulness and applicability for all partner agencies.

and noise pollution, preventable injuries from traffic incidents, and physical inactivity.[112,113]

I.A3. Incorporate safety considerations of all roadway users into programs, policies, and community designs.

a. Support an increase in the number of low-resource schools participating in the state and federal Safe Routes to School programs.
    i. Ensure Caltrans District Application Review Committee members are trained in health and environmental justice principles that are impacted by Safe Routes to School, and that each committee has members with experience in the area of health and disadvantaged communities to reinforce these principles.
    ii. Provide additional outreach and assistance to low-resource communities to encourage and enable successful participation in the state and federal Safe Routes to School programs.
b. Analyze the impact of lower speed limits on injuries, air pollution, and greenhouse gas emissions.
c. Explore opportunities to reduce injuries, greenhouse gas emissions, and air pollution through changes in roadway features to encourage slower speeds (e.g., traffic calming).
d. Promote legislation to amend the California vehicle code so that localities can lower speed limits on local roads, where appropriate.
e. Convene stakeholders and relevant agencies to discuss lower speed limits on highways.

Incorporating safety considerations for all roadway users into programs, policies, and community designs creates multiple benefits from increased physical activity, improved air quality, and reductions in greenhouse gas emissions and traffic fatalities.

Safe Routes to School

Physical fitness of children is linked not only to improved health, but also improved academic performance.[114] Schools located in neighborhoods close to students can support health by making walking and biking to school a feasible option, helping children stay active and reducing traffic and vehicle emissions.[115] Ensuring the quality of the built environment around schools can make sure travel to and from school is safe and support sufficient space for children to be active during school hours.[116] While the California Department of Education's primary focus is student achievement, the department understands the importance of quality school facilities, school siting, and how they impact student achievement. Children who walk or bicycle to school have better cardiovascular fitness than do children who do not actively commute to school,[117] but a Center for Disease Control and Prevention survey found that parental perception of traffic dangers prevented an estimated 20 million children nationally from actively commuting to school.[118] Residents in low-income urban areas are more likely to report busy streets and poor pedestrian and bicycle infrastructure, and may be particularly concerned about sending children to school by foot or bicycle.[119] These concerns are

not unfounded, as children living in low-income neighborhoods have a greater risk of pedestrian accidents and fatalities.[120]

California's Safe Routes to School (SR2S) program and the federal Safe Routes to School Program (SRTS) have successfully encouraged active transportation for youth. These programs provide funding for infrastructure projects that improve safety such as installing and improving traffic signals, sidewalks, bicycle lanes, speed humps, crosswalks, and disabled access ramps and implementing traffic calming and speed reduction measures.[121] Non-infrastructure programs seek to address parental concerns through education and encouragement. There is evidence that these programs work, and depending on the area and program, increases of walking or biking to school of 20-200 percent have been shown throughout California.[122] In addition to making active transportation safer for children, SRTS/SR2S programs can help schools and communities address issues such as traffic congestion, costs associated with busing, disconnects between school and community, and poor air quality.[123]

SRTS has specifically recognized the critical need for low-resource schools and communities to be able to access funds and implement these programs.[124] Low-income families are twice as likely to walk as higher-income families, but face many more risks.[125,126] Therefore, continuing to encourage low-resource schools and helping them overcome barriers to implementing SRTS/SR2S is especially important. Current barriers include a lack of access to professional expertise, such as planners and engineers, to help with applying for and implementing funding, as well as other structural barriers to applying for funding, like understaffed schools.[127] One action step towards this goal, initially suggested by the SRTS Technical Assistance Resource Center (TARC), is to ensure that the Caltrans District Application Review Committee members are trained in health and environmental justice principles that are impacted by SRTS/SR2S, and that each committee has members with experience in the area of health and disadvantaged communities to reinforce these principles. A second specific action step is for TARC to provide additional outreach and assistance to low-resource communities to encourage and enable successful participation in the State and federal Safe Routes to School programs.

Many groups support both traffic calming measures and expansion of Safe Routes to School. For example, the Institute of Medicine, in its report *Local Government Actions to Prevent Childhood Obesity*, recommends that governments "plan, build, and retrofit streets so as to reduce vehicle speeds, accommodate bicyclists, and improve the walking environment."[128] Methods to implement SRTS in low-resource schools and communities have been suggested as best practices by the Safe Routes to School National Partnership, and SRTS has been recommended as a strategy to provide physical activity opportunities by the Robert Wood Johnson Foundation's *Action Strategies Toolkit*.

Vehicle Speed

Measures to reduce speeds, including traffic calming measures and lowering speed limits, can significantly improve health and sustainability efforts by reducing greenhouse gas emissions, air pollution, injuries, and deaths. The emission of air pollutants increases exponentially with increased speeds. Raising motor vehicle speeds from 50 mph to 70 mph raises gasoline emissions of carbon monoxide and nitrogen oxides by factors of 3.5 and 1.7, respectively, and increases diesel emissions of particulate matter over 200 percent; conversely, reducing the speed limit to 55 mph would reduce vehicle greenhouse gas emissions by at least 10 percent.[129,130] The Netherlands lowered speed limits on various roadways near city dwellings in order to meet European Union air quality standards in 2006, with substantial improvements in air quality and noise.[131] Another Dutch study looking at traffic congestion levels found that they did not increase as a result of reduced speed limits, contrary to concerns expressed before the restriction was put in place.[132] Reduced vehicle speeds are also associated with lower motor vehicle injury and fatality rates. The Global Road Safety Partnership recommends an approach that includes 30 kilometers per hour (km/h) (19 miles per hour) speed limits in built-up areas with a mix of motor vehicle traffic and vulnerable road users,[133] which characterizes residential areas. Speed influences the risk of collisions and their consequences. The number and severity of injuries increase as collision speeds increase. For example, pedestrians have a 90 percent chance of surviving an impact at 30 km/h, but survival decreases to less than a 50 percent for collisions at 45 km/h or above.[134] The implementation of a 55 mph speed limit in the 1970s resulted in 9,000 fewer U.S. highway fatalities in the first year and between 3,000 and 5,000 fewer annual fatalities thereafter.[135] Subsequent increases in state speed limits to at least 70 mph resulted in 35-38 percent more deaths.[136]

Currently, localities can only decrease speed limits below 25 miles per hour on "narrow" streets or near schools or senior centers, but they do not have discretion over other areas.[137] Legislation should be proposed to amend the California vehicle code so that localities can, at their discretion, lower speed limits on local roads, where appropriate and feasible. Many stakeholders, including Caltrans, Office of Traffic Safety, California Highway Patrol, Business, Transportation and Housing Agency, Department of Public Health, and the general public, have an interest in the issue of speed limits on highways. Convening these stakeholders would provide an opportunity to discuss issues of legal authority, feasibility, benefits to health, and reduction of greenhouse gas emissions. California-specific analyses of the predicted impact of lower speed limits on injuries and health, air pollution, and greenhouse gas emissions would be helpful in educating the public about the value of speed reduction.

While speed limit enforcement can reduce speeds by about 25 percent and is an important component of pedestrian safety, reductions in vehicle speeds can also be achieved through structural measures such as traffic calming.[138] The Institute of Transportation Engineers defines traffic calming as a "combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users."[139] Physical measures to

reduce vehicle speeds include road humps, roundabouts, medians, and increased use of stop signs. These are important not only because they reduce traffic fatalities, but people feel safer walking and bicycling when vehicles drive slower[140] and are therefore more likely to be active. Traffic calming methods are effective; speed humps are associated with a 53 percent to 60 percent reduction in the odds of injury or death among children struck by an automobile in their neighborhood.[141] State actions should include promotion of and training regarding best practices in roadway design for traffic calming, incentives for incorporating such features in transportation infrastructure projects, and monitoring of outcomes of infrastructure change.

I.A4. Highlight the opportunities presented by SB 375 to promote active transportation.

a. Incorporate health considerations in Strategic Growth Council (SGC) outreach and technical assistance program for the SGC's Sustainable Communities Planning Grant program, and in SGC metrics for grant evaluation.
b. Convene regional workshops with local health officers (California Conference of Local Health Officers) and planners (Metropolitan Planning Organizations and Regional Transportation Planning Agencies) to promote and facilitate integration of health considerations in sustainable community planning.

SB 375 aims to reduce greenhouse gas emissions from passenger vehicles by encouraging sustainable planning that reduces urban sprawl.[142] Because of the links between infill, multi-modal transportation, and health, SB 375 has the potential to produce tremendous short-term health benefits, alongside the indirect benefits that may come from reductions in greenhouse gas emissions. SB 375 requires the California Air Resources Board (CARB) to develop regional greenhouse gas emission reduction targets to be achieved from the passenger vehicle sector for 2020 and 2035. Each of California's Metropolitan Planning Organizations (MPOs) will prepare a Sustainable Communities Strategy demonstrating how the region will meet its target through land use and transportation strategies. SB 375 also establishes incentives to encourage implementation of the Sustainable Communities Strategy.[143,144]

For every 1 percent of automobile travel that is replaced by walking or biking, motor vehicle emissions decrease by between 2 percent and 4 percent.[145] The transition from automobile to active transportation modes also has noise reduction, greenhouse gas emission reduction, and energy conservation benefits.[146] Further, land use development practices that facilitate active transportation contribute to economic development, can increase property values, and, because reduced automobile travel saves about 20 cents per mile in vehicle costs, each million mile reduction in car travel could add two jobs and increase income within the region by $45,000.[147,148,149]

The California Center for Public Health Advocacy recommends that "the Strategic Growth Council should encourage regional planning commissions to incorporate community health goals into their sustainable growth strategies and should prioritize

funding for land use planning and urban greening projects" in order to reduce the costs of overweight and obesity in California.[150]

Health Considerations in Planning Grant Programs

Through the Sustainable Communities Planning Grant program, the SGC administers Proposition 84 funds for planning grants and planning incentives that reduce energy consumption, conserve water, improve air and water quality, and provide other community benefits.[151] The SGC provides outreach and technical assistance regarding the development of sustainable community strategies, and can use this outreach as an opportunity to educate regional planners on the health impacts of land use and transportation planning. In addition, the SGC grants should incorporate health metrics into evaluation processes.

Regional Workshops

A preliminary effort to convene MPO and local health department staff occurred during three day-long workshops that were conducted in Oakland, Fresno, and Los Angeles in June 2010 by CDPH. The *Integrating Community Health Measures into Modeling for Healthy Regional Planning and Decisions* workshop attendees included a total of 44 MPO staff, 66 local health department staff, and 8 attendees from State or other health agencies. Evaluation comments (1) reflected participants' appreciation for the training, (2) highlighted the diverse backgrounds and orientation of the attendees, and (3) identified that because of the diversity of experience in attendance, the level of training was too complex for some attendees and too broad for others. Additionally, evaluations indicated that further information on specific tools and measures of health impacts as well as data would be helpful to all in attendance to move this work forward. Attendees largely agreed that continuing to provide introductions and orientation to the different agencies involved in regional planning and their various responsibilities would be essential to sustainable community planning.

I.A5. Incorporate trails and greenways as part of an active transportation system.

A greenway and trail network can connect people and places, and serve as an essential piece of active transportation infrastructure. Trails can be a low-cost intervention that reduces the cost, convenience, and accessibility barriers that individuals can encounter when trying to be physically active and provides residents access to community destinations without reliance upon motor vehicles.[152] Access to neighborhood trails is associated with a 51 percent increased likelihood that adults will achieve the recommended 30 minutes of daily physical activity.[153] Trails and greenways that are located close to people's residences and workplaces, that connect to a variety of destinations, such as employment centers, stores, and schools, that are longer, have multiple points of access, and are part of a network of trails, are more likely to be utilized for active transportation, including commuting.[154] Providing trails and greenways to enhance and connect other bicycle and pedestrian infrastructure can result in a 5 percent to 30 percent reduction in a community's overall vehicle miles

traveled (VMT).[155,156] Trails and greenways can mitigate climate change by reducing VMT, which reduces greenhouse gas emissions.

Park access is usually lower in low-income neighborhoods, exacerbating the other health impacts of poverty by reducing access to activity-promoting facilities.[157] Integrating greenway plans, trails, and parks with land use, transportation, and economic development plans can provide access to spaces for physical activity in all communities. Residents of communities with trails, sidewalks, and other active living environments are twice as likely to ride a bicycle or walk than residents in communities with little active transportation infrastructure, and research indicates this association is amplified for low-income residents.[158]

Trail investments can support the local economy by bringing tourists into communities. Trails also contribute to improved property values, ranked second of 18 preferred amenities home buyers would like in their community.[159] Leadville, Colorado received an increase of 19 percent in sales tax revenue in the months following the opening of the Mineral Belt Trail from tourists visiting the area to hike the trail, and the Mineral Wells-to-Weatherford Rail-Trail in Texas generates $2 million in local revenue from users.[160] In California, the Ohlone Greenway is a 5.3-mile urban trail that links Berkeley, Albany, and El Cerrito by weaving together a number of parks and green spaces. The asphalt path connects commuters to two transit stations along the way, and passes close to the campus of the University of California, Berkeley. The greenway is dotted with community gardens, exercise equipment, a playground, a dog park, and public art, making it an attractive site for a variety of users, including families and youth.[161]

The Robert Wood Johnson Foundation recommends prioritizing the integration and connection of trails, paths, and sidewalks into existing transportation planning and encourages agencies to access federal funding for these improvements through the Transportation Enhancement Program offered by the U.S. Department of Transportation's Safe, Accountable, Flexible, Efficient, Transportation, Equity Act: A Legacy for Users (SAFETEA-LU).[162]

I.A6. Promote and encourage active transportation and physical activity for State employees.

a. Develop a bicycle fleet for State employee use.
b. Provide ample covered and secure bicycle storage and on-site showers for employee use in all State buildings (leased and owned).
c. Require new State buildings or renovations to incorporate designs for health (e.g., prominent/usable stairways).
d. Explore shifting parking subsidies to incentives for active transportation and physical activity.
e. Facilitate the sharing across agencies of existing resources in support of physical activity, such as exercise areas, showers, bicycle storage, and walking clubs.

Chronic disease and obesity have important impacts on the State as a large employer. Obesity and chronic disease contribute to significantly more absenteeism and less productivity when on the job ("presenteeism") because of health problems.[163,164,165] In addition to productivity issues, chronic diseases lead to high insurance premiums for employers. The State spent between $1.83 and $2.48 billion on State employee health care costs in FY 2003-2004, and $6.95 million on retired employee health care costs in the same year.[166] Return on investment ranges from $3 to $15 for each dollar invested in workplace wellness programs and savings can appear within 12 to 18 months.[167] An evaluation of the worksite wellness program established for Ventura County employees conservatively estimated a $4.40 return on every dollar invested in the program in 2004 and a $3 return for FY 2007-2008.[168] Therefore the State has incentives to improve health for its own employees. Adults spend a significant amount of time at work, making worksites important places for interventions to control overweight, obesity, and chronic disease.[169] There is strong evidence that worksite physical activity programs do result in increased physical activity among employees.[170] Additionally, the State has the opportunity to model positive workplace practices for local governments.

Bicycle Fleet and Facilities

There are a number of steps State agencies could take to improve the health of employees. For example, State agencies could make bicycles available for use by State employees. Developing a bicycle fleet requires bicycle parking, a registration and check-out system, an introductory bicycle safety course, insurance and liability management, and purchasing bicycles. Since April 2009, the California State Teachers' Retirement System has had eight bicycles for employees to use for personal use and during Bicycle Month engages employees in after-work and lunchtime group rides. The California Environmental Protection Agency (Cal/EPA) is currently piloting an electronic bicycle-sharing program of six bicycles available for the personal use of Cal/EPA employees and other building occupants. Even without a bicycle fleet, the State could encourage active transportation to work by providing ample covered and secure bicycle storage and on-site showers in all leased and owned State buildings. The State could also encourage physical activity by developing a set of guidelines and requiring all new State buildings or renovations to incorporate designs for health, such as prominent and usable stairs, on-site exercise facilities, locker rooms, and showers.

Transportation Subsidies

Since 2001, the State of California has had a Pre-Tax Parking Reimbursement Account Program, currently established in bargaining unit agreements, allowing State employees to set aside tax-exempt money for parking. Providing incentives to State employees to drive to work seems to contradict goals to reduce greenhouse gas emissions, improve health, and reduce air pollution. The pre-tax parking reimbursement program could be transformed into an incentive program to encourage active transportation and physical activity, such as by allowing employees to set aside money for health club membership, fitness classes, or other purchases such as bicycles or the employee share of transit passes.

Resource-Sharing

In order to improve State efficiency and save money while promoting physical activity, State agencies and departments should be encouraged to share existing resources such as exercise areas, showers, and bicycle storage. The State should identify opportunities for, and current barriers to, sharing facilities. There may be concerns regarding security or liability, but given goals of economic efficiency and sustainability, reducing duplicative services is essential.

Policies to support government employees' use of active transportation are already being pursued on a federal level. Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, signed by President Obama on October 5, 2009, established a federal government-wide policy promoting a clean energy economy. As part of the Executive Order, the Inter-Agency Task Force on Bicycling and Active Transportation outlined recommended steps for the cost-effective creation of a bicycle-friendly environment for employees at and visitors to federal facilities, thereby reducing the emission of greenhouse gases.[171] Among the document's recommendations to promote bicycle commuting among federal employees are providing bicycle parking in secure areas, providing showers and lockers when possible, and joining or establishing bicycle share programs.[172]

I.B. Housing and Indoor Spaces

Aspirational Goal: All California residents live in safe, healthy, affordable housing.

Housing and Health

Affordable housing provides increased stability and greater choice of location, which allows families more resources for other goods and services, health care needs, and basic necessities such as healthy food.[173,174] Residential instability exacerbates health problems and has been associated with academic, emotional, and behavioral problems in children.[175] Housing hazards (e.g., lead paint, fire hazards, and mold) are associated with health problems including developmental disabilities, injuries, and asthma.[176,177,178] Residents of multi-unit properties may also face involuntary exposure to tobacco smoke, which is linked to significant health problems. Banning smoking in indoor spaces has been shown both to reduce exposure to

HiAP in Action: Green Buildings

The California Building Standards Commission 2010 California Green Building Standards (CALGreen) Code goes into effect on January 1, 2011. CALGreen was developed through the collaborative efforts of the Department of Housing and Community Development, the Division of the State Architect, the Office of the State Fire Marshal, the Office of Statewide Health Planning and Development, the California Energy Commission, and the Building Standards Commission, with an aim of reducing greenhouse gas emissions, energy use, and water use. CALGreen addresses many intersections between buildings and health, including indoor air quality, indoor moisture control, bicycle parking, and changing/shower facilities.

secondhand smoke among nonsmokers and to decrease tobacco use among smokers.[179] By encouraging physical activity, healthy eating, active transportation, and social networks, health is supported when housing is located near parks, grocery stores with healthy food, jobs, schools, and other community necessities.[180]

Relationship to Strategic Growth Council Objectives

Housing policy can improve health while helping to reduce greenhouse gas emissions, preserve agricultural lands, and enhance environmental sustainability. Infill and transit-oriented development provide alternatives to sprawl, which can in turn decrease vehicle miles traveled, greenhouse gas emissions, acres paved, loss of agricultural and forested land, water surface runoff, and soil degradation. Housing located close to essential services and amenities encourages active transportation, which is beneficial for health outcomes and reduces greenhouse gas emissions. When affordable housing is not available, people often have to commute long distances, which can increase vehicle miles traveled.

I.B1. Encourage sustainable development through healthy housing by offering incentives and providing State guidance.

a. Develop incentives for healthier new and existing housing developments by promoting universal design, community gardens, siting near grocery stores, parks, and other resources necessary for healthy living, and smoke-free policies in multi-family housing developments.

Healthy housing is influenced by housing location, conditions, maintenance, design, location, and affordability. Through guidance and incentives (such as funding or bonus points in grant applications), the State can promote existing and new housing development with positive health impacts. The location and design of housing can increase social interaction and provide economic opportunity.[181] Housing location affects access to resources such as parks, recreation, grocery stores with healthy food, jobs, schools, and other community necessities. By impacting access, housing location influences people's behaviors such as physical activity, healthy eating, and method of transportation, which in turn impact health. For example, fruit and vegetable consumption increases significantly when there are more supermarkets located in a neighborhood.[182] When children have easy access to playgrounds, their physical activity level increases. Safety is particularly important; when people feel safe in their neighborhoods, they spend more time walking,[183] biking, and being in the streets and parks, and on public transportation.[184] State funding should be directed towards new housing that is accessible to community resources. Existing housing can also be made more accessible through policies that increase infill and transportation services.

Housing incentives can support design features that promote health. Universal design is "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."[185] California can use universal design to help prepare for its aging population, which is essential for reducing the number of seniors who must move to costly residential care facilities simply because their housing is not sufficiently accessible. Community gardens have a

number of benefits, including creating social cohesion, supporting healthy eating and reducing neighborhood crime by developing vacant lots.[186,187,188] Through State incentives, existing housing developments can add community gardens and new housing can incorporate community gardens from the beginning of development.

Many children have not fully benefited from California's smoking bans because they are still exposed to secondhand smoke at home[189] or from their neighbors in multi-family housing development. Eliminating indoor smoking is the only way to create smoke-free homes, as methods like opening windows and use of ventilation systems cannot completely eliminate secondhand smoke.[190] New multi-family housing developments built with State funds should encourage tobacco-free policies. A number of California cities including Sebastopol, South Pasadena, Belmont, Richmond and others have adopted smoke-free multifamily housing laws. The Surgeon General's *Call to Action to Promote Healthy Homes* suggests that "adopting smoke-free rules in homes reduces involuntary exposure to secondhand smoke and improves health."[191] The U.S. Department of Housing and Urban Development strongly encourages public housing authorities to implement non-smoking policies for their buildings.[192]

I.B2. Explore secure and permanent funding for affordable housing.

a. Develop a permanent source of funding for affordable housing to succeed Proposition 1C program funds.

California has a shortage of 2 million housing units, and this deficit has been growing since the late 1980s.[193] Proposition 1C, the Housing and Emergency Shelter Trust Fund Act of 2006, designated $2.85 billion to finance affordable housing and infrastructure across California. However, nearly all of the voter-approved funds are expected to be exhausted by the end of this year.[194] The Department of Housing and Community Development has identified the development of a permanent source of funding for affordable housing as a goal in its *Strategic Plan 2007-2010*.[195] Potential sources of revenue include employer-assisted housing tax credits, higher transient occupancy fees, or fees on real estate transactions.

One example of a permanent affordable housing funding supply is the Connecticut Public Act, which established a $30 fee for recording land records, $26 of which goes to the State to be placed in a Land Protection, Affordable Housing and Historic Preservation Account to supplement new or existing affordable housing programs.[196] The money dedicated to housing has gone to nonprofit developers to pay for the preliminary planning and design of affordable housing, a technical assistance pilot program for rural and suburban areas, and a fund to help public housing authorities improve living environments for tenants.[197]

The Robert Wood Johnson Foundation Commission to Build a Healthier America identifies housing affordability as one of the three most important factors of housing related to health, in addition to neighborhood and housing conditions.[198] The Smart Growth Network explicitly highlights affordable housing as a goal of smart growth.[199]

I.B3. Promote sustainable development through smart housing siting.

a. Develop incentives for sustainable housing development by awarding bonus points in competitive grant programs or giving dedicated or beneficial funding consideration for infill and transit-oriented developments.
b. Identify barriers to achieving infill and transit-oriented development and identify strategies to address these barriers. Potential barriers to be evaluated include local zoning and regulations, infrastructure deficiencies, and multiagency mitigation requirements.
c. Develop recommended processes for balancing multiple public policy objectives affecting air quality and the permit processing and siting of transit-oriented development.
d. Identify research needs and support research and demonstration efforts to mitigate adverse environmental and public health impacts in residential areas proximate to major urban roadways and transportation corridors.

Sprawl is associated with negative health outcomes, including increased exposure to air pollution,[200] lower levels of physical activity,[201] and increased motorist and pedestrian fatalities.[202] The longer commutes that accompany sprawl reduce time with family and friends and potentially impact mental health and social capital.[203] Residents of more compact communities walk more, weigh less, and have lower levels of hypertension than do residents of sprawling communities.[204] Strategies that reduce sprawl and create compact communities will thus have a number of positive health and sustainability outcomes. One of the many approaches to reduce sprawl is transit-oriented development, which seeks to create communities around new or existing public transit stations.[205] Another approach is infill development, which builds homes, businesses, or public facilities on currently unused or underutilized land.[206] There is evidence that sustainable housing development through infill and urban redevelopment of existing areas allows for active transportation and increased community access to resources and integrates communities.[207,208]

Promoting the use of transit-oriented development and infill can be done by providing incentives for smart housing siting and by addressing barriers. Barriers to healthier housing development, such as local zoning and permitting processes and lack of developer capital to invest in new infrastructure, can be overcome by creating incentives for sustainable development projects.[209] Incentives could include waiving development-related fees,[210] awarding bonus points in competitive grant programs, or dedicating funding specifically for these projects.

While the benefits of infill and transit-oriented development have been clearly delineated, the potential adverse health impacts also merit careful consideration. There is substantial evidence that residents of housing located in close proximity to busy roadways suffer an increased risk of asthma symptoms and hospitalizations, children's medical visits, and cancer, and that particulate matter pollutant levels close to freeways are considerably higher than those 500 feet away.[211] Some jurisdictions, such as San Francisco, have implemented processes to mitigate the health risks of locations close to roadways in order to accommodate greater numbers of affordable housing units.[212]

Concerns about the proximity of housing to roadways are frequently cited as barriers to infill development and other smart housing siting methods. Research and demonstration efforts should be supported to determine how to mitigate the effects of major urban roadways and transportation corridors on nearby residential areas.

The U.S. Department of Housing and Urban Development has a new Sustainable Community Regional Planning Grants Program, which includes criteria to increase construction on underutilized infill development sites and a major focus of fostering transit-oriented, mixed-use development.[213] A number of states and cities have programs to support transit-oriented development and infill. The California Department of Housing and Community Development's Catalyst Projects for California Sustainable Strategies Pilot Program provides a financial incentive for innovative land use planning and green building strategies.[214] Massachusetts has a Transit Oriented Development Infrastructure and Housing Support Program which provides financial support for compact, mixed-use, walkable development within a quarter-mile of public transit stations.[215] In Phoenix, Arizona, a housing ordinance encourages infill development through a number of incentives. The program has been successful in increasing the supply of housing for low- and moderate-income families.

Transit-oriented development and infill are supported by the Smart Growth Network, which cites transit-oriented development as a "key opportunity to accommodate new growth" and recommends supporting infill development and offering incentives for local communities to increase density.[216] Public Health Law & Policy recommends transit-oriented development and urban infill as two ways of integrating public health into planning.[217] The State of Washington *Example Comprehensive Plan Policies to Support Physically Active Communities* specifically suggests pursuing transit-oriented development to improve opportunities for physical activity.[218]

I.B4. Ensure that all workers and school-children enjoy smoke-free environments.

a. Amend Health and Safety Code (H&S) Code Section 104420(n)(1) and H&S Code Section 104420(n)(2) to require all school campuses to be tobacco free, expand the definition of tobacco to include other non-prescription nicotine delivery devices, and amend H&S Code Section 104420 to update the definition of a Local Education Agency (LEA) to include direct-funded charter schools.
b. Create smoke-free workplaces that will protect all groups of workers and create an environment that increases smokers' chances of successfully quitting by eliminating provisions in Labor Code Section 6404.5 that permit smoking in hotel lobbies, hotel banquet rooms, tobacco shops and private smokers' lounges, warehouses, break rooms, workplaces with five or fewer employees, and businesses defined as "owner operated."

Secondhand smoke (or environmental tobacco smoke) causes serious and deadly health effects.[219,220,221,222] It is estimated that exposure to the carcinogens and toxins in secondhand smoke (SHS) kills more than 3,000 adult nonsmokers from lung cancer,

approximately 46,000 from coronary heart disease, and an estimated 430 newborns from sudden infant death syndrome every year.[223] Children are impacted by SHS, which causes an increased risk of lower respiratory tract infections such as bronchitis and pneumonia, is associated with additional episodes and increased severity of symptoms in children with asthma, and is a risk factor for new cases of asthma in previously healthy children.[224] Creating smoke-free schools and workplaces reduces SHS exposure and improves the health of smokers, who smoke less and become more likely to quit smoking.[225]

The adoption and enforcement of tobacco-free campus policies is currently required by Health and Safety (H&S) Code Section 104420(n)(2) only for public schools districts and county offices of education that receive Proposition 99 funding. As this funding has diminished and funds are awarded competitively, fewer schools are receiving these funds and having a tobacco-free campus is no longer the policy at many schools. In fact, 24 percent of California school districts do not have a tobacco-free campus policy.[226] Given the health impacts of tobacco, legislative action should be taken to amend the H&S Code to require all schools to be tobacco-free regardless of whether or not the schools receive Proposition 99 funding.

Smokeless tobacco use (such as dipping tobacco, chewing tobacco, and "snus") is on the rise among youth.[227,228] As the use of smokeless tobacco products increases, it is essential that H&S codes reflect these changes. Additionally, new electronic cigarettes are unregulated by the Food and Drug Administration (FDA) and there are concerns that these "e-cigarettes," when used by youth, can increase nicotine addiction and lead young people to try other tobacco products.[229] The current H&S codes regarding tobacco-free school policies do not cover new nicotine products such as e-cigarettes and should be changed to reflect these new nicotine delivery systems.

Direct-funded charter schools are not subject to many H&S codes regarding tobacco-free school policies. Only one percent (7 of 562) of direct-funded charter schools in California maintain a certified tobacco-free campus, creating environments where a majority of children at charter schools are unprotected from secondhand-smoke exposure. Currently, 341,000 students in California attend 809 charter schools[230] and the California Charter School Association projects that by 2018, this will increase to at least 1 million students.[231] The H&S Code should be expanded to encompass all charter schools.

Smoking has been banned in most workplaces, and a systematic review of U.S. smoking bans in workplaces, pubs and restaurants, and the general public found that smoking bans reduced exposure to SHS, with the greatest reduction seen in hospitality workers.[232] The review also found a reduction in hospital admissions for acute coronary syndrome after smoking bans.[233] The Surgeon General's 2006 report on secondhand smoke identifies the workplace as a major source of environmental tobacco exposure for adults, especially for those workers in the service industry, who tend to be young adults, of low socioeconomic status, and Hispanic.[234] Currently, the California Labor Code Section 6404.5 permits smoking in hotel lobbies, hotel banquet rooms, tobacco

shops and private smokers' lounges, warehouses, break rooms, workplaces with five or fewer employees, and businesses defined as "owner operated."

> ***HiAP in Action:* Smoking Cessation Promotion**
>
> Many State agencies share clients and target audiences, presenting opportunities for shared messaging. The Department of Community Services and Development provides smoking cessation materials and messages tailored to American Indians and farm workers to its community partner agencies receiving Community Services Block Grants. These messages are developed by the Department of Public Health Tobacco Control Program.

The Labor Code exemptions for separately ventilated areas mean that California's smoke-free workplace law is not meeting national standards for having a comprehensive smoke-free policy.[235] According to the Centers for Disease Control and Prevention, California is one of only 18 states without a 100 percent smoke-free indoor air law for bars, restaurants, government worksites, or private worksites.[236] As a result, only 75.4 percent of employed California adults are protected by a smoking ban at work, ranking California 27th among the 50 states and the District of Columbia for this indicator.[237] Removing loopholes from the Labor Code would significantly improve healthy working conditions and reduce the unfair health burden that secondhand smoke places on poor, young adult, and Hispanic workers.

Evidence shows that smoking bans in schools and workplaces reduce SHS exposure and decrease the number of individuals who smoke and how much they smoke. In fact, the Surgeon General's 2006 report concludes that smoking bans are the only effective way to eliminate exposure to SHS, as separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate exposure.[238] The Task Force on Community Preventive Services also recommends smoking bans and restrictions in workplaces based on strong evidence of their effectiveness.[239]

I.C. Parks, Urban Greening, and Places to be Active

Aspirational Goal: Every California resident has access to places to be active, including parks, green space, and healthy tree canopy.

Parks, Urban Greening, Places to Be Active, and Health

Access to open and green spaces, forests, and outdoor park and recreational facilities increases opportunities for physical activity, which is protective against premature death, cardiovascular disease, type 2 diabetes, some cancers, hypertension, obesity, osteoporosis, and depression.[240,241] Trees provide shady, pleasant places to engage in physical activity and active transportation,[242] and shade from trees provides protection during extreme heat events[243] and from cancer-causing ultraviolet radiation.[244] Well-maintained parks and recreation facilities can help reduce crime as the presence of park users in and around facilities can increase surveillance and discourage criminal

activities.[245,246] Low-income and racial/ethnic minority neighborhoods, whose residents are the most at risk to be sedentary and overweight, have the least access to parks and physical activity opportunities such as bicycle trails and public pools.[247,248]

Relationship to Strategic Growth Council Objectives

Urban greening has multiple benefits including energy savings, air quality improvement, stormwater control, and property value increases. Mature tree canopies can reduce air temperature five to ten degrees, helping to counteract the urban heat island effect, and reduce the production of harmful ground-level ozone. Urban shade trees can reduce building air conditioning needs, decreasing energy demand, which can in turn decrease pollutant emissions from power plants.[249,250] Trees and other vegetation can improve air quality by filtering out pollutants (e.g., ozone and nitrogen dioxide), intercepting particulate matter, and sequestering greenhouse gas emissions.[251] Plant life maintains California's water supply by protecting watersheds, providing permeable surfaces in urban areas to reinforce stormwater management, and reducing pollutant loads in runoff as it recharges groundwater aquifers. Management and protection of natural resources and forests both protects residents from wildfire and improves air quality by preventing wildfire, which releases particularly harmful gases and particulate matter. Invasive species may threaten California's agriculture, urban and parks tree canopy, and forests.[252, 253] Joint use of facilities improves health by increasing opportunities for physical activity, while decreasing the inefficient and expensive need to replicate services and develop land that might otherwise be used for agriculture or green space.[254] Joint use can also improve collaboration between agencies, communities, and organizations. The chemical components of tobacco waste can endanger humans, waterways, wildlife, and vegetation.[255]

I.C1. Support urban greening and access to green spaces.

a. Promote increases in tree canopy through communication, education, and outreach regarding multiple co-benefits of trees, including promoting use of existing tools and guidance for selection of trees for urban forestry with regard to fire hazard, drought tolerance, water use, allergenicity, and improved air quality.
b. Encourage fruit trees and community gardens, including through the use of grants; investigate the use of specialty crop block grants for this purpose.
c. Conduct a statewide assessment of existing tree canopy cover, then develop achievable targets for each jurisdiction and quantify the anticipated benefits associated with meeting the target, including health benefits.
d. Explore the development of policies to establish markets for the ecosystem services of trees.
e. Explore the use of easements to expand the availability of land for trails and greenways, where appropriate.
f. Expand programs to provide access to parks for disadvantaged communities.

The U.S. Department of Agriculture Forest Service points to urban forestry as a tool to improve air quality, reduce stormwater runoff, promote smart growth, save energy, strengthen local economies, improve walkability, and enhance social connections.[256]

Specific to climate change benefits, the U.S. Department of Energy identifies urban forests as an important and effective climate change adaptation tool and identifies the forestry community as a resource communities can utilize to develop an adaptation strategy that maximizes carbon sequestration capacity, acknowledges community needs, and capitalizes on the co-benefits of urban greening.[257] Urban forestry can lead to improved feelings of safety, which can benefit health either directly or indirectly through an increase in physical activity or social interaction.[258]

Trees not only support physical health and a healthy environment, but they provide a number of economic benefits as well. First, trees can save energy; in the summer, the shade of one properly placed tree can reduce annual air conditioning use by 2 to 8 percent.[259] In the winter, trees can help block cold winds. It has been estimated that planting 100 million mature trees in U.S. cities could save $2 billion in energy costs while improving air quality through a reduction in greenhouse gases.[260] Tree canopy reduces water runoff and stormwater drainage decreasing the amount of pollutants that get into waterways.[261] This can save money that would have been spent on stormwater treatment and flood control. Other economic benefits of tree canopy and urban forests include a reduced need to repave roads, increased consumer spending in areas with trees, and higher property values.[262]

The Task Force recommends that California promote tree canopy by better educating the public about the multiple benefits of trees, promoting use of tools that have already been developed, encouraging fruit trees and community gardens, and conducting assessment and targets for increased tree canopy. Communities can access existing tools to help identify trees that will grow well in their specific location, are resource-efficient in terms of using little water, are able to withstand drought and fire, do not typically cause allergies, and improve air quality. The Urban Forestry Ecosystems Institute's *SelecTree: A Tree Selection Guide* is an example of a tool that provides information for selection of tree varieties based on attributes such as fire safety, utility precautions, root damage potential, invasive plants, biogenic emissions, allergy and toxicity, maintenance, and hazardousness.[263] ICLEI, Local Governments for Sustainability also provides guidance on appropriate tree selection.[264] Fruit trees and community gardens can be encouraged through the use of grants, both by changing grant criteria to provide bonus points for urban greening and through new funding sources. The State should explore the use of California Department of Food and Agriculture (CDFA) Specialty Crop Block Grants for projects that support specialty crops through community gardens and urban orchards. In order to facilitate smart planning, the State should conduct an assessment of existing tree canopy cover, including the types of trees, locations, distribution, and maintenance strategies currently in place. The State should then develop achievable targets for each jurisdiction, based upon need and anticipated benefits, including benefits related to climate change and health.

The monetary value placed on the services provided by natural resources, such as clean water, wildlife habitat, food chain support, or carbon sequestration, is being used to create "ecosystem markets."[265] These markets, which allow for trading permits or credits related to environmental services,[266] are a relatively new but growing field, and bring together economists, developers, regulators, investors, and community organizations to identify ways to build profit-motivated interest in tree canopy and other greening. The American Forest Foundation established a carbon market pilot project in Oregon through Woodlands Carbon and in New York through CarbonTree, LLC.[267] Both projects aggregate and trade sequestered carbon credits from managed forest lands to create yearly revenue for owners and mitigate climate change. The Chicago Climate Exchange market has protocols in place to trade carbon credits from sustainable forestry offset projects, and CARB supports the use of the *Climate Action Reserve's Forest Project Protocol* for current offset projects during transition into CARB's compliance offset program.[268] The Task Force could be a venue to explore these ideas and learn more about how these tools could be used to advance greening, ecosystem preservation, and health co-benefits in California.

***HiAP in Action:* Parks and Health Messaging**

Staff from the Departments of Public Health and Parks and Recreation are working together to provide information for parents and teachers on healthy field trip lunches to encourage healthy eating among the over one million children visiting State parks annually for school field trips. California State Parks has also helped develop a "Find Recreation" website where the public can find open spaces, including parks, that are venues for physical activity.

The State should expand programs that increase access to parks for vulnerable communities. One way to expand the availability of land for trails and greenways is through the use of easements. While easements often provide narrow strips of land that are not ideal for most park areas, they can provide greenways and walkable or bikeable linkages between parks or other green areas.

Urban greening is a recognized strategy to address climate change. The 2009 California Climate Adaptation Strategy identifies urban greening as a climate action that has co-benefits and is a near-term action to address climate vulnerabilities.[269] Both CAL FIRE and the SGC provide grants for communities to implement urban greening efforts by stopping the decline of urban forest resources, implementing climate change mitigation and adaptation, facilitating tree planting, improving environmental quality, and enhancing urban vegetation to optimize the health, climate, and environmental benefits of vegetation. More grant applications for both planning and project SGC Urban Greening Grants were received than could be funded, pointing to a possible place for expansion.

I.C2. Improve wildfire-related air quality and safety.

a. Convene a forum to explore relative risks of controlled burns/fuels management and wildfires.
b. Foster interagency collaboration to strengthen general plan guidance related to wildland fire risks and development in wildland and wildland/urban interface areas; continue to work with local governments and Fire Safe Councils to educate landowners on their responsibilities for addressing wildland fire risks; and continue to seek state and federal funding for fuels reduction projects.

Prescribed burns and other fuel reduction methods can reduce the risk of wildfire, removing thick underbrush in a controlled manner.[270] Approximately 150,000 acres of California wildlands are treated annually using prescribed burning.[271] Prescribed burns create air pollutant emissions, but with the intent of preventing wildfires that would emit larger amounts of air pollutants. Both wildfires and prescribed burns release smoke and particulate matter, which have a number of public health impacts, ranging from eye and respiratory irritation to more serious effects such as reduced lung function, bronchitis, exacerbation of asthma, and heart attack.[272] Young children, the elderly, people with pre-existing heart and lung conditions, and smokers are particularly vulnerable to smoke-related health risks.[273] Prescribed burns are coordinated with local air quality management authorities to minimize impacts on air quality. Research on the relative health impacts of controlled burns and wildfires can provide forestry and air quality officials with enhanced information on which to base prescribed burning decisions.

Homes built in wildland-urban interface areas are at risk from wildfire.[274] In 2009, 4,657 wildland fires burned 80,990 acres in the CAL FIRE State Responsibility Area and the local jurisdictions that CAL FIRE protects under contract, causing nearly $34 million in damage.[275] Fire suppression costs for the 2009-2010 fiscal year totaled over $256 million. Wildfire prevention has clear economic benefits.

Homeowners who live in wildfire areas are advised to take responsibility for ensuring that their homes have low ignitability, both for their own safety and to prevent fueling fire.[276] State law requires homeowners in wildland areas to reduce vegetation within 100 feet of their homes.[277] However, tensions exist between the relative importance of individual homeowner and government responsibilities to reduce hazardous fuel loads on both public and private lands in order to protect homes adjacent to wildland areas.

I.C3. Take stronger actions to prevent and control invasive species which pose a threat to all ecosystems, including agriculture and forests.

a. Foster interagency collaboration on education and outreach to stakeholders that emphasizes the importance of prevention to reduce the number of invasive species introduced.
b. Develop mechanisms that allow for early public health input into response options when an invasive species threat is detected.

Invasive species are those non-indigenous species that "persist, proliferate, and cause economic or environmental harm, or harm to human health."[278] While some species can spread to new regions on their own, most invasive species are introduced purposefully or accidentally by humans, and recently, introduction has accelerated because of increased movement of people and goods across the globe.[279] Invasive species cause the decline of native species, compete with agricultural crops, leading to crop shortage and poor crop quality, and degrade forests.[280] Nationally, the estimated costs associated with the effects and control of invasive plants, animals, pests, insects, plant pathogens, and human diseases total $120 billion a year.[281] Though steps to control invasive species exist, established species can be difficult and expensive to eradicate, and sometimes impossible.

Eradicating established species often involves the use of chemical or other control mechanisms, which can have environmental impacts on native species and adverse human health impacts.[282] For example, exposure to pesticides can increase risk for short and long-term illnesses, birth defects, cancers, and poisoning.[283,284,285,286] This creates a need for mechanisms to allow public health and other agency input into response options to ensure the safety of humans, animals, and soil and water quality with a long-term perspective. Furthermore, the best way to limit their impact is by preventing non-native species from invading and establishing themselves in the first place.[287,288] Greater interagency collaboration could foster education and outreach to stakeholders to emphasize the need for prevention.

Similar recommendations have been made by others closely involved with invasive species control. The California Invasive Species Advisory Committee's (CISAC) *Strategic Framework Draft* includes as one of its priority recommendations increasing interagency communication to ensure coordinated prevention approaches.[289] CISAC also recommends creating a standing Rapid Response Working Group, including representatives from all involved agencies and individuals with public health expertise, to guide response to new invasive species.[290]

I.C4. Encourage joint use of facilities throughout communities in California.

a. Provide guidance to school districts/superintendents regarding existing state law that provides liability protection.
b. Incorporate incentives for joint use in funding and construction of new schools. Specifically, explore statute changes to allow for the use of State joint use bond funds for outdoor recreational facilities/spaces and to allow local partners more flexibility in fulfilling the required 50 percent local share match for use of these joint use funds.
c. Encourage the joint use of parks, open space lands, and recreational facilities between schools and communities for purposes of moderate to vigorous physical activity, gardening, and other recreation opportunities.
d. Explore the feasibility of allowing joint use of state properties for community gardens.

Many communities lack safe, well-maintained, and accessible places for community members to be physically active.[291] This is particularly true in low-income communities of color, where access to and availability of public spaces for physical activity and recreation is low. [292] Access to no- or low-cost public spaces for physical activity plays a critical role in the prevention and treatment of obesity and overweight. One solution for this is joint use agreements, which involve organizations coming together to share indoor and/or outdoor space for community use.

Joint use policies and practices can mean schools opening their gates during non-school hours for community use, schools working with partners to share space, or local governments allowing schools/community members to use their space to enhance school-based activities and improve community recreation and healthy eating opportunities. Joint use agreements are formal agreements between agencies (such as school districts, cities or counties, and community-based organizations) that set the terms, conditions, and responsibilities of each party sharing the facility or public grounds.

In many communities, schools provide the only open space for community members to be active. In a recent survey of California's school superintendents/board members, 68 percent of respondents from higher-income districts indicated that some or all of their schools were open outside of school hours, compared to only 44 percent of respondents from lower-income districts.[293] This data highlights a need to expand the adoption of joint use agreements as these communities are also disproportionately affected by obesity and chronic disease.[294] Though some California laws encourage joint use for schools,[295] there are a number of barriers to joint use, including school district liability concerns, restrictions on the availability and types of use of State funds, and a lack of resources for staffing or maintenance.

Schools can currently protect themselves from risk of loss, damage, or liability if they properly maintain their insurance and property, require outside partners to maintain their insurance, and include indemnity clauses in joint use agreements. Despite this, many schools still have concerns about liability. The California Department of Public Health can work with the California School Boards Association and the Association of California School Administrators to educate their members regarding existing liability protections.

An incentive structure could be set up to ensure that funding for construction of new schools includes incentives for those plans that include joint use. Currently, the Education Code limits how State joint use funds may be used. Districts must use the joint use funds to develop new facilities, funds cannot be used for outdoor facilities, and the school district must come up with 25 percent of the local 50 percent match while the local partner(s) provide the remaining 25 percent. The local match requirement creates challenges in low-resource districts/schools, which would benefit from more flexibility in how they meet their match with partners. Allowing funds to be used for outdoor recreation spaces would also be of benefit, as these have the potential to serve the most people. These changes would require amending the Education Code. Joint use

bond funds have expired and additional State funding for joint projects will require another State school bond. However, making Education Code changes now would be a proactive step towards increasing the ability of communities to advance joint use.

State-owned land provides an opportunity for the State of California to model best practices with respect to healthy eating, joint use, and interagency collaboration. Unused land could be opened to communities or schools for gardens. While there are a number of considerations, including soil safety, maintenance, water supply issues, and zoning barriers to take into account, collaboration of agencies could explore these barriers and determine ways for State-owned land to be jointly used for gardening.[296] In San Francisco, every department with jurisdiction over land was required to audit their land to identify sites suitable for food production.[297] Forty community gardens are now supported and managed by the Recreation and Parks Department on City-owned property.[298]

Joint use is recommended as a strategy to increase physical activity and/or prevent childhood obesity by numerous national and California organizations including the Centers for Disease Control and Prevention,[299] the Robert Wood Johnson Foundation,[300] the Institute of Medicine's Committee on Childhood Obesity Prevention Actions for Local Government,[301] the American Heart Association,[302] and the UC Berkeley Center for Cities and Schools.[303]

I.C5. Reduce the environmental impact of tobacco waste.

a. Encourage interagency collaboration to test and develop messaging that raises awareness and motivates policy, system, and environmental level interventions to reduce the harmful public health and environmental impact of tobacco waste in California.

The filters of discarded smoked cigarettes biodegrade slowly, are ubiquitous in urban environments and on beaches, contribute to blight, and may pose a health threat to small children and animals.[304,305] Toxic chemicals that are leached from cigarette butts and other tobacco litter are a significant source of water pollution. Cigarette butts contain numerous toxins that are poisonous when consumed by small children and can leach into soil or water, harming micro-organisms and fish and disrupting ecosystems.[306,307] Cigarette butts are the most common item collected during the Ocean Conservancy's annual International Coastal Clean-Up Day, and are a major contributor to marine debris.[308] Additionally, tobacco litter contributes to blight in neighborhoods, at recreational areas, and along freeways. Blight contributes to disparities by exacerbating perceptions of community decline and disorder, which are associated with increased petty crime, such as vandalism and graffiti. The amount of tobacco waste and its health and environmental impacts warrant partnerships among organizations and agencies to increase public awareness.[309]

Cigarette butts make up 25 to 50 percent of all collected litter and waste items from roadways and streets and are costly to clean up.[310] A litter and waste audit in San Francisco calculated cigarette butt clean-up to cost over $7 million a year, which led

the City Council to adopt a 20 cent per pack fee to help cover the costs.[311] Nebraska imposes a fee on retail outlets to help cover these costs.

In 2007, the California Ocean Protection Council (OPC) adopted a resolution to reduce and prevent marine debris.[312] To prevent and control litter and plastic debris, the OPC's implementation strategy recommends coordinating and expanding education and outreach campaigns to promote behavior change and awareness about the connection between cigarette use and environmental cigarette litter.[313] The Centers for Disease Control and Prevention includes hard-hitting counter-advertising as an effective media strategy to reduce tobacco use.[314] Developing, testing, and placing hard-hitting counter-advertising media messages related to cigarette litter can change social norms about tobacco use and litter, improving human and environmental health.

I.D. Violence Prevention

Aspirational goal: Every California resident is able to live and be active in their communities without fear of violence or crime.

Violence, the Perception of Violence, and Health

Violence is a leading cause of injury, disability, and premature death, and disproportionately impacts low-income communities and communities of color.[315] In 2006, 2,483 homicides occurred in California.[316] Homicide is the leading cause of death among Black males ages 15-34 years old.[317] In 2005, California child welfare data show almost one-half million children had at least one child maltreatment referral, and an estimated 130-140 children die each year of child maltreatment in California.[318] Seventeen percent of California women have suffered sexual violence in their lifetime.[319] Adverse childhood experiences, including abuse, neglect, and incarceration of family members, increase the risk of multiple childhood and adult health problems and unhealthy behaviors.[320] Violence and fear of violence may cause people to stay indoors, in turn reducing physical activity, limiting access to healthy food, and reducing social interactions that would otherwise contribute to community cohesion.[321]

Violence prevention is a complex continuum of strategies ranging from primary prevention to avoid first-time perpetration to reducing re-entry into the criminal justice system.[322] The goal is to create resilient communities that foster social cohesion, value their youth, and offer employment opportunities as well as improvements in the physical characteristics of neighborhoods.[323,324] To be effective, violence prevention must take into account the underlying root causes and risk factors such as poverty, alcohol, and substance abuse, violence in the media, and urban decay.[325,326,327]

Relationship to Strategic Growth Council Objectives

Violence is a commonly cited reason for moving from city neighborhoods to suburban areas, and may be an impediment to efforts to promote infill, density, and active transportation as strategies to reduce per capita vehicle miles traveled and greenhouse gas emissions. Violence also acts as a barrier to attracting investments in the community resources and opportunities that support healthy eating, active living, and attract residents to urban areas.

I.D1. Build violence prevention capacity statewide by supporting community-level efforts to engage and convene stakeholders to develop data-informed prevention actions, including through training to promote effective community engagement and joint action.
I.D2. Disseminate existing guidance on Crime Prevention through Environmental Design.
I.D3. Analyze State violence prevention spending in the ten California communities that have the highest rates of violence and develop recommendations for State agency action in those ten communities, drawing from evidence-based approaches.
I.D4. Expand the Governor's Office of Gang and Youth Violence Policy to become a comprehensive clearinghouse on violence prevention that will develop and distribute crime prevention education and training materials as well as provide training and technical assistance to communities.
I.D5. Work with foundation, private sector, and State agency partners to increase resources for a Probation Resource Center to support probation departments' efforts to implement evidence-based practices.

Violence prevention efforts need to take a comprehensive approach, fostering coordinated leadership at the state and local levels. Helping communities become safer requires organizing and providing technical assistance and information on funding, best practices, and cutting-edge research; supporting training to engage and convene multiple sectors, community organizations, and advocates to develop data-informed joint prevention actions; and tracking and evaluating the impact of community efforts.

Crime Prevention Through Environmental Design (CPTED) is an evidence-based approach to crime prevention, and uses the physical design of neighborhoods, shopping areas, and other community locations to reduce the likelihood of crime taking place. The key principles of CPTED include making people's activities visible, managing entries and exits, using territorial reinforcement to distinguish public and private spaces, and performing ongoing maintenance to convey a sense of order in a given area.[328] This approach helps prevent crime, making urban areas feel safer, attracting more people to live in cities, and decreasing suburban sprawl. For example, police and community organizations partnered to provide green space, outdoor art, benches, and lighting in a Cincinnati neighborhood, with a subsequent 22 percent reduction in crime, including murder, rape, and robbery, and a doubling in community involvement with the police department.[329]

One recommendation is to analyze violence prevention spending in California communities with high rates of youth and adult violence and focus efforts to increase age-appropriate evidence-based programming in those communities. Because these are the areas of highest violence in the State, this evidence-based approach would allow for a large impact in both reach and increasing overall efficiency and would serve as a model for other communities.

Improving public safety through evidence-based crime prevention and recidivism reduction strategies is also part of the continuum of strategies. Programs aimed at addressing the challenges faced by offenders must use empirical assessment tools to target the program to the individual offender and must objectively measure program implementation and outcomes. For example, implementing the use of evidence-based approaches requires probation officers to identify strategies and program approaches that are likely to be successful given their specific populations and needs, and requires them to measure the effectiveness of their programs and make adjustments when necessary. A 2008 review of California correctional programs found that only 4 out of 26 programs studied used validated tools to measure participant risk, and programs that serve only high-risk participants were not using anti-recidivism measures,[330] despite evidence that recidivism-reduction efforts are most effective for those at highest risk.[331] A Probation Resource Center would be able to offer technical assistance to probation departments so they can better identify appropriate interventions and increase their success rates.

I.E. Healthy Food

Aspirational Goal: Every California resident has access to healthy, affordable foods at school, at work, and in their neighborhoods.

Food and Health

Poor diet is one of the leading causes of death in the United States and in California.[332] Diets high in processed, high calorie, low-nutrient food and low in fruits, vegetables, and whole grains contribute to obesity and overweight, heart disease, high blood pressure, cancer, and musculoskeletal disorders.[333,334] Despite the fact that California produces nearly half of the fruit and vegetables grown in the U.S.,[335] low-income neighborhoods often lack access to fresh and affordable produce,[336,337] and consumption of fruits and vegetables continues to be far below recommended levels.[338] California continues to have low food assistance program enrollment rates, leaving millions of federal dollars on the table; for every dollar spent on food stamps, $1.79 is generated throughout the economy.[339,340,341] Increasing utilization of federally-funded school meal programs and improving the availability of fresh and local produce in school meals can significantly improve student health, which in turn is linked to academic achievement.[342]

Relationship to Strategic Growth Council Objectives

The State's agriculture and food industries are essential economic resources, providing jobs and promoting commerce; increasing fruit and vegetable consumption would significantly benefit California's agricultural economy. Increasing access to fresh, local, and sustainably grown produce in communities and institutions can also support a food system that uses less energy, supports the preservation of farmland, contributes fewer greenhouse gases and other air pollutants, is more prepared to adapt to climate change, and provides access to healthy nutrition options for all residents. Collaborating to leverage state and federal resources to promote sustainable food systems can protect and strengthen California's economic, environmental, and human capital.

I.E1. Encourage and expand the availability of affordable and locally grown produce through "farm-to-fork" policies and programs.

a. Promote farm-to-school programs to increase fresh produce offerings in school breakfast and lunch programs.
    i. Establish a farm-to-school statewide coordinator to facilitate the development of farm-to-school programs.
b. Explore methods to make it easier for small/local farmers to consolidate produce supply in order to sell to institutions.
c. Promote school and community garden and orchard programs (including incorporation into learning curriculum), and explore funding streams to support such programs (e.g., United States Department of Agriculture specialty crop block grants).
d. Encourage labeling of produce origin so that purchasers can select local produce if desired.
e. Identify State and local regulations that pose barriers to access to locally grown or healthy foods, and recommend changes to:
    i. Make it easier for farmers' markets and produce vendors to operate in neighborhoods that lack access to fresh produce.
    ii. Eliminate contracting and other barriers to procurement and use of fresh fruits and vegetables by institutions.
    iii. Make it easier for school cafeterias to serve food grown in school gardens, including through identification of best practices for safe use of school-grown food.

"Farm-to-fork" policies and programs support consumers in buying local produce, effectively reducing vehicle miles traveled when food supply can be bought in a closer location and increasing the ability of individuals to eat healthy, affordable foods. There are a number of ways to encourage farm-to-fork on the production side by assisting farmers, and on the consumption side by supporting those who want to buy locally or develop their own food production mechanisms.[343]

Farm to School

Farm-to-school programs engage K-12 schools or districts in purchasing "fruit, vegetables and other fresh products from local farms to serve as part of school meals and/or snacks."[344] These programs provide an opportunity to improve healthy eating among youth while teaching them about local food systems, and often include an educational component about nutrition and food supply. Like other farm-to-fork programs, farm-to-school reduces the vehicle miles that food must travel. In 2008, the agriculture sector contributed 6.1 percent of total U.S. greenhouse gas emissions. Eleven percent of the greenhouse gas emissions associated with food come from "food miles," while wholesaling and retailing food contribute 5 percent, and food production practices account for the majority (83 percent) of greenhouse gas emissions from the food system.[345] There are 40 farm-to-school programs in California, involving 105 school districts and over 500 schools. With over 1,000 school districts and nearly 10,000 public schools in California, there is tremendous opportunity for growth.

One proposed strategy for expanding these programs is to create a farm-to-school coordinator position to help schools or districts develop and sustain farm-to-school programs. A Pennsylvania study found that farm-to-school coordinators improve efficiency through provision of technical assistance to build local capacity and create connections between farms and schools.[346] In 2008, Oregon and Maryland both passed legislation to hire farm-to-school coordinators based in the departments of education, to work in concert with a coordinator at the department of agriculture.[347] Oklahoma and Connecticut also have farm-to-school coordinators.[348]

Small and Local Farmers

Small and local farmers face a number of barriers in selling their produce to institutions such as schools, prisons, and hospitals. For example, many schools need to buy food that is already washed, chopped, frozen, and ready-to-eat, which requires processing plants that are unavailable to small farms.[349] Storage, processing, and distribution infrastructure is costly, and many agricultural communities lack the infrastructure needed for small- and mid-sized farms.[350] Identification of strategies to address these barriers and provision of technical assistance to help farmers overcome these obstacles is another strategy to increase access to healthy produce in schools and communities.

School and Community Gardens and Orchards

Community and school gardens and orchard programs provide opportunities for physical activity, help people eat better, and increase social interaction.[351,352] At schools, these programs can often be successfully incorporated into curriculum, and can improve student willingness to try new vegetables, reduce their food waste, and even improve grades and test scores.[353] These programs require funding for staff, infrastructure, supplies, and curriculum. While a number of funding sources exist, exploration of potential new funding sources – such as United States Department of Agriculture (USDA) development programs and Specialty Crop Block Grants – could facilitate the expansion of community gardens and orchards.[354]

Labeling of Produce Origin

Country of origin labeling is already required for most produce, and California producers are currently allowed to label most produce by origin.[355] As interest in buying local increases,[356] requiring such labeling could support small farmers.[357,358] For example, the $1.16 million campaign that occurred during 2000 to market *Jersey Fresh* produce using labels provided an almost $32 return to fruit and vegetable growers for each dollar invested in the labeling program.[359] The Buy California Marketing Agreement continues to be a tool to differentiate California-grown produce from that grown elsewhere.[360] Encouraging purchase of local produce also aids in the reduction of greenhouse gas emissions associated with produce transportation. The American Planning Association reasons that “efforts to combat sprawl would benefit significantly from initiatives to enhance local markets for locally produced and processed foods,” reducing the pressure for farmers to sell their land and for urban development.[361]

Address Regulatory Barriers

Farmers' markets and fruit and vegetable vendor carts can provide greater access to fruits and vegetables, especially in neighborhoods lacking full-service grocery stores, and can also stimulate the economy through support for small to mid-sized farmers.[362,363] Zoning regulations may restrict farmers' markets from locating in commercial or residential neighborhoods, although a few cities have recently redressed these policies. In 2008, after collaboration between health, agriculture, and planning groups, the Fresno City Council approved revised zoning language to permit farmers' markets as an approved use.[364] Schools and other public properties can also provide sites for farmers' markets; Fresno and La Jolla currently operate school-based farmers' markets through joint use agreements.[365]

Food banks often purchase "unmarketable" or "less-than-perfect" produce, which is fine for consumption but may be misshapen, blemished, overabundant, or oddly-sized. However, barriers such as contracting procedures, lack of knowledge, and lack of infrastructure may prevent full utilization of this healthy food resource by other institutions.[366] Comments received at public workshops suggest, for example, that the time required for a local school district to execute a contract with a grower that has available perishable produce may exceed the life of the produce. Mechanisms to avoid this food waste could include education, waivers, or changes in the public contract code. Institutions such as prisons and schools may seek to purchase fresh fruits and vegetables, but encounter substantial barriers. For example, the USDA requires extensive documentation, has strict portion size guidelines, and has stringent audit requirements that schools must abide by, that can make the flexibility required to procure and serve fresh produce extremely difficult.[367]

School gardens provide multi-disciplinary learning opportunities for children, expose and encourage children to eat fruits and vegetables, and provide opportunities for learning about nature and ecological processes.[368] As of 2002, there were approximately 2,400 gardens in California schools,[369] but many schools prohibit the consumption of produce grown in school gardens due to safety concerns and misperceptions that the California Health and Safety Code does not allow it.[370,371] This is a missed opportunity, as schools play a role in encouraging healthy eating and an estimated 19 to 50 percent of calorie intake by children occurs at school.[372] Kitchen facilities and staff skilled in food preparation and safe food handling are absent from many schools, making the preparation of fresh fruits and vegetables difficult to impossible.[373]

I.E2. Better utilize State-administered food assistance programs to increase consumption of healthy foods, decrease consumption of low-nutrient, high-calorie foods, reduce hunger, and add dollars to the local economy.

a. Modify policies and practices to increase participation of Californians in food assistance programs.
    i. Direct Certification: Address data-sharing issues that pose barriers to automatically enrolling eligible children in free or reduced-price meal

programs at school.

ii. Single Portal for Applications and Eligibility: Review existing structure and options including implementing a single portal for all health and human services programs, new system development, or leveraging an existing county eligibility system.

iii. Modified Categorical Eligibility for CalFresh (food stamps): Expand Modified Categorical Eligibility to seniors and persons with disabilities.

iv. Simplified Reporting for CalFresh: Implement a 6-month reporting requirement.

v. CalFresh Business Process Re-Engineering.

b. Support healthier food choices through food assistance programs.

i. Limit use of CalFresh funds for purchase of unhealthy foods and beverages, beginning with requesting a waiver from United States Department of Agriculture to allow California to prohibit the purchase of sugar-loaded beverages with CalFresh dollars.

ii. Implement a healthy food purchase pilot which adds funds to Electronic Benefits Transfer (EBT) cards when fruits and vegetables are purchased.

Increase Participation of Californians in Food Assistance Programs

When combined with incentives to purchase healthy foods, increasing enrollment in food assistance programs can facilitate greater consumption of fruits and vegetables, including local produce. Strong local food systems support preservation of agricultural lands and reduce food miles travelled, which improves air quality and reduces greenhouse gas emissions. Federal food assistance programs include the Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps, now called CalFresh in California), the National School Lunch Program, the School Breakfast Program, the Child and Adult Care Food Program, Summer Feeding, and the Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC). Many Californians are not receiving the federal food assistance for which they are eligible. In 2007, only 48 percent of Californians eligible for CalFresh actually received benefits, compared to 66 percent nationally, making California second-to-last in the nation for SNAP participation rates.[374] Increasing participation in federal food assistance programs would also bring federal dollars into California's economy. A 2009 report estimated that if all eligible individuals participated in SNAP, California would receive an estimated $3.7 billion in additional federal benefits each year and those benefits would generate an additional $6.9 billion in annual statewide economic activity.[375]

Direct certification simplifies the enrollment process for low-income families and schools, increases access to free meals for children in households already certified to receive food stamps, and accurately brings more children into school meal programs.[376] Under the Child Nutrition and WIC Reauthorization Act of 2004, school districts are required to directly certify for free school meals any child who is a member of a household receiving assistance under the Food Stamp Program.[377] Unfortunately, due to data confidentiality provisions that restrict the ability to match and share data

between the education and CalFresh programs, and the lack of automated common student/family databases in California's approximately 1,200 school districts, performing data matches is largely a manual process. In California, only 65 percent of children who are eligible for direct certification based on receipt of CalFresh benefits are directly certified for free school meals, below the national average of 71 percent.[378] Conversely, children are one of the largest eligible segments not reached by CalFresh; establishing categorical eligibility for CalFresh by students enrolled in school meal programs would further benefit families, communities, and California's economy.

Federal Health Care Reform requires states to establish a web portal for Medicaid that can include human services programs (e.g., CalFresh) by January, 2014, which presents an opportunity to establish a centralized eligibility system with a single portal in California. Implementing a single portal for all health and human services programs, whether by developing a new system or leveraging an existing county eligibility system, could dramatically reduce administrative costs and redundancies. The vendor contracts for two of the State's three existing eligibility systems will expire in 2013, which presents an opportunity to direct the State towards a single centralized eligibility system. Under any alternative, the State will need to review the issues and challenges of its current eligibility systems.

As a result of Assembly Bill 433, enacted in 2008, individuals and families are granted modified categorical eligibility (MCE) for CalFresh, and do not have to meet asset tests to receive benefits.[379] MCE allows families to retain savings and support their climb out of poverty, rather than needing to exhaust all of their assets and resources before receiving assistance.[380] Federal law allows individuals and families who are provided a Temporary Assistance for Needy Families (TANF) funded benefit or service to be categorically eligible for CalFresh benefits. This expansion is currently funded through special collections of SNAP-Nutrition Education funds, and is expected to allow an estimated 87,000 families to access the CalFresh program in 2010-2011. The State budget for 2010-11 recognized the value of this eligibility process and included additional funding to support MCE for certain able-bodied adults without dependents as well, beginning in November 2011. Seniors and persons with disabilities would be the final category of individuals for MCE expansion, subject to the availability of adequate administrative funding.

Although all other states in the country operate their food stamp programs using simplified reporting, which allows recipients a six-month reporting cycle, California currently requires CalFresh recipients to report specified changes in income and employment on a quarterly basis. Under a federal waiver from the USDA, California must demonstrate progress in converting to a simplified reporting system. A study of four states with simplified reporting found a beneficial effect on client access and participation and reduced staff administrative burden.[381] Simplified reporting not only reduces the administrative costs of the program by reducing the number of required contacts with recipients and periodic paperwork, but also provides nutritional benefit stability to recipients through more predictable benefit levels and reduced caseload

"churn" in which recipients fall off and then re-enter the program due to the paperwork burden.

With food assistance needs and caseloads increasing, it is important to explore opportunities to be more efficient and effective in providing CalFresh services and benefits in order to meet customer expectations for timeliness and accuracy, meet outcome measures, and minimize costs. Potential business process re-engineering opportunities include changes in case flow processing from intake to completion; client management, such as online applications or call centers for routine requests; innovative use of technology and data management, such as data mining; innovative use of available policies or procedures or waivers; and cross-program integration, using categorical eligibility or single applications. The scale of re-engineering efforts also matters – whether actions are county-specific, throughout a consortia or counties, or statewide.

Support Healthier Food Choices through Food Assistance Programs

People living in poverty are more likely to consume nutrient-poor foods, and low-income consumers are disproportionately impacted by high blood pressure, heart disease, diabetes, obesity, and dental disease, all of which are influenced by diet.[382] SNAP participants report consuming less fruit, vegetables, and whole grains and appear to purchase 40 percent more sugar-sweetened beverages than do other consumers.[383] Despite the SNAP program's "focus on nutrition and putting healthy food within reach for low-income households,"[384] SNAP clients can buy all foods intended to be eaten at home, including nutrient-poor foods; purchases of alcoholic beverages, cigarettes, foods hot at the point of sale, non-food items, vitamins, medicines, and pet foods are excluded. Many argue that if tobacco and alcohol can be excluded from SNAP purchases, nutrient-poor foods, such as sugar-loaded beverages, should also be excluded. Given that government funds support the food purchases and health care expenditures of many low-income individuals and families, savings can result from supporting healthy eating behaviors. Overweight, obesity, and physical inactivity are estimated to cost California $20.7 billion in health care costs.[385]

In California, 41 percent of children ages 2-11, 62 percent of adolescents ages 12-17, and 24 percent of adults drink at least one sugar-loaded beverage (soda or

HiAP in Action: CalFresh – Better Food for Better Living

On October 22, 2010, the California Food Stamp Program, California's food assistance program, was rebranded as CalFresh – Better Food for Better Living. The rebranding was a collaborative effort between the Department of Public Health and the Department of Social Services to refocus attention on the program's nutritional value and emphasize fresh fruits and vegetables and healthy living while supporting California agriculture. The program has been modernized away from traditional food stamp coupons to electronic benefit transfer cards, which can be used anywhere debit or credit cards are used to purchase food.

sweetened fruit-flavored drink) every day.[386] The average California adolescent consumes the equivalent of 39 pounds of sugar from sugar-loaded beverages in a year[387] and nutrient-poor sweetened soft drinks and fruit-flavored drinks represent nine percent of calories consumed by American adults.[388] Consumption of sugar-loaded beverages is associated with overweight and obesity in both children and adults.[389] Fortunately, reducing consumption of sugar-loaded beverages leads to reductions in overweight and obesity.[390] The 2006 California Obesity Prevention Plan recommends that state and local governments "[e]nsure that food assistance programs provide healthy foods."[391] Through New York State, New York City recently requested a waiver from the USDA to remove sodas and other sugar-loaded beverages from the list of items that can be bought with food stamps in New York City for two years.[392] California could request a similar waiver. CalFresh recipients would receive the same amount of monthly benefits, but eliminating purchases of sugar-loaded beverages would increase the amount of benefits available for the purchase of nutritious foods and beverages, including fruits and vegetables. Encouraging the purchase of fruits and vegetables in turn supports the preservation of California's agricultural lands and, longer-term, reduces health care services expenditures.

Another approach to encouraging healthier diets through CalFresh is to institute a healthy food purchase pilot program which adds funds to Electronic Benefits Transfer (EBT) cards when fruits and vegetables are purchased, effectively lowering the price of fruits and vegetables. The USDA estimates that a 10 percent decrease in the price of fruits and vegetables would result in a 6-7 percent increase in the purchase of fruits and vegetables by food stamp users.[393] Several other states and localities are currently participating in fresh produce incentive pilot projects. In New York City, Health Bucks provide Food Stamp clients with extra benefits when they purchase fresh fruits and vegetables at farmers' markets.[394] Philadelphia's Food Bucks program provides farmers' market customers with $2 in Philly Food Bucks coupons for every $5 they spend in food stamp benefits.[395] Baltimore Bucks vouchers enable users to double their food stamp dollars up to $5 at farmers' markets.[396] In 2006, Assembly Bill 2384 was chaptered, requiring the then Department of Health Services to develop a healthy food purchase pilot program to increase the sale and purchase of fresh fruits and vegetables in low-income communities.[397] Unfortunately, no funding has been made available for the implementation of such a pilot program.

I.E3. Establish a California Food Policy Council comprised of State agencies and other relevant stakeholders involved with food production, distribution, purchase, promotion, provision, and health, in order to build a more robust, sustainable food system, alleviate hunger, and promote consumption of healthy foods. The Food Policy Council could work toward implementation of the food-related recommendations herein.

A food policy council provides a platform to bring together all of the entities involved in the food system to examine how the system is operating and to develop coordinated recommendations for improvement. Engaging agencies and stakeholders from all sectors of the food system – food production, consumption, processing, distribution, and

waste recycling – can improve coordination between agencies whose policies influence the food system and ensure that the food system is meeting the State's goals for climate change, sustainability, and health while also achieving economic and production goals. Food policy can link economic development, environmental preservation, and climate change mitigation and adaptation efforts to the food security, hunger, nutrition, and food access needs of communities. A state-level food policy council is uniquely positioned to examine actions and inactions that influence the supply, quality, price, production, distribution, and consumption of food and identify multi-sectoral strategies to broadly address the social, political, economic, and environmental needs of the State.[398]

> ***HiAP in Action:* Earned Income Tax Credit Outreach**
>
> The Earned Income Tax Credit (EITC), a refundable federal tax credit, available for working low-income individuals. This highly effective anti-poverty program is currently underutilized, with hundreds of thousands of eligible individuals failing to claim their refunds. The California Department of Social Services has undertaken a number of information outreach activities, including distributing information about the EITC and other tax credits to 1.5 million CalWORKS and CalFresh households. Through a working group, the Department of Community Services and Development collaborates with the Department of Social Services on EITC outreach, airing radio public service announcements, and hosting an EITC symposium.

Evaluating the food system can highlight missed opportunities to boost the economy. An assessment of the food economy of the Chesapeake Bay region found that a 15 percent increase in local food purchases would bring in three times more dollars.[399,400] A study on the economic impact of increasing production and consumption of fruits and vegetables to provide five servings a day to Iowa residents found that an additional $302 million in sales and more than 4,000 jobs would be added to the state's economy even if just 25 percent of the extra fruit and vegetables were grown in Iowa.[401]

State-level food policy councils are spreading across North America. Colorado, Ohio, Michigan, Connecticut, Iowa, New York, Alaska, Florida, Georgia, Illinois, and New Mexico have state-level bodies to examine the food system. Connecticut was the first state to establish such a food policy council. Through its role in monitoring, analyzing, and advising on food system issues, the Council identified actions to achieve a food security goal for the state and sponsored a statewide farmland conference that led to increased support for farmland preservation measures.[402] The Connecticut council also fostered new partnerships, with the Department of Social Services and Department of Public Health evaluating the feasibility of linking WIC and SNAP assistance. The New York State Council on Food Policy has undertaken efforts to maximize participation in federally funded nutrition programs. Through the Council's support and partnership

development efforts, New York experienced significant program growth in SNAP and WIC for 2008, resulting in increased benefits entering the state's economy.[403]

While food policy councils are not the only vehicle for improving the food system, they are emerging as the most common effort state and local governments are embarking on to improve food policy.[404] The Robert Wood Johnson Foundation has identified food policy councils as a useful tool for inspiring innovative, systemic change and improving the availability of healthy food in stores, and increased consumption of healthy foods in homes.[405,406] The June 2010 draft of *California Agricultural Vision: Options for Short-Term Action and Longer-Term Challenges*, the California State Board of Food and Agriculture's strategic plan for the future of the state's agriculture and food system, recommends that "the state convene a task force comprised of leading experts and practitioners from all necessary fields to devise a comprehensive, systemic strategy to promote food security and healthy diets in California." The American Planning Association "support[s] a comprehensive food planning process at the community and regional levels" to integrate land use, economic development, transportation, public safety, public health, agricultural preservation, and other planning efforts to achieve community food needs, prepare for emergencies, improve health, and strengthen the economy.[407] The Institute of Medicine's Committee on Childhood Obesity Prevention Actions for Local Governments recommends efforts like those that a California Food Policy Council could tackle, including improving access to and consumption of healthy, safe, and affordable foods and reducing access to and consumption of calorie-dense, nutrient-poor foods.[408]

I.E4. Leverage government spending to support healthy eating and sustainable local food systems.

a. Adopt a healthy food procurement policy, pursuant to Public Contract Code section 12400-12404, to ensure that foods purchased for consumption or sale on State property (e.g., vending machines, institutions, cafeterias, concessioner contracts) meet minimum nutritional standards.
    i. Establish nutrition standards for foods and beverages available in government-run recreation centers and parks.
    ii. Implement and strengthen existing legislation to promote healthier options in vending machines.
    iii. Enhance vendor and concession policies to support the availability of healthy foods, for example through bid incentives for healthy options and locally-grown produce. Policy revisions should consider potential cost implications.
    iv. Identify existing best practices and provide training and technical assistance on implementation of healthy procurement policies.

The State of California spends $140,922,000 per year on food for prisoners alone, and healthy food procurement policies are a powerful way that the State can leverage its immense buying-power as a tool for supporting healthy food and a local agricultural economy.[409] By restricting State food spending to healthy and local foods, whenever possible, the State can both influence what people consume and can support a robust

local food system, which is good for reducing greenhouse gas emissions and preserving agricultural lands.[410]

The concept of healthy food procurement has been introduced through California's landmark legislation requiring healthy food and limiting unhealthy foods and beverages on school campuses. In 2003, SB 677 mandated that only water, milk, and 100 percent fruit juices or fruit-based drinks with no less than 50 percent fruit juice and no added sweeteners could be sold during elementary and middle school hours. In 2005, SB 965 defined school beverage standards for high schools, eliminating the sale of soda and other sweetened beverages on high school campuses in California. Also in 2005, SB 12 established the most rigorous nutrition standards for food sold on K-12 school campuses in the country.

HiAP in Action: State-Contracted Concessionaires Provide Healthy Food

The California Department of Parks and Recreation recognizes that concessionaires have an important role in building healthier communities. The State Parks Healthy Foods requests for proposals provide incentives that encourage concessionaires, to the extent possible, to develop relationships with local farmers and producers, provide selections that conform to the United States Department of Agriculture's definition of healthy food, and offer organic, natural, California-grown products. This enables State park visitors to make healthy food choices that also put money back into the local food system.

Existing public contract code provides a window for prioritizing procurement of healthy foods, beyond schools, through its broad definition of "environmentally preferable purchasing," which allows for the "procurement or acquisition of goods and services that have a lesser or reduced effect on human health and the environment when compared with competing goods or services that serve the same purpose."[411]

Healthy food procurement policies have been introduced in several other states, as well. For example, in 2009, Massachusetts Governor Deval Patrick issued Executive Order 509, stating that all food purchased by State agencies or sold on State property must conform with nutrition standards defined by the Department of Public Health. The nutritional guidelines will govern the purchase and serving of food by State agencies, and ensure that a broad choice of healthy, balanced meals and snacks are offered. While not enrolled, in 2010 the Virginia State Legislature introduced a bill (HB 423) that would have (1) required nutritional standards for foods served by State agencies and State-run institutions and (2) encouraged the use of Virginia-grown foods to the greatest extent possible. The bill directs the Secretary of Health and Human Services to convene a Food Standards Task Force to develop procurement procedures and facilitate the purchase of Virginia produced products.

A number of national organizations recommend healthy government food procurement policies. The American Planning Association (APA) recommends amending state policies and funding and implementing incentives to help public institutions, including government agencies, to purchase foods produced in the region.[412] The White House Task Force on Childhood Obesity recommends several strategies to improve access to healthy, affordable food and reduce childhood obesity, including encouraging facilities that serve children to implement policies and practices to promote healthy foods and "reduce or eliminate the availability of calorie-dense, nutrient poor foods."[413] They also recommend economic incentives to increase production of healthy foods and create greater access to local and healthy foods. The Centers for Disease Control and Prevention has identified evidence-based strategies[414] that can have a profound influence on improving health behaviors through changes to community environments, including limiting unhealthy food and beverage availability[415,416,417] and implementing procurement policies and practices that support nutrition.[418,419,420]

***HiAP in Action:* Lactation Accommodation Policy and Signage**

The California Labor Code requires every employer to make reasonable efforts to provide an employee with the use of a room or other location, other than a toilet stall, for the employee to express milk in private. Providing lactation accommodation rooms supports breastfeeding, which improves mothers' and children's health and helps to prevent childhood obesity. The California Public Utilities Commission has implemented a lactation accommodation program, including clearly posted signs and invitations to workers and building visitors to use a lactation room.

II. PROMOTE HEALTHY PUBLIC POLICY

Aspirational Goal: California's decision makers are informed about the health consequences of various policy options during the policy development process.

Public Policy, Health, and its Relationship to Strategic Growth Council Objectives
The Executive Order (EO) that created the Health in All Policies Task Force articulated that "the health and well-being of all people is critical for a prosperous and sustainable California," that "policies related to air and water quality, natural resources and agricultural land, affordable housing, infrastructure systems, public health, sustainable communities, and climate change all significantly influence the physical, economic, and social environments" in which "people live, shop, work, study, and play," and that these environments "influence the adoption of healthy lifestyles by making it more or less difficult for individuals to choose behaviors that promote or diminish health." The EO acknowledged that "largely avoidable chronic illnesses such as heart disease, stroke, and diabetes are a growing burden for the State and its people, and they negatively affect Californians' productivity, quality of life, life expectancy, and health care costs." The EO further suggested that policy officials consider "health when formulating policy," and that "agencies should collaborate with each other to ensure that health is considered when policies are developed."

The Health in All Policies Task Force has revealed broad and deep potential for State agencies to enhance the health of California residents and to promote healthy communities. The HiAP Task Force has stimulated enthusiastic public discussion of the State's emergent efforts to address health in a more integrated manner. Working across sectors will require deepening of collaborative relationships among multiple agencies – a process that takes time and resources. The recommendations below offer ways to more consciously and conscientiously identify win-win strategies that will help both attain better health and achieve other important sustainability goals, and to develop the collaborative relationships necessary for an efficient, sustainable, and healthy California.

II.A. State Guidance

II.A1. Incorporate a health and health equity perspective into State guidance, surveys, and technical assistance documents where feasible and appropriate.

a. Work with agencies to incorporate a health lens in guidance documents, for example:
    - Office of Planning and Research (OPR) General Plan Guidelines
    - OPR Annual Planning Survey
    - OPR and Caltrans "complete streets" guidelines
    - Caltrans guidance documents:
        i. Regional Transportation Plan (RTP) Guidelines
        ii. System Planning Guidelines
        iii. California Interregional Blueprint
        iv. Project Initiation Documents

- California Department of Housing and Community Development Building Blocks for Effective Housing Elements
- Additional opportunities to be identified

Because land use and transportation systems have been identified as deeply influencing health outcomes, there is an opportunity to infuse health into planning and guidance documents in order to protect the population's health. While the specific examples discussed here relate to guidance on the built environment, opportunities to incorporate a health and equity perspective into State guidance could extend to other areas such as nutrition, safety, and economic development. An emerging trend in local and state governments is incorporating public health considerations into comprehensive planning and community design documents and guidelines. Planning processes, tools, and guidance can utilize and leverage existing resources to achieve health objectives by incorporating health considerations. For example, the City of Richmond has incorporated a Community Health and Wellness Element into its general plan and Riverside County has a Healthy Communities Element in its general plan.[421]

Development and implementation of many plans happens at a local or regional level, but the State can encourage local and regional agencies to embed health in their land use and transportation decisions by providing guidance and support on these topics. Such guidance will be essential to the diffusion of innovative approaches responsive to the diverse needs of California communities. At a minimum, State guidance documents can direct planners to resources that support inclusion of a health perspective in land use and transportation plans. Many such resources exist, including the Institute for Local Government's *Understanding the Basics of Land Use and Planning: Guide to Planning Healthy Neighborhoods*[422] and Public Health Law & Policy's *How to Create and Implement Healthy General Plans*[423] and *Healthy Planning Policies*.[424]

HiAP in Action:
Energy Upgrade California

Energy Upgrade California, a joint program of the Public Utility Commission and the California Energy Commission, has a one-stop website (http://www.energyupgradecalifornia.com) that makes it easy for people to find federal and utility district rebate offers and local energy efficiency contractors. It could serve as a model for provision of easily accessible information about the multiple planning processes and funding streams available for building healthy communities.

Incorporation of health considerations into land use and transportation decision-making has been recommended by several national entities. The Robert Wood Johnson Foundation identifies "re-evaluat[ing] urban design and comprehensive land-use plans to improve active living" as a key strategy to "increase opportunities for physical activity, help reduce pollution and improve economic development by providing more green space and walkable, mixed use development."[425] The U.S. Department of Transportation announced a policy statement on incorporating "safe and convenient walking and bicycling facilities into transportation projects" to "support the

development of fully integrated active transportation networks" and encourages other government agencies to adopt similar efforts in order to express their commitment to an integrated transportation system that meets the needs of all users.[426] The Institute of Medicine's Committee on Childhood Obesity Prevention Actions for Local Governments recommends adopting plans that identify "a long-term vision for walking and bicycling in the community and guide implementation."[427] Additionally, they state that modifying land use plans and regulations to promote high density, mixed-use communities and working with land developers to require set-asides for parks, trails, and pathways can reduce childhood obesity.[428] Finally, the *U.S. National Physical Activity Plan* recommends integrating "land-use, transportation, community design and economic development planning with public health planning to increase active transportation and other physical activity," as well as developing standards to guide communities in developing integrated plans.[429]

II.A2. Identify and publicize a comprehensive set of State resources for communities to use in healthy community planning.
Collaborate across Task Force agencies to provide and make easily accessible information that allows communities to better understand the multiple and diverse planning processes and funding streams that are available for building healthy communities, including opportunities for blending funding from different sources to create a more comprehensive healthy communities program.

a. Provide technical assistance to local entities to promote and facilitate healthy community planning, policies, and programming, including through the SGC's Sustainable Communities Learning Network.

Because health is impacted by policies across a wide array of agencies and departments, local entities that wish to implement health-promoting policies must piece together information from multiple agencies, regulatory programs, and funding streams. Many local governments and community based organizations lack sufficient resources to comprehensively search for available information, technical assistance, or funding to promote community health. Providing a "one-stop shop" would increase efficiency and enhance the ability of low-resource schools, government agencies, and communities to access needed resources to build healthier communities. A web-based resource site might include links to "healthy checklists" for general plans and transportation plans,

***HiAP in Action:* One-Stops/Co-Location of Services**

The California Labor and Workforce Development Agency, its Employment Development Department, and Local Workforce Investment Boards provide services, activities, and programs at One-Stop Career Centers. These One-Stops bring partners together in California communities to help residents explore job options, search for job openings, develop resume and interviewing skills, and find training classes. By providing multiple services under one roof, One-Stops increase access to services and minimize client travel, supporting air quality and greenhouse gas reductions.

examples of best practices (e.g., procurement policies that promote healthy eating and a local food economy), information about evidence-based practice with links to evidence (e.g., evidence-based violence prevention), and information about the multiple funding streams that might fit together to create a comprehensive program. For example, State and federal Safe Routes to School funding each come with their own set of usage restrictions. Schools and communities would benefit from information about how to blend these funding streams in order to support a comprehensive project that includes both infrastructure and non-infrastructure components.

One model for an online resource center is the *State Healthy People 2010 Tool Library*, which is a national online peer resource center that allows users to access up-to-date Healthy People 2010 resources from the field. The site was developed in collaboration with the federal Office of Disease Prevention and Health Promotion, and resources on the site include measurement tools, planning processes, and methods for stakeholder engagement.

State agencies can assist local entities in identifying the areas in which their work impacts health and sustainability, and help them develop environments that support improved health and sustainability. The already established Strategic Growth Council Sustainable Communities Learning Network provides one mechanism for the provision of such technical assistance.

II.B. Embedding Health in Decision Making

II.B1. Incorporate health and health equity criteria into State grant Requests for Applications, review criteria and scoring, technical assistance, and monitoring/performance measures, where feasible and appropriate. For example,

a. Incorporate a health module into the outreach and technical assistance programs of the Strategic Growth Council.
b. Add health criteria to the California Environmental Protection Agency's annual Environmental Justice Small Grants program.
c. Add per capita VMT reduction and increased active transportation to Office of Traffic Safety grants.
d. Incorporate considerations of non-safety-related health benefits into Safe Routes to School grants review processes.
e. Develop health criteria for discretionary funds review processes.
f. Identify opportunities to incorporate relevant Task Force recommendations as requirements in future State grant guidelines.

Communities that face health and economic inequities also often face increased exposure to greenhouse gas co-pollutants, are more likely to be impacted by heat islands, and can face greater negative impacts of increases in energy and fuel costs.[430] Health and health equity are critical components of sustainable communities, and should be considered in the planning phase of grant-funded efforts in order to provide the basis for sustainable community changes.[431] Combined with strategically-targeted

technical assistance, health and health equity criteria can ensure that State funding supports measurable improvements to communities in these areas and direct funds towards projects that promote sustainable community development, thereby improving short- and long-term health and equity outcomes. This is one way to help vulnerable and disadvantaged communities receive the resources and technical assistance that they need, increasing the State's ability to achieve broad sustainability, health, and equity goals.

Examples of organizations and programs that can support health and other SGC goals through changes in grant processes include the SGC, Cal/EPA, Office of Traffic Safety (OTS), and Safe Routes to School (SRTS). The SGC can integrate a health module into its existing outreach and technical assistance programs, in order to encourage a health lens in its grant-making. Cal/EPA's Environmental Justice Small Grants Program could further their support of sustainable communities by including equity as a consideration, and explicitly working with grantees to provide technical assistance on the health impacts of environmental justice challenges. OTS can support health and other goals of the SGC by including per-capita vehicle miles traveled (VMT) reduction and active transportation in grants. This could benefit health by reducing preventable injuries and death while mitigating climate change by reducing greenhouse gas emissions from VMT through active transportation. Including non-safety-related health benefits in SRTS efforts can capture important data on local health improvements resulting from programming and infrastructure efforts to improve safety for children's active travel to school. Including equity considerations in the awarding of SRTS grants can also help identify schools most in need due to economic, injury, or other outcome data and ensure that investments are targeting schools that can benefit most from new resources. When developing future grant guidelines and criteria, State agencies could consider recommendations in this Task Force report.

II.B2. Continue to provide integrated comments on federal legislative and policy proposals from multiple California agencies, including incorporation of a health and health equity lens (e.g., Transportation Reauthorization, Child Nutrition Reauthorization, Environmental Protection Agency Greenhouse Gas Regulation).

Federal legislation and policy impacts what the State of California can do. Providing integrated comments on proposed federal legislation gives California a stronger and more unified voice on key federal policy issues and fosters interagency discussion about the impacts of proposed policies across sectors. The SGC previously commented on the National Transportation Safety Board Reauthorization Act of 2010. Similarly, the California Department of Education, the California Department of Food and Agriculture, and California Department of Public Health submitted joint comments on the last Farm Bill.

II.B3. Explore appropriate ways to integrate health analysis into existing State projects and plans.

a. Design and conduct a feasibility study to explore possible methods or approaches for incorporating a health lens into analyses of a subset of legislation and Budget Change Proposals (BCPs), to consider long-term health and State health-care expenditure consequences of short-term financial and policy decisions.
b. Use the HiAP Task Force to 1) identify the range of methods (including Health Impact Assessment) for incorporating health perspectives in State planning, review processes, and guidance; 2) explore appropriate integration of these methods, including how and where to incorporate health perspectives; and 3) consider concerns of Agencies and Departments, including the need to reconcile competing policy priorities, enable efficient processes, and provide input early and upstream in planning processes where possible.

The World Health Organization's 2010 Adelaide Statement on Health in All Policies discusses tools and instruments that have been useful in policy development and implementation, including impact assessments, health lens analysis, and legislative frameworks.[432] Given that these assessments are becoming increasingly common and accepted as an effective tool for evidence-based decision-making, California has an opportunity to play a proactive role in shaping the discussion and identifying appropriate methods and venues for implementation.

The State routinely analyzes legislative and budget change proposals in order to provide information to policy-makers about the cost consequences of proposals, but these analyses do not typically consider longer-term health impacts that could yield serious increases in health care costs or, on the other hand, significant long-term savings to the State. The Task Force proposes to explore the nature of policy decisions for which an assessment of health consequences might be valuable, identify criteria for such assessments, and examine various methods that might be applied, including analysis of the potential impacts on efficiency and cost. For example, Connecticut's Office of Fiscal Analysis is required to analyze

***HiAP in Action:* California Advocates for Federal Healthy Food Policy**

The California Department of Education, Department of Public Health, and Department of Food and Agriculture developed and presented policy recommendations on how to best improve the Child Nutrition program and the Women, Infants, and Children (WIC) program. *Investing in Our Children for the 21st Century: 2009 Child Nutrition and WIC Reauthorization Act* provided an opportunity for these agencies to collaboratively provide comments on federal legislation that improves nutrition, impacts California's farmers, and impacts the ability of schools to provide meals at school.

expenditures based on criteria including equity.[433]

There is an increasing use of Health Impact Assessments (HIA) across California and the U.S. to assess projects and policies. In California, HIA has been used on topics ranging from a San Francisco public housing development, to the Los Angeles City living wage ordinance, to Humboldt County's assessment of three development plans under consideration for inclusion in their general plan. As HIA has increased, so have concerns about its impact on scope, timing, and cost of projects and its perception as imposing of additional layer of regulation. HIA is not the only tool for providing a health perspective in decision-making. The Task Force provides an excellent venue to evaluate available tools that might be used to identify the potential positive or adverse health consequences of various projects and policies, appropriate venues and timing for application of such tools, their costs, and agency capacity to conduct such analyses.

II.C. Data and Research

II.C1. State agencies and their contractors, where feasible and appropriate, should incorporate health and health equity indicators into data collection tools and accountability measures, and endeavor to standardize data elements and indicators to facilitate data collection, sharing, and accessibility.

a. Incorporate health issues into State data collection and survey efforts, where appropriate.
b. Develop uniform data elements, data collection tools, and assessment standards related to health, to allow consistent data collection across State grants. For example:
    i. Review available walkability assessment tools and develop one standardized tool for grantees to use across agencies and grant programs, where appropriate.
    ii. Develop a standard set of measurement indicators for a healthy community so that agencies and grantees measure consistent healthy community goals and objectives.
c. Enhance data collection and availability of data to allow assessment, analysis, and policy-making that address health inequities (e.g., standardized data on race, ethnicity, language, education level, income, and other social factors that influence health).
d. Include a standard set of core data elements in State data products to facilitate linkages across datasets.

Numerous California State agencies collect data through surveys. The addition of health-related items to such surveys would increase what is known about the links between health and other sectors and better inform program and policy decisions. The 2006 California Obesity Prevention Plan recognized the importance of data, including a recommendation to "[i]ncorporate standardized health indicators such as physical activity, healthy eating, social norm change, and healthy community environment measures, into all relevant statewide surveys."[434]

The recent launches of two State data portals, Data.ca.gov and Data.sgc.ca.gov, present opportunities to share data across State agencies and with the public through an open data repository. Interagency data sharing can also be facilitated by using consistent core data elements in datasets, such as standardized assessments of race and ethnicity. In a 2009 report, the Institute of Medicine's Subcommittee on Standardized Collection of Race/Ethnicity Data for Healthcare Quality Improvement found that the "collection of data on race, ethnicity, and language will, in principle, have the greatest impact if it is done according to standards that allow for comparison of data across organizations, sharing of individual level data from one to another, and combining of data from multiple sources."[435]

Some data sharing between agencies requires the potential use or linkage of disaggregated data on individuals. State agencies should explore ways to create linkable datasets while preserving confidentiality of personal information. Within legal frameworks, this includes adopting more uniform standards of applying confidentiality rules and accepted techniques that can be applied to de-identify individuals and create linked files. This may include any combination of techniques such as aggregation, data masking, random displacements of geographic data, and/or the use of trusted, third parties to perform linkage.

Numerous entities are developing and using indicators of community health, ranging from measures of health determinants to measures of health outcomes, with each entity creating its own set of measures. The U.S. Department of Health and Human Services' Healthy People is the most widely used set of health objectives, but is primarily limited to health outcome data, although the upcoming release of Healthy People 2020 objectives is expected to include measures of "upstream" determinants of health.[436] Within California, a standard set of indicators of a healthy community does not exist. However, the Strategic Growth Council has recognized the utility of such an indicator set and has awarded funds to the California Department of Public Health to develop a standardized set of healthy community indicators.

Along with a standardized set of healthy community indicators, standardized assessment tools would assist California agencies in collecting program data. Standardized assessment tools are particularly useful in evaluating the comparative effectiveness of programs. For example, the development of a single walkability assessment tool to be used by Office of Traffic Safety grantees would allow for consistent measurement of program impact on walkability across grants.

II.C2. Increase use of evidence-based practices.

a. Improve efficiency and cost-effectiveness of State-funded programs by providing bonus points to grant and contract applicants using evidence-based practices.
b. Identify programs and policy topics that would benefit from additional research into health impacts and cost-effectiveness.

Too often, agencies fund programs for which there is no evidence of their actual effectiveness; this is an inefficient and ineffective use of State resources. Evidence-based programs and practices are those that, through rigorous research and evaluation, have been shown to be effective when implemented correctly. Assembly Bill 2459 (2010) related to juvenile crime prevention defined an evidence-based program as one that "[i]ncorporates significant and relevant practices that are based on scientifically based research," uses "practices that have been documented to be valid and reliable," or is "cost effective in the service that it provides."[437] Providing incentives to implement evidence-based programs and practices increases the likelihood that funded agencies will achieve their desired outcomes and ensures responsible stewardship of State resources.

II.D. Cross-Agency Collaboration and Expertise

II.D1. Foster deeper understanding and collaboration across State agencies.

a. Through the Strategic Growth Council and its State Agency Learning Network, promote and seek resources to facilitate staff-sharing, interagency or inter-department transfers, and temporary placement of staff in a partner agency (e.g., from Caltrans to California Air Resources Board).
b. Agencies should more consciously and consistently invite partner agency staff to participate in training opportunities (e.g., Caltrans Transportation Planning Training Academies, California Department of Public Health training on Health Impact Assessment).
c. Provide opportunities to identify and reconcile important but competing public policy goals (e.g., food safety and use of school garden produce; forest management though controlled burns and air quality; open space and land for affordable housing).

The HiAP Task Force process fostered deeper understanding between Task Force members of each other's mission, programs, and concerns, and increased collaboration in addressing the complex problems California faces. The problem of organizational and sectoral issues is not, of course, specific only to California; a 2009 Government Accountability Office report highlighted the importance of agency collaboration in addressing complicated, multi-sectoral issues.[438] Cross-agency collaboration can increase government's effectiveness and efficiency, but successful collaboration does not happen without the investment of time and resources to build capacity. The Health in All Policies Task Force effort has illustrated several important lessons associated with interagency work. Each State agency has its own mission that it rightfully focuses on. Collaboration across agencies must begin with identification of a shared goal, so that the agencies involved come together for a common purpose and with a sense that they stand to gain from the collaboration. In instances where agency goals appear to conflict, identification of common ground is essential, and often requires a neutral convener who can offer an alternate perspective. Just as each agency has its own goals, each also has its own perspective and view of the underlying problem. Based on their unique histories and perspectives, agencies have sensitivities that are not readily apparent, but the earlier these sensitivities can be identified, the sooner language and

approaches that unintentionally create tensions can be avoided. Interagency collaboration offers many benefits to justify the labor-intensive groundwork required. However, in times of budget shortages, the initial investment of resources to build collaborative capacity can be a difficult sell. If California is to make progress towards addressing wicked problems like health, equity, and sustainability, we must find resources to support collaboration.

The Task Force believes that institutionalization of greater cross-agency coordination and collaboration is critical and recommends several approaches. The SGC's State Agency Learning Network offers an opportunity to support interagency work. Deeper trans-disciplinary work could be facilitated by arranging for temporary placements of staff in sister agencies, such as for implementation of specific collaborative projects recommended herein. A simpler approach is for agencies and departments to more conscientiously and routinely invite staff from partner agencies and departments to participate in staff-development trainings and workshops that can develop cross-agency competencies. For example, public health staff could participate in Caltrans' Transportation Planning Training Academies. A third recommendation is to find and create opportunities to identify and reconcile competing public policy goals. For example, food safety regulations may discourage schools from serving children produce that they have grown themselves, but with proper guidance, schools can both facilitate consumption of school-grown fruits and vegetables and ensure proper food safety. Another example is zoning laws that are intended to prevent large commercial endeavors within residential areas, but inadvertently prevent the establishment of farmers' markets and mobile produce stands that could enhance access to fresh food in areas that lack sufficient grocery stores.

HiAP in Action:
Health Criteria in Strategic Growth Council Grants

The Strategic Growth Council (SGC) administers several grant programs including Urban Greening Project and Planning grants. These grants' requests for proposals included health goals and criteria, and incentives for grant applicants to consult with local health officials when developing their applications. Department of Public Health staff have assisted in reviewing grant applications to assess potential health benefits of proposed projects, while other SGC agency staff scored proposals on contributions to other goals. Several Urban Greening Project grants will fund community gardens that will increase the availability of fresh fruits and vegetables in disadvantaged communities, while providing the air quality, greenhouse gas reduction, heat island reduction, and other benefits of green spaces by reducing the distance food must travel to reach these communities.

The Health in All Policies Task Force builds on prior California efforts to promote State interagency collaboration and coordination. The California State Agency Interagency Coordination and Collaboration 2008 convening of over 30 participants from multiple State agencies recognized that agencies and departments cannot meet the challenges facing them if they continue to operate in isolation. The discussion emphasized the

need for universally acknowledged goals, tools to measure statewide progress towards goals, strong executive vision and leadership, funding flexibility, and developing a process to resolve competing agency goals. Cross-training of employees between agencies was recommended, as was flexibility to move funds and staff among programs and departments.[439]

II.E. Community Engagement

II.E1. Improve opportunities for substantive community engagement in State agency decision-making.

a. Provide training for agencies on community engagement, and share best practices, including use of webinars and other technologies.
b. Provide incentives for meaningful community engagement in State grants and contracts.
c. Encourage non-governmental organization (NGO) and citizen participation by exploring funding opportunities, and increase funding for staff positions/time to support meaningful community engagement processes.
d. Look for opportunities for State agencies and departments to coordinate outreach and community engagement efforts.
e. Encourage broad community participation in regional and local planning processes to ensure that integrated planning processes consider community and stakeholder needs.

In order to address complex issues such as the physical, social, and economic factors that influence health, sustainability, and equity, the State needs broad and varied approaches, including a robust program of engaging with community members and other public stakeholders.[440] Community engagement in State agency decision-making can develop a supportive base to advocate for a project as it moves forward, as well as resolve concerns as they surface, reducing the costly need to revise plans during implementation. Finally, community engagement can support progress toward equitable outcomes by providing a venue for input from historically marginalized groups.

Community engagement is widely recognized as an important component of health promotion. The World Health Organization and Centers for Disease Control and Prevention (CDC) recognize the importance of community engagement, and the CDC highlights two essential community engagement functions: “informing, educating and empowering people about health issues” and “mobilizing community partnerships and actions to identify and solve health problems.”[441] Contra Costa Health Services has created a model “ladder of community participation” that outlines appropriate points for collaboration, information-gathering, and shared decision-making, as well as times when it is appropriate for a government agency to act without community involvement.[442]

Public input can take a variety of forms, including public comment periods in which written comments are solicited, public workshops or listening sessions, formal hearings, focus groups and surveys.[443,444] Different forms are useful depending upon the target

group. For example, the HiAP Task Force held public workshops, collected written input, received verbal comment at SGC meetings, and held informal consultations and focus-group-style meetings with select stakeholders. While several stakeholders from the San Francisco Bay Area attended SGC meetings in Sacramento to offer input, stakeholders in the Central Valley were grateful that the Task Force had physically come to them and voiced an interest in seeing the State increase its presence in their region as part of a larger initiative to solicit input from stakeholders in rural areas. The State can also tailor public input sessions in order to collect input from groups that are often marginalized. For example, language should be easy to understand so that people who are not involved in policy processes can participate. Input sessions should include translation services when warranted, should take place in locations that are easily reachable by public transit, and should be physically accessible to the elderly senior population and people with disabilities.

The State can increase community engagement by providing agencies with resources and supporting collaborative outreach efforts. Providing tools, funding, and incentives to implement engagement efforts can support State agencies in identifying opportunities for public participation. State agencies can coordinate outreach and engagement efforts in order to pool resources, potentially allowing for more robust participation opportunities.

***HiAP in Action:* Using Grants to Fund Evidence-Based Programs**

The Governor's Office of Gang and Youth Violence Policy (OGYVP) uses grant scoring criteria to steer investments toward programs that are proven to work. Bidders using evidence-based programs in their applications are eligible for 15 bonus points in the grant application rating process. Evidence-based programs increase program efficacy and deliver proven outcomes; OGYVP worked with experts to develop a list of *Proven and Promising Evidence-Based Crime and Violence Prevention and Intervention Programs*, educates bidders on evidence-based programs, and encourages bidders to include technical assistance needs in their applications.

II.F. Continue Health in All Policies Task Force

II.F1. Continue the Health in All Policies Task Force in order to foster continued dialogue on the impact of decisions on health and health equity, and to pursue implementation of recommendations. Expand participation to additional relevant agencies.

The work of the Task Force is far from complete. The Task Force should continue in order to foster dialogue between agencies, identify priorities among these recommendations for early action and further exploration, develop implementation and action plans, and support implementation of those recommendations, including facilitating multiagency or multi-department actions.

The Health in All Policies Task Force should work closely with the SGC to identify priorities from this report, and should engage stakeholders in the prioritization process and in the development of action plans. Action plans should be detailed, include a timeline, and identify who must act in order for implementation to take place. Engaged stakeholders should include the public, non-profit advocacy organizations, and local and regional governments and planning bodies. The Task Force should reach out to additional agencies and departments, as relevant to particular recommendations.

The Task Force should also continue to serve as a clearinghouse for new ideas and should discuss issues that require further consideration. The Task Force has illuminated many complex issues, such as ways to embed health in decision-making processes, that will require continued cross-agency dialogue and research in order to identify appropriate approaches. In addition, due to time constraints, the Task Force was unable to address all important issues. Concerns about water quality, a greater look at the relationship between equity and sustainability, the availability of alcohol in communities, and economic development all warrant future discussion by the Task Force.

Next Steps

The Health in All Policies Task Force is poised to place a powerful imprint on how California decision makers implement systematic, innovative, and effective solutions that will positively impact health, the state's infrastructure, and the environment. In particular, the next phase of the Task Force's work should include prioritizing among these recommendations and translating the recommendations into action plans that are specific, actionable, technically and politically feasible, and clearly delineate agency responsibilities. Due to the short timeline imposed by the Executive Order, the Task Force did not have an opportunity for in-depth exploration of the many complex issues addressed in the recommendations; in many cases, additional conversation and exploration is needed before instituting changes, and there should be clear timelines and outcomes from such activity.

Some of the recommendations, most notably those that address ways to embed health in State decision-making processes, will also require careful consideration to ensure that this is done in ways that do not excessively compromise cost-effectiveness, timeliness, or other State goals. California's budget shortfall, and the resulting limitations faced by agencies and departments, must be seriously considered in developing action plans. The Task Force should pay special attention to costs and should seek approaches that are low- to no-cost. In addition, the Task Force should continue to identify short-term and long-term co-benefits in order to be able to fully weigh the inputs and outputs of any policy approach. The Health in All Policies Task Force will continue to work to transcend silos to build a healthier California.

The Health in All Policies Task Force stands ready to continue working with and supporting the Strategic Growth Council in a new administration. There is great potential for California agencies to collaborate to develop and implement programs, policies, and strategies that build sustainable communities and improve the health of Californians.

Endnotes

[1] State of California, Department of Public Health, *Death Records*.; State of California, Department of Finance, *Race and Ethnic Population with Age and Sex Detail, 2000-2050* (Sacramento, CA: July 2007).
[2] Ross DeVol and Armen Bedroussian, *An Unhealthy America: The Economic Burden of Chronic Disease Charting a New Course to Save Lives and Increase Productivity and Economic Growth*. (Milken Institute: 2007), http://www.milkeninstitute.org/pdf/ES_ResearchFindings.pdf.
[3] California Center for Public Health Advocacy, *The Economic Costs of Overweight, Obesity and Physical Inactivity Among California Adults* (2006).
[4] Horst Rittel and Melvin Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences*, Vol. 4 (1973): 155–169.
[5] I. Kickbusch and K. Buckett,"Health in All Policies: The Evolution," *Implementing Health in All Policies* (Government of South Australia: Adelaide, 2010).
[6] I. Kickbusch and K. Buckett,"Health in All Policies: The Evolution," *Implementing Health in All Policies* (Government of South Australia: Adelaide, 2010).
[7] I. Kickbusch and K. Buckett,"Health in All Policies: The Evolution," *Implementing Health in All Policies* (Government of South Australia: Adelaide, 2010).
[8] International Health Conference, *Preamble to the Constitution of the World Health Organization* (New York: June 19-July 22, 1946).
[9] Kaiser Family Foundation, *Health Care and the 2008 Elections* (October 2008), http://www.kff.org/insurance/upload/7828.pdf.
[10] Ralph Waldo Emerson, *The Conduct of Life* (1860).
[11] Valerie Brown, John Grootjans, Jan Ritchie, Mardie Townsend, and Glenda Verrinder, *Sustainability and Health: Supporting Global Ecological Integrity in Public Health,* (Allen & Unwin, Crows Nest, N.S.W., 2005).
[12] RG Evans and GL Stoddart GL, "Producing Health, Consuming Health Care," *Why are Some People Healthy and Others Not? The Determinants of Health of Populations* (New York: Aldine De Gruyter, 1994).
[13] Raphael, D. (2009). *Social Determinants of Health: Canadian Perspectives*. 2nd Edition. Toronto: Canadian Scholars' Press Incorporated.
[14] Robert Wood Johnson Commission to Build a Healthier American, *What Drives Health*, http://www.commissiononhealth.org/WhatDrivesHealth.aspx.
[15] D.R. Williams, M.V. Costa, A.O. Odunlami, and S.A. Mohammed, "Moving Upstream: How Interventions That Address the Social Determinants of Health Can Improve Health and Reduce Disparities," *Journal of Public Health Management Practice Suppl,* (Nov 2008): S8-S17.
[16] Commission on Social Determinants of Health. (2008). *Closing the Gap In a Generation.* World Health Organization.
[17] Office of the Governor, *Executive Order S-04-10*, http://www.sgc.ca.gov/docs/workgroups/EO_S-04-10_SGC_Health_Task_Force.pdf.
[18] Karen Glanz and Donald B. Bishop, "The Role of Behavioral Science Theory in Development and Implementation of Public Health Interventions," *Annual Review of Public Health* 31 (April 2010): 399-418.
[19] Susan H. Babey, E. Richard Brown, and Theresa A. Hastert, *Access to Safe Parks Helps Increase Physical Activity Among Teenagers* (UCLA Center for Health Policy and Research, December 2005).
[20] Nicole I. Larson, Mary T. Story, and Melissa C. Nelson, "Neighborhood Environments: Disparities in Access to Healthy Foods in the U.S.," *American Journal of Preventive Medicine* 36, no. 1 (January 2009): 74-81.
[21] California Pan-Ethnic Health Network, *The Landscape of Opportunity: Cultivating Health Equity in California* (June 2009).
[22] Victoria Colliver, "Online Report Card Shows S.F. Health Disparities," *San Francisco Chronicle* (September 23, 2010).
[23] Bay Area Regional Health Inequities Initiative (BARHII), *Health Inequities in the Bay Area* (2008), http://www.barhii.org/press/download/barhii_report08.pdf.
[24] Nancy E. Adler and K. Newman, "Socioeconomic Disparities in Health: Pathways and Policies," *Health Affairs* 20, no. 2 (2002):60-76.

[25] World Health Organization, *Adelaide Statement on Health in All Policies* (Government of South Australia: Adelaide, 2010).
[26] L. St-Pierre, *Governance Tools and Framework for Health in All Policies* (National Collaborating Centre for Healthy Public Policy).
[27] I. Kickbusch and K. Buckett,"Health in All Policies: The Evolution," *Implementing Health in All Policies* (Government of South Australia: Adelaide, 2010).
[28] L. St-Pierre, *Governance Tools and Framework for Health in All Policies* (National Collaborating Centre for Healthy Public Policy).
[29] Allison L. Diamant, Susan H. Babey, Joelle Wolstein and Malia Jones, *Obesity and Diabetes: Two Growing Epidemics in California*, (UCLA Center for Health Policy and Research, August 2010).
[30] The Trust for America's Health, *F as in Fat: How Obesity Threatens America's Future* (2010), http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf.
[31] The Trust for America's Health, *F as in Fat: How Obesity Threatens America's Future* (2010), http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf.
[32] National Cancer Institute, *Obesity and Cancer: Questions and Answers*, http://www.cancer.gov/cancertopics/factsheet/Risk/obesity.
[33] The Trust for America's Health, *F as in Fat: How Obesity Threatens America's Future* (2010), http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf.
[34] The Trust for America's Health, *F as in Fat: How Obesity Threatens America's Future* (2010), http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf.
[35] SS Guo and WC Chumlea, "Tracking of Body Mass Index in Children in Relation to Overweight in Adulthood," *American Journal of Clinical Nutrition* 70 Suppl (1999): 145S-148S.
[36] C Power, J Lake, and T Cole, "Measurement and Long Term Health Risks of Child and Adolescent Fatness," *International Journal of Obesity* 21 (1997): 507-526.
[37] G. Sacks, B. Swinburn, and M. Lawrence, "Obesity Policy Action Framework and Analysis Grids for a Comprehensive Policy Approach to Reducing Obesity, "*Obes. Rev* 10 (2009): 76-86.
[38] *Governor's Vision for a Healthy California*, http://images.emaildirect.com/clients/govpressoffice847/HealthSummitGovernorsVisionFinal.pdf.
[39] Office of the Governor, *Executive Order S-04-10*, http://www.sgc.ca.gov/docs/workgroups/EO_S-04-10_SGC_Health_Task_Force.pdf.
[40] Steinberg, "SB 732*,* Chapter 729," *Statutes of 2008*.
[41] Steinberg, "SB 732*,* Chapter 729," *Statutes of 2008*.
[42] Office of the Governor, *Executive Order S-04-10*, http://www.sgc.ca.gov/docs/workgroups/EO_S-04-10_SGC_Health_Task_Force.pdf.
[43] National Prevention, Health Promotion and Public Health Council, *2010 Annual Status Report* (2010), http://www.hhs.gov/news/reports/nationalprevention2010report.pdf.
[44] U.S. Department of Health and Human Services, *Understanding the Affordable Care Act: Provisions of the Affordable Care Act, By Year*, http://www.healthcare.gov/law/about/order/byyear.html.
[45] Environmental Protection Agency, *Partnership for Sustainable Communities* (January 2010), http://www.epa.gov/smartgrowth/pdf/2010_0105_partnership-in-action.pdf.
[46] I. Kickbusch and K. Buckett,"Health in All Policies: The Evolution," *Implementing Health in All Policies* (Government of South Australia: Adelaide, 2010).
[47] First International Conference on Health Promotion,*The Ottawa Charter for Health Promotion*, (Ottawa: World Health Organization, November 1986), http://www.who.int/healthpromotion/conferences/previous/ottawa/en/.
[48] T Ståhl T, M Wismar, E Ollila, E Lahtinen, and K Leppo, eds, *Health in All Policies: Prospects and Potentials*, (Finland: Ministry of Social Affairs and Health, 2006).
[49] Office of the Governor, *Executive Order S-04-10*, http://www.sgc.ca.gov/docs/workgroups/EO_S-04-10_SGC_Health_Task_Force.pdf.
[50] State of California, *Death Records*.; State of California, *Race and Ethnic Population*.
[51] State of California, *Death Records*.; State of California, *Race and Ethnic Population*.
[52] Peter Conrad, *The Sociology of Health and Illness* Eighth Ed. (2009): 13.
[53] State of California, *Death Records*.; State of California, *Race and Ethnic Population*.
[54] Camillia Lui and S.P. Wallace, *Chronic Conditions of Californians: 2007 California Health Interview Survey.* (California HealthCare Foundation, 2010).

[55] W He, V.A. Velkoff, and K.A. DeBarros, *65+ in the United States: 2005* (U.S. Department of Health and Human Services and U.S. Department of Commerce, 2005), http://www.census.gov/prod/2006pubs/p23-209.pdf.
[56] DeVol and Bedroussian, *An Unhealthy America*.
[57] National Vital Statistics System, *10 Leading Causes of Death by Age Group, United States – 2007* (National Center for Health Statistics, CDC, 2007), http://www.cdc.gov/injury/wisqars/pdf/Death_by_Age_2007-a.pdf.
[58] A.H. Mokdad, J.S. Marks, D.F. Stroup, and J Gerberding, "Actual Causes of Death in the United States, 2000," *JAMA, 291*, no 10 (2004):1238-1245.
[59] Partnership to Fight Chronic Disease, *The Growing Crisis of Chronic Disease in the United States*.
[60] Nancy E. Adler and D.H. Rehkopf, "U.S. Disparities in Health: Descriptions, Causes, and Mechanisms," *Annu. Rev. Public Health* 29 (2008):235-52.
[61] California Diabetes Program, *Diabetes in California Counties* (Sacramento, CA: Department of Public Health; University of California San Francisco, Institute for Health and Aging, 2009).
[62] California Diabetes Program, *Diabetes in California Counties* (Sacramento, CA: Department of Public Health; University of California San Francisco, Institute for Health and Aging, 2009).
[63] The Trust for America's Health, *F as in Fat: How Obesity Threatens America's Future* (2010), http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf.
[64] U.S. Census Bureau, *U.S. Census 2000*, cited in California Pan-Ethnic Health Network Race and Ethnicity Data – Demographics of CA, http://www.cpehn.org/democharts.php.
[65] U.S. Census Bureau. *2007 American Community Survey One-Year Estimates*, cited in California Pan-Ethnic Health Network Race and Ethnicity Data – Demographics of CA, http://www.cpehn.org/democharts.php.
[66] J. Currie and M. Stabile, "Socioeconomic Status and Health: Why is the Relationship Stronger for Older Children?" *NBER Working Paper No. 9098* (August 2002).
[67] Public Policy Institute of California, *Just the Facts: California's Population* (July 2006), http://www.ppic.org/content/pubs/jtf/JTF_PopulationJTF.pdf.
[68] U.S. Census, *Racial/Ethnic Demographics of California Counties 2000 and 2004*, cited in *California Tomorrow Newsletter* (Summer 2007).
[69] U.S. Centers for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System* (2007-2009).
[70] California Center for Public Health Advocacy, *The Economic Costs*.
[71] EA Finkelstein, IC Fiebelkorn, and G. Wang, "State-Level Estimates of Annual Medical Expenditures Attributable to Obesity," *Obesity Research* 12, no. 1 (2004):18–24.
[72] Trust for America's Health, *Prevention for a Healthier California: Investments in Disease Prevention Yield Significant Savings, Stronger Communities* (2008).
[73] Trust for America's Health, *Prevention for a Healthier California: Investments in Disease Prevention Yield Significant Savings, Stronger Communities* (2008).
[74] LD Frank, M Andresen, and T Schmid, "Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars," *American Journal of Preventive Medicine* 27 (2004): 87-96.
[75] U.S. Department of Health and Human Services, *Physical Activity and Health: A Report of the Surgeon General* (Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996).
[76] U.S. Preventive Services Task Force, *Guide to Clinical Preventive Services, 2nd ed* (Baltimore: Williams and Wilkins, 1996): 611-624.
[77] U.S. Department of Health and Human Services, *Physical Activity Fundamental to Preventing Disease* (Washington, DC: 1999).
[78] J Bell and L Cohen, *The Transportation Prescription: How Transportation Policies and Plans Influence Health* (PolicyLink & Prevention Institute, 2009).
[79] Centers for Disease Control and Prevention, *CDC Recommendations for Improving Health through Transportation Policy* (National Center for Environmental Health, 2008).
[80] California Air Resources Board, "California Greenhouse Gas Inventory for 2000-2008-by Category," *The Scoping Plan* (May 2010), http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf.

[81] RC Brownson, TK Boehmer, and DA Luke DA, "Declining Rates of Physical Activity in the United States: What are the Contributors?," *Annual Review of Public Health* 26, no. 1 (2005): 421-443.
[82] H Frumkin, L Frank, and R Jackson, *Urban Sprawl and Public Health: Designing, Planning, and Building Healthy Communities* (Washington, DC: Island Press, 2004).
[83] UCLA School of Public Health, "State Funding for Mass Transit," *Health Impact Assessment Policy Brief* (Health Impact Assessment Project, August 2007).
[84] Public Policy Institute of California, *How Much Do California's Low-Income Households Spend on Transportation?* Issue 91 (July 2004) http://www.ppic.org/content/pubs/rb/RB_704LRRB.pdf.
[85] Regional Targets Advisory Committee. *Recommendations of the Regional Targets Advisory Committee (RTAC) Pursuant to Senate Bill 375* (2009) http://www.arb.ca.gov/cc/sb375/rtac/report/092909/finalreport.pdf.
[86] J Hobson and J Quiroz-Martínez, *Roadblocks to Health: Transportation Barriers to Healthy Communities* (Transportation and Land Use Coalition, 2002).
[87] Strategic Growth Council, *Criteria for Awarding Proposition 84 Funds: Model Development and Data Gathering*, http://www.sgc.ca.gov/docs/funding/Final_Criteria.doc.
[88] Strategic Growth Council, *Criteria for Awarding Proposition 84 Funds: Model Development and Data Gathering*, http://www.sgc.ca.gov/docs/funding/Final_Criteria.doc.
[89] Lawrence Frank & Co., Inc, The Sacramento Area Council of Governments, and Mark Bradley Associates, *I-PLACE3S Health & Climate Enhancements and Their Application in King County*,*HealthScape* (King County, June 1, 2009).
[90] Lawrence Frank & Co., Inc, The Sacramento Area Council of Governments, and Mark Bradley Associates, *I-PLACE3S Health & Climate Enhancements and Their Application in King County*,*HealthScape* (King County, June 1, 2009).
[91] J Woodcock, P Edwards, C Tonne, BG Armstrong, Banister D Ashiru, S Beevers, Z Chalabi, Z Chowdhury, A Cohen, OH Franco, AH Haines, R Hickman, Lindsay G Mittal, D Mohan, G Tiwari, A Woodward, and I Roberts, "Public Health Benefits of Strategies to Reduce Greenhouse-Gas Emissions: Urban Land Transport," *The Lancet* 374, 9705 (2009) :1930-1943.
[92] Caltrans. *Complete Streets Implementation Action Plan, 2010.* http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/CompleteStreets_IP03-10-10.pdf.
[93] N Owen, N Humpel, E Leslie, et al. "Understanding Environmental Influences on Walking; Review and Research Agenda. *American Journal of Preventive Medicine* 27 no. 1 (2004): 67–76.
[94] Centers for Disease Control and Prevention, Recommended Community Strategies and Measurements to Prevent Obesity in the United States. *MMWR* 58, no. RR07 (2009):1-26.
[95] M Ernst, L Shoup*. Dangerous by Design. Surface Transportation Policy Partnership and Transportation for America 2009*. http://transact.org/PDFs/2009-11-09-Dangerous%20by%20Design.pdf.
[96] Caltrans. *Complete Streets.* http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets.html.
[97] Caltrans. *Complete Streets Implementation Action Plan, 2010.* http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/CompleteStreets_IP03-10-10.pdf.
[98] Caltrans. *Smart Mobility 2010.* http://www.dot.ca.gov/hq/tpp/offices/ocp/smf_files/SMF_handbook_062210.pdf.
[99] Caltrans. *Smart Mobility 2010.* http://www.dot.ca.gov/hq/tpp/offices/ocp/smf_files/SMF_handbook_062210.pdf.
[100] B McCann B, S Rynne. *Complete Streets: Best Policy and Implementation Practices.* American Planning Association Advisory Service, 2010.
[101] B McCann B, S Rynne. *Complete Streets: Best Policy and Implementation Practices.* American Planning Association Advisory Service, 2010.
[102] City of Columbus Department of Public Service, Division of Mobility Options. *Complete Streets.* http://publicservice.columbus.gov/uploadedFiles/Public_Service/Transportation/Mobility/Complete_Streets.pdf.
[103] Institute of Medicine. *Local Government Actions to Prevent Childhood Obesity.* Washington, DC: The National Academies Press, 2009.
[104] California Department of Health Services. *California Obesity Prevention Plan: A Vision for Tomorrow, Strategic Actions for Today.* Sacramento (CA): California Department of Health Services, 2006.
[105] California Resources Agency, *The California Environmental Quality Act* (1998-2003). http://ceres.ca.gov/ceqa/summary.html.

[106] R. Bhatia, "Automobile Level of Service: A Liability for Health and Environmental Quality," *Working Policy Paper* (San Francisco Department of Public Health, September 23, 2005).
[107] T. Litman, *Evaluating Transportation Equity: Guidance For Incorporating Distributional Impacts in Transportation Planning* (Victoria Transport Policy Institute, 2010).
[108] R. Bhatia, "Automobile Level of Service: A Liability for Health and Environmental Quality," *Working Policy Paper* (San Francisco Department of Public Health, September 23, 2005).
[109] T. Litman, *Evaluating Transportation Equity: Guidance For Incorporating Distributional Impacts in Transportation Planning* (Victoria Transport Policy Institute, 2010).
[110] R. Bhatia, "Automobile Level of Service: A Liability for Health and Environmental Quality," *Working Policy Paper* (San Francisco Department of Public Health, September 23, 2005).
[111] National Cooperative Highway Research Program, *NCHRP Report 616: Multimodal Level of Service Analysis for Urban Streets*, (Washington, DC: Transportation Research Board, 2008).
[112] R. Bhatia, "Automobile Level of Service: A Liability for Health and Environmental Quality," *Working Policy Paper* (San Francisco Department of Public Health, September 23, 2005).
[113] HiAP in Action Textbox: California Department of Transportation, *Smart Mobility 2010: A Call to Action for the New Decade* (February 2010), http://www.dot.ca.gov/hq/tpp/offices/ocp/smf_files/SMF_handbook_062210.pdf.
[114] California Department of Education, *A Study of the Relationship between Physical Fitness and Academic Achievement in California using 2004 Test Results* (2005), http://www.cde.ca.gov/ta/tg/pf/documents/2004pftresults.doc.
[115] United States Environmental Protection Agency, *Travel and Environmental Implications of School Siting* (Development, Community, and Environment Division, September 2003).
[116] United States Environmental Protection Agency, *Travel and Environmental Implications of School Siting* (Development, Community, and Environment Division, September 2003).
[117] KK Davison, J Werder, and C Lawson, "Children's Active Commuting to School: Current Knowledge and Future Directions," *Preventing Chronic Disease* 5.3 (2008): A100.
[118] Centers for Disease Control and Prevention, "Barriers to Children Walking and Biking to School – 1999," *MMWR* 51, no. 32 (2002): 701-704.
[119] JL Black and J Macinko, "Neighborhoods and Obesity," *Nutrition Reviews* 66, no. 1 (2008): 2-20.
[120] Safe Kids Worldwide, *Latest Trends in Child Pedestrian Safety: A Five-Year Review* (2007), http://www.safekids.org/assets/docs/ourwork/research/pedestrian-safety-research.pdf.
[121] M.R. Orenstein, N. Gutierrez, T.M. Rice, J.F. Cooper, and D.R. Ragland, *Safe Routes to School Safety & Mobility Analysis* (UC Berkeley Traffic Safety Center, 2007).
[122] M.R. Orenstein, N. Gutierrez, T.M. Rice, J.F. Cooper, and D.R. Ragland, *Safe Routes to School Safety & Mobility Analysis* (UC Berkeley Traffic Safety Center, 2007).
[123] Safe Routes to School National Partnership, *Implementing Safe Routes to School in Low-Income Schools and Communities: A Resource Guide for Schools and Communities* (2010), http://www.saferoutespartnership.org/media/file/LowIncomeGuide.pdf.
[124] Safe Routes to School National Partnership, *Implementing Safe Routes to School in Low-Income Schools and Communities: A Resource Guide for Schools and Communities* (2010), www.saferoutespartnership.org/media/file/LowIncomeGuide.pdf.
[125] N. McDonald, "Critical Factors for Active Transportation to School among Low-Income and Minority Students: Evidence from the 2001 National Household Travel Survey," *American Journal of Preventive Medicine* 34, no. 4 (2008): 341-344.
[126] Safe Kids Worldwide, *Latest Trends in Child Pedestrian Safety: A Five-Year Review* (2007), http://www.safekids.org/assets/docs/ourwork/research/pedestrian-safety-research.pdf.
[127] Safe Routes to School National Partnership, *Implementing Safe Routes to School in Low-Income Schools and Communities: A Resource Guide for Schools and Communities* (2010), www.saferoutespartnership.org/media/file/LowIncomeGuide.pdf.
[128] Institute of Medicine, *Local Government Actions to Prevent Childhood Obesity* (Washington, DC: The National Academies Press, 2009).
[129] CGB Mitchell, "Influencing Speed and its Environmental Benefits—Vehicle Design," *Safety Mobility and the Environment–Striking the Balance, Understanding the Effects of Speed on the Environment Workshop*, (London: PACTS Conference, March 4, 1993).

[130] ED Richter, P Barach, L Friedman, S Krikler, and A Israeli. "Raised Speed Limits, Speed Spillover, Case-Fatality Rates, and Road Deaths in Israel: a 5-Year Follow Up," *Am. J. Public Health* 94, no 4 (2004):568–74.
[131] EF Van Beeck, JP Mackenbach, CW Looman, and AE Kunst AE. "Determinants of Traffic Accident Mortality in The Netherlands: A Geographical Analysis," *Int. J. Epidemiol* 20, no. 3 (1991): 698–706.
[132] MBA Dijkema, SC van der Zee, B Brunekreef, and RT van Strien RT, "Air Quality Effects of an Urban Highway Speed Limit Reduction," *Atmospheric Environment* 42 (2008): 9098–9105.
[133] Global Road Safety Partnership. *Speed Management: A Road Safety Manual for Decision-Makers and Practitioners*. Geneva (2008)
[134] Margie Peden, Richard Scurfield, David Sleet, Dinesh Mohan, Adnan A. Hyder, Eva Jarawan and Colin Mathers. *World Report on Road Traffic Injury prevention.* World Health Organization. Geneva (2004).
[135] ED Richter, T Berman, L Friedman, and G Ben-David, "Speed, Road Injury, and Public Health," *Annu Rev PublicHealth* 27 (2006):125-152.
[136] Insurance Institute for Highway Safety. *Q&As: Speed and speed limits.* http://www.iihs.org/research/qanda/speed_limits.html.
[137] California Vehicle Code Section 22358: Decrease of Local Speed Limits.
[138] U.S. Department of Transportation, *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries* (National Highway Traffic Safety Administration, 1999), http://www.nhtsa.gov/people/injury/research/pub/HS809012.html.
[139] Institute of Transportation Engineers and the Federal Highway Administration, *Traffic Calming: State of the Practice* (1999).
[140] Federal Highway Administration, *PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System Report 16* (Federal Transit Administration, Transit Cooperative Research Program, Transit and Urban Form, 1996).
[141] JM Tester, GW Rutherford, Z Wald, and MW Rutherford. A matched case–control study evaluating the effectiveness of speed humps in reducing child pedestrian injuries. American Journal of Public Health, 2004: 94(4), 646-650.
[142] SB Steinberg, "SB 375*,* Chapter 728," *Statutes of 2008*.
[143] California Air Resources Board, *Senate Bill 375 - Regional Targets* (November 2010), http://www.arb.ca.gov/cc/sb375/sb375.htm.
[144] California Air Resources Board, *Senate Bill 375 - Research on Impacts of Transportation and Land Use-Related Policies* (October 2010), http://arb.ca.gov/cc/sb375/policies/policies.htm.
[145] Charles Komanoff and Cora Roelofs, "The Environmental Benefits of Bicycling and Walking," *National Bicycling and Walking Study Case Study No. 15* (USDOT, 1993).
[146] NRC, *Effectiveness and Impact of Corporate Average Fuel Efficiency (CAFE) Standards* (National Academy Press, 2001), http://www.nap.edu/html/cafe.
[147] Jon Miller, Henry Robison and Michael Lahr, *Estimating Important Transportation-Related Regional Economic Relationships in Bexar County, Texas* (San Antonio: VIA Transit, 1999), http://www.viainfo.net.
[148] NAR and NAHB (2002), *Joint Survey: Survey Suggests Market-Based Vision of Smart Growth*, National Association of Realtors & National Association of Home Builders, http://www.realtor.org/SG3.nsf/Pages/NARNHAB02Survey?OpenDocument.
[149] T. Liman, *Quantifying the Benefits of Nonmotorized Transportation for Achieving Mobility Management Objectives* (Victoria Transport Policy Institute).
[150] California Center for Public Health Advocacy, *The Economic Costs of Overweight, Obesity, and Physical Inactivity: Policy Recommendations* (July 2009).
[151] Strategic Growth Council, *Sustainable Communities Planning Grant And Incentives Program: Grant Guidelines & Application 2010* (2010), http://www.sgc.ca.gov/.../Planning_Grant-_Final_Proposed_2010_02_12.pdf.
[152] R Brownson, R Housemann, D Brown, et al, "Promoting Physical Activity in Rural Communities: Walking Trail Access, Use, and Effects," *American Journal of Preventive Medicine* 18, no. 3 (April 2000): 235-241.

[153] SL Huston, KR Evenson, P Bors, and Z Gizlice, "Neighborhood Environment, Access to Places for Activity, and Leisure-Time Physical Activity in a Diverse North Carolina Population," *American Journal of Health Promotion* 18, no. 1 (2003): 58-69.
[154] H Morris, *Trails & Greenways: Commute Rates from the 2000 Census. Rails to Trails Conservancy* (2003), http://www.michigantrails.org/blog/wp-content/uploads/trails-greenways-commute-rates.pdf.
[155] Todd Litman, *Win-Win Emission Reduction Strategies: Smart Transportation Strategies Can Achieve Emission Reduction Targets And Provide Other Important Economic, Social and Environmental Benefits* (Victoria Transport Policy Institute, 2007), www.vtpi.org/wwclimate.pdf.
[156] CCAP, *Linking Green-TEA and Climate Policy. Presentation by Steve Winkelman of Center of Clean Air Policy* (February 26, 2007), http://www.seagrant.noaa.gov/focus/documents/SCD/Linking%20Green-TEA%20and%20Climate%20Policy%20March%202007.pdf.
[157] Jennifer Wolch, John P. Wilson, and Jed Fehrenback, "Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis," *Urban Geography* 26, no. 1 (2005): 16.
[158] G Heath, R Brownson, J Kruger, et al, "The Task Force on Community Preventive Services. The Effectiveness of Urban Design and Land Use and Transport Policies and Practices to Increase Physical Activity: A Systematic Review." *Journal of Physical Activity and Health* 3, no. 1S (2006): S55-S76.
[159] National Association of Realtors and the National Association of Home Builders*, Consumer's Survey on Smart Choices for Home Buyers* (April 2002).
[160] National Transportation Enhancements Clearinghouse, *Enhancing America's Communities: A Guide to Transportation Enhancements* (November 2002).
[161] Rails to Trail Conservancy. *Ohlone Greenway.* http://www.traillink.com/trail/ohlone-greenway.aspx
[162] Leadership for Healthy Communities. *Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity*. Princeton, NJ: Robert Wood Johnson Foundation, updated February 2010.
[163] EA Finkelstein, JG Trogdon, JW Cohen, and W Dietz. "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates," *Health Affairs* 28 (2009): w822–w831.
[164] EA Finkelstein, MdC DiBonaventura, SM Burgess, and BC Hale, "The Costs of Obesity in the Workplace." *Journal of Occupational and Environmental Medicine* 52, no. 10 (2010): 971-976.
[165] JA Ricci and E Chee, "Lost Productive Time Associated with Excess Weight in the U.S. Workforce, " *Journal of Occupational and Environmental Medicine* 47 (2005): 1227–1234.
[166] The Center for Government Analysis, *An Analysis of Public Sector Health Care Costs in California* (September 2006).
[167] M Carnethon, LP Whitsel, BA Franklin, P Kris-Etherton, R Milani, CA Pratt, GR Wagner, et al, "Worksite Wellness Programs for Cardiovascular Disease Prevention: A Policy Statement From the American Heart Association," *Circulation* 120 (2009): 1725-1741.
[168] County of Ventura Wellness Program. Annual Report FY 2007-08, County Executive Office, Human Resources Division.
[169] Centers for Disease Control and Prevention, "Public Health Strategies for Preventing and Controlling Overweight and Obesity in School and Worksite Settings: A Report on Recommendations of the Task Force on Community Preventive Services," *MMWR* 54, no. RR10 (2005): 1-12.
[170] KI Proper, M Koning, AJ van der Beek, VH Hildebrandt, RJ Bosscher, and W Mechelen, "The Effectiveness of Worksite Physical Activity Programs on Physical Activity, Physical Fitness, and Health," *Clinical Journal of Sports Medicine* 13, no. 2 (2003): 106-17.
[171] Task Force on Bicycling and Active Transportation, *Implementing a Successful Bicycle and Active Commuting Program in the Washington, DC Metropolitan* (2010), http://www.fedcenter.gov/Documents/index.cfm?id=15046&pge_id=1854.
[172] Task Force on Bicycling and Active Transportation, *Implementing a Successful Bicycle and Active Commuting Program in the Washington, DC Metropolitan* (2010), http://www.fedcenter.gov/Documents/index.cfm?id=15046&pge_id=1854.
[173] Robert Wood Johnson Foundation, "Where We Live Matters for Our Health: The Links Between Housing and Health," *Issue Brief 2* (September 2008).
[174] LM Anderson, JS Charles, MT Fullilove, SC Scrimshaw, JE Fielding, and J Normand, "Providing Affordable Family Housing and Reducing Residential Segregation by Income: A Systematic Review," *American Journal of Preventive Medicine* 24, no 3S (The Task Force on Community Preventive Services, 2003): 47-67.

[175] Robert Wood Johnson Foundation, "Where We Live Matters for Our Health: The Links Between Housing and Health," *Issue Brief 2* (September 2008).
[176] Robert Wood Johnson Foundation, "Where We Live Matters for Our Health: The Links Between Housing and Health," *Issue Brief 2* (September 2008).
[177] National Institutes of Health, *Lead Poisoning*, http://www.nlm.nih.gov/medlineplus/ency/article/002473.htm.
[178] R Flournoy, *Breathing Easy from Home to School: Fighting the Environmental Triggers of Childhood Asthma* (PolicyLink, 2008).
[179] LT Goodfellow and JB Waugh, "Tobacco Treatment and Prevention: What Works and Why," *Respiratory Care* 54, no 8 (2009): 1082-1090.
[180] S Treuhaft and A Karpyn, *The Grocery Gap: Who Has Access to Health Food and Why It Matters* (PolicyLink, 2010).
[181] U.S. Department of Health and Human Services, *The Surgeon General's Call to Action to Promote Healthy Homes* (Office of the Surgeon General, 2009).
[182] Treuhaft, S. & A. Karpyn. 2010. *The Grocery Gap: Who Has Access to Health Food and Why It Matters.* PolicyLink.
[183] GG Bennett, et al, "Safe to Walk? Neighborhood Safety and Physical Activity Among Public Housing Residents," *PLOS Med* 4, no 10 (2007) : e306.
[184] Virginia Lee, J. Srikantharajah, and L. Mikkelsen, *Fostering Physical Activity for Children and Youth: Opportunities for a Lifetime of Health* (The Convergence Partnership, 2010).
[185] Bettye Rose Connell, Mike Jones, Ron Mace, Jim Mueller, Abir Mullick, Elaine Ostroff, Jon Sanford, Ed Steinfeld, Molly Story, and Gregg Vanderheiden, *The Principles of Universal Design* (NC State University: The Center for Universal Design, 2007), http://www.ncsu.edu/www/ncsu/design/sod5/cud/about_ud/udprinciplestext.htm.
[186] M Francis, P Lindsey, and JS Rice, *The Healing Dimensions of People-Plant Relations: Proceedings of a Research Symposium* (UC Davis, CA: Center for Design Research, Department of Environmental Design, 1994).
[187] Donna Armstrong-A, "A Survey of Community Gardens in Upstate New York: Implications for Health Promotion and Community Development," *Health and Place* 6 (2000): 319-327.
[188] Katherine H Brown, Anne Carter, et al, *Urban Agriculture and Community Food Security in the United States: Farming from the City Center To the Urban Fringe* (Urban Agriculture Committee of the Community Food Security Coalition, February 2003).
[189] A McNabola and L.W. Gill, "The Control of Environmental Tobacco Smoke: A Policy Review," *International Journal of Environmental Research and Public Health* 6 (2009): 741-758.
[190] U.S. Department of Health and Human Services, *The Surgeon General's Call to Action to Promote Healthy Homes* (Office of the Surgeon General, 2009).
[191] U.S. Department of Health and Human Services, *The Surgeon General's Call to Action to Promote Healthy Homes* (Office of the Surgeon General, 2009).
[192] U.S. Department of Housing and Urban Development, *HUD Notice PIH-2009-21* (July 17, 2009), http://www.hud.gov/offices/pih/publications/notices/09/pih2009-21.pdf.
[193] California Department of Housing and Community Development, *Strategic Plan 2007-2010* (2007), http://www.hcd.ca.gov/strategic_plan_docs/HCDStrategicPlan2007-2010.pdf.
[194] California Department of Housing and Community Development, *Permanent Source Update* (2008), http://www.hcd.ca.gov/permsource/.
[195] California Department of Housing and Community Development, *Strategic Plan 2007-2010* (2007), http://www.hcd.ca.gov/strategic_plan_docs/HCDStrategicPlan2007-2010.pdf.
[196] *Connecticut Public Act 05-228: Act Concerning Farmland Preservation, Open Space, Historic Preservation and Affordable Housing* (2005).
[197] Connecticut Housing Finance Authority, *The Community Investment Act: A Guide to Public Act 228*, http://www.chfa.org/content/Multifamily%20Document%20Library/CommunityInvestmentActBrochure.pdf.
[198] Robert Wood Johnson Foundation, "Where We Live Matters for Our Health: The Links Between Housing and Health," *Issue Brief 2* (September 2008).
[199] Smart Growth Network Subgroup on Affordable Housing., *Affordable Housing and Smart Growth: Making the Connection* (Washington, DC: National Neighborhood Coalition, 2001), http://www.epa.gov/smartgrowth/pdf/epa_ah_sg.pdf.

[200] B Stone Jr., "Urban Sprawl and Air Quality in Large US Cities," *Journal of Environmental Management* 86 (2008): 688–698.
[201] R Ewing, T Schmid, R Killingsworth, A Zlot, and S Raudenbush S. "Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity, *American Journal Health Promotion* 18, no. 1 (2003): 47–57.
[202] R Ewing, R Schieber, and CV Zeeger, "Urban Sprawl as a Risk Factor in Motor Vehicle Occupant and Pedestrian Fatalities," *American Journal of Public Health* 93, no. 9 (2003): 1541-1545.
[203] H Frumpkin, "Urban Sprawl and Public Health," *Public Health Reports* 17 (2002): 201-216.
[204] R Ewing, T Schmid, R Killingsworth, A Zlot, and S Raudenbush S. "Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity, *American Journal Health Promotion* 18, no. 1 (2003): 47–57.
[205] PolicyLink, *Equitable Development Toolkit: Transit Oriented Development: 2008* (2008), http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/TODTOOL_FINAL.PDF.
[206] Greenbelt Alliance, *Infill Development: Rebuilding Our Cities for a Sustainable Future*, http://www.greenbelt.org/downloads/about/infill.pdf.
[207] LE Jackson, "The Relationship of Urban Design to Human Health and Condition," *Landscape and Urban Planning* 64 (2003): 191–200.
[208] R Cervero, "Mixed Land-Uses and Commuting: Evidence from the American Housing Survey," *Transportation Research Part A: Policy and Practice* 30, no. 5 (1996): 361-377.
[209] PolicyLink, *Equitable Development Toolkit: Transit Oriented Development: 2008* (2008), http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/TODTOOL_FINAL.PDF.
[210] PolicyLink, *Infill Incentives*, http://policylink.info/EDTK/Infill/#8.
[211] California Environmental Protection Agency and California Air Resources Board, *Air Quality and Land Use Handbook: a Community Health Perspective* (April 2005), http://www.arb.ca.gov/ch/handbook.pdf.
[212] R Bhatia and T Rivard, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review* (City and County of San Francisco: Program on Health, Equity, and Sustainability, Occupational & Environmental Health Section, Department of Public Health, May 6, 2008), http://www.sfphes.org/publications/Mitigating_Roadway_AQLU_Conflicts.pdf.
[213] U.S. Department of Housing and Urban Development, *Docket No. FR-5396-N-03. Notice of Funding Availability (NOFA) for HUD's Fiscal Year 2010 Sustainable Communities Regional Planning Grant Program* (Office of Sustainable Housing and Communities, Office of the Deputy Secretary, 2010).
[214] California Department of Housing and Community Development, *Catalyst Projects for California Sustainable Strategies Pilot Program*, http://www.hcd.ca.gov/hpd/cpcsspp.html.
[215] PolicyLink, *Equitable Development Toolkit: Transit Oriented Development: 2008* (2008), http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/TODTOOL_FINAL.PDF.
[216] Smart Growth Network, *Getting to Smart Growth: 100 Policies for Implementation* (International City/County Management Association), http://www.smartgrowth.org/pdf/gettosg.pdf.
[217] Public Health Law and Policy, *Healthy Planning Policies: A Compendium from California General Plans* (2009), http://www.phlpnet.org/sites/phlpnet.org/files/Healthy_Planning_Policies_Compendium_FINAL_web_090925.pdf.
[218] State of Washington, *Example Comprehensive Plan Policies to Support Physically Active Communities* (Department of Community, Trade and Economic Development, 2007).
[219] Surgeon General, *The Health Consequences of Involuntary Exposure to Tobacco Smoke* (Atlanta, GA: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, 2006).
[220] California Environmental Protection Agency, *Health Effects of Exposure to Environmental Tobacco Smoke* (Sacramento, CA: Air Resources Board, Office of Environmental Health Hazard Assessment, 2005).
[221] U.S. Environmental Protection Agency, *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders* (Washington, D.C.: 1992).

[222] A McNabola and L.W. Gill, "The Control of Environmental Tobacco Smoke: A Policy Review," *International Journal of Environmental Research and Public Health* 6 (2009): 741-758.
[223] Surgeon General, *The Health Consequences of Involuntary Exposure to Tobacco Smoke* (Atlanta, GA: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, 2006).
[224] U.S. Environmental Protection Agency, *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders* (Washington, D.C.: 1992).
[225] Centers for Disease Control and Prevention. State Tobacco Activities Tracking & Evaluation System. State Smoke-Free Indoor Air Fact Sheet. http://www.portal.state.pa.us/portal/server.pt?open=18&objID=446196&mode=2
[226] April Roeseler. Personal Communication.
[227] Bobby Caina Calvin. "Teen chewing tobacco use putting baseball in a pinch," *Sacramento Bee,* October 21, 2010. http://www.sacbee.com/2010/10/21/3120276/teen-chewing-tobacco-use-putting.html.
[228] Lloyd D. Johnston, Patrick M. O'Malley, Jerald G. Bachman and John E. Schulenberg. *Monitoring the Future: Overview of Key Findings*. Atlanta, GA: U.S. Department of Health and Human Services, National Institute on Drug Abuse, 2009. http://monitoringthefuture.org/pubs/monographs/overview2009.pdf.
[229] U.S. Department of Health and Human Services. *E-Cigarettes: Questions and Answers*. Silver Spring, MD: U.S. Department of Health and Human Services, Food and Drug Administration, 2010. http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm225210.htm.
[230] California Charter School Association. *California Charter Schools Fact Sheet: 2010-2011*. http://www.calcharters.org/CCSA_Fact_Sheet.pdf.
[231] California Charter School Association. *California Charter Schools Fact Sheet: 2010-2011*. http://www.calcharters.org/CCSA_Fact_Sheet.pdf.
[232] Joanne E. Callinan, Anna Clarke, Kirsten Doherty, and Cecily Kelleher. "Legislative Smoking Bans for Reducing Secondhand Smoke Exposure, Smoking Prevalence and Tobacco Consumption," *Cochrane Database Systematic Review* 14, no. 4 (2010).
[233] Joanne E. Callinan, Anna Clarke, Kirsten Doherty, and Cecily Kelleher. "Legislative Smoking Bans for Reducing Secondhand Smoke Exposure, Smoking Prevalence and Tobacco Consumption," *Cochrane Database Systematic Review* 14, no. 4 (2010). doi:10.1002/14651858.CD005992.pub2.
[234] U.S. Dept. of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
[235] Centers for Disease Control and Provention, State Smoking Restrictions for Private-Sector Worksites, Restaurants, and Bars --- United States, 2004 and 2007. *MMWR.* 57, no. 20 (2008): 549-552. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5720a3.htm.
[236] Centers for Disease Control and Prevention. State Tobacco Activities Tracking & Evaluation System. State Smoke-Free Indoor Air Fact Sheet. http://www.portal.state.pa.us/portal/server.pt?open=18&objID=446196&mode=2.
[237] GA Giovino, FJ Chaloupka, AM Hartman, JK Gerlach, J Chriqui, CT Orleans, K Wende, C Tworek, D Barker, JT Gibson, J Yang, J Hinkel, KM Cummings, A Hyland, B Fix, M Paloma, M Larkin, Cigarette Smoking Prevalence and Policies in the 50 States: An Era of Change – the Robert Wood Johnson Foundation ImpacTeen Tobacco Chart Book. (Buffalo, NY: University at Buffalo, State University of New York, 2009). http://www.impacteen.org/statetobaccodata/chartbook_final060409.pdf
[238] U.S. Dept. of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
[239] U.S. Department of Health and Human Services. *Guide to Community Preventive Services*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services, Epidemiology Analysis Program Office, The Community Guide Branch. Accessed 11/14/2010. http://www.thecommunityguide.org.
[240] U.S. Department of Health and Human Services. *Physical Activity Fundamental to Preventing Disease*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2002.

[241] Penny Gordon-Larsen, Melissa C. Nelson, Phil Page and Barry M. Popkin. "Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity," *Pediatrics* 117, no. 2 (2006): 417–24.
[242] Kathleen L. Wolf. "City trees, nature and physical activity," *Facility Management Journal* 20, no. 1 (2010): 50-54.
[243] Dan Burden. *22 Benefits of Urban Street Trees*. Glatting Jackson and Walkable Communities, Inc., May 2006.
[244] Mona Saraiya, Karen Glanz, Peter A. Briss, Phyllis Nichols, Cornelia White, Debjani Das, S. Jay Smith, Bernice Tannor, Angela B. Hutchinson, Katherine M. Wilson, Nisha Gandhi, Nancy C. Lee, Barbara Rimer, Ralph C. Coates, Jon F. Kerner, Robert A. Hiatt, Patricia Buffler and Phyllis Rochester. "Interventions to Reduce Skin Cancer by Reducing Exposure to Ultraviolet Radiation: A Systematic Review," *American Journal of Preventive Medicine* 27, no. 5 (2004): 422-466.
[245] Frances E. Kuo and William C. Sullivan. "Environment and Crime in the Inner City: Does Vegetation Reduce Crime?" *Environment and Behavior* 33, no. 3 (2001): 343-367.
[246] Jennifer Wolch, John P. Wilson and Jed Fehrenback. "Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis," *Urban Geography* 26, no. 1 (2005): 4-35.
[247] International City/County Management Association. *Active Living and Social Equity - Creating Healthy Communities for All Residents: A Guide for Local Governments*. Washington, DC: International City/County Management Association, January 2005.
[248] Lisa M. Powell, Sandy Slater and Frank J. Chaloupka. "The Relationship Between Community Physical Activities Settings and Race, Ethnicity and Socioeconomic Status," *Evidence-Based Preventive Medicine* 1, no. 2 (2004): 135-144.
[249] H. Akbari. "Shade Trees Reduce Building Energy Use and CO2 Emissions from Power Plants," *Environmental Pollution* 116*,* Supplement 1 (2002)*:* S119-S126.
[250] E. Gregory McPherson and James R. Simpson. *Reducing Air Pollution through Urban Forestry*. Proceedings of the 48th Annual Meeting of the California Forest Pest Council, November, 1999.
[251] David J. Nowak. *The Effects of Urban Trees on Air Quality*. Syracuse, NY: U.S. Department of Agriculture, Forest Service, 2002.
[252] University of California Division of Agriculture and Natural Resources. Invasive Plants in Southern California: FAQs. Accessed 29 Oct 2010. http://groups.ucanr.org/socalinvasives/FAQs/.
[253] David Pimentel, Rodolpho Zuniga and Doug Morrison. "Update on the Environmental and Economic Costs Associated With Alien-Invasive Species in the United States," *Ecological Economics* 52 (2005): 273-288.
[254] Tamar Cooper and Jeffrey Vincent. *Joint Use School Partnerships in California: Strategies to Enhance Schools and Communities.* Berkeley, CA: Center for Cities & Schools and Public Health Law and Policy, 2008. http://citiesandschools.berkeley.edu/reports/CC&S_PHLP_2008_joint_use_with_appendices.pdf.
[255] Thomas E. Novotny, Kristen Lum, Elizabeth Smith, Vivian Wang and Richard Barnes. "Cigarettes Butts and the Case for an Environmental Policy on Hazardous Cigarette Waste," *International Journal of Environmental Research and Public Health* 6, no. 5 (2009): 1691-705.
[256] U.S. Department of Agriculture. *Trees for People, Urban Forestry 101.* Washington, D.C.: U.S. Department of Agriculture, Forest Service, Urban and Community Forestry. Last modified October 3, 2008. http://www.fs.fed.us/ucf/treesforpeople.html.
[257] Sarah M. Forbes and Rose H. Dakin. *Terrestrial Sequestration: An Adaptation and Mitigation Strategy*. US Department of Energy, National Energy Technology Lab. http://seca.doe.gov/publications/proceedings/03/carbon-seq/PDFs/054.pdf.
[258] A.C.K. Lee and R. Maheswaran. "The Health Benefits of Urban Green Spaces: A Review of the Evidence," *Journal of Public Health* (2010): 1-11.
[259] Ryan Bell and Jennie Wheeler. *Talking Trees: An Urban Forestry Toolkit for Local Governments*. ICLEI – Local Governments for Sustainability, November 2006.
[260] Ryan Bell and Jennie Wheeler. *Talking Trees: An Urban Forestry Toolkit for Local Governments*. ICLEI – Local Governments for Sustainability, November 2006.
[261] Ryan Bell and Jennie Wheeler. *Talking Trees: An Urban Forestry Toolkit for Local Governments*. ICLEI – Local Governments for Sustainability, November 2006.
[262] Ryan Bell and Jennie Wheeler. *Talking Trees: An Urban Forestry Toolkit for Local Governments*. ICLEI – Local Governments for Sustainability, November 2006.

[263] Urban Forest Ecosystems Institute. *SelecTree: A Tree Selection Guide.* http://selectree.calpoly.edu/right_tree.html.
[264] Ryan Bell and Jennie Wheeler. *Talking Trees: An Urban Forestry Toolkit for Local Governments*. ICLEI – Local Governments for Sustainability, November 2006.
[265] Dennis M. King and Marissa Mazzotta. *Essentials of Ecosystem Valuation*. http://www.ecosystemvaluation.org/essentials.htm.
[266] Ecosystem Marketplace. *Payments for Ecosystem Services.* http://www.ecosystemmarketplace.com/pages/dynamic/web.page.php?page_id=7183&section=about_us&eod=1#pes_5.
[267] American Forest Foundation. Ecosystem Service Market – Carbon, 2010. http://www.affoundation.org/ccs_ecocarbon.html.
[268] Climate Action Reserve. *Forest Project Protocol: Version 3.2*, August 31, 2010.
[269] California Natural Resources Agency. *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*. Sacramento, CA: California Natural Resources Agency, 2009.
[270] California Department of Forestry and Fire Protection. *Resource Management and Forestry Overview*. Sacramento, CA: California Natural Resources Agency, California Department of Forestry and Fire Protection. Accessed 11/13/2010. http://www.fire.ca.gov/communications/downloads/fact_sheets/ResourceManagementOverview.pdf.
[271] California Environmental Protection Agency. *Fact Sheet: Prescribed Burning and Smoke Management*. Sacramento, CA: California Environmental Protection Agency, California Air Resources Board, 2003. http://www.arb.ca.gov/smp/progdev/pubeduc/pbfs.pdf.
[272] Michael Lipsett, Barbara Materna, Susan Lyon Stone, Shannon Therriault, Robert Blasidell and Jeff Cook. *Wildfire Smoke: A Guide for Public Health Officials*, 2008. http://www.californiabreathing.org/images/stories/publications/wildfire_smoke_guide_july08.pdf.
[273] Cynthia T. Fowler. "Human Health Impacts of Forest Fires in the Southern United States: A Literature Review," *Journal of Ecological Anthropology* 7 (2003): 39-63.
[274] Jack D. Cohen. "Preventing Disaster: Home Ignitability in the Wildland-Urban Interface," *Journal of Forestry* 98, no. 3 (2000): 15-21.
[275] California Department of Forestry and Fire Protection. *CAL FIRE 2009 Wildland Fire Summary*. Sacramento, CA: California Natural Resources Agency, California Department of Forestry and Fire Protection, June 2010. http://www.fire.ca.gov/communications/downloads/fact_sheets/2009Summary.pdf.
[276] Jack D. Cohen. "Preventing Disaster: Home Ignitability in the Wildland-Urban Interface," *Journal of Forestry* 98, no. 3 (2000): 15-21.
[277] California Department of Forestry and Fire Protection. *Homeowner's Checklist: How to Make Your Home Fire Safe.* Sacramento, CA: California Natural Resources Agency, California Department of Forestry and Fire Protection, March 2009. http://www.fire.ca.gov/communications/downloads/fact_sheets/Checklist.pdf.
[278] Ecological Society of America. *Invasive Species – INVASION! Fact Sheet*. Washington, DC: Ecological Society of America, 2004. http://www.esa.org/education/edupdfs/invasion.pdf.
[279] David Pimentel, Rodolpho Zuniga and Doug Morrison. "Update on the Environmental and Economic Costs Associated With Alien-Invasive Species in the United States," *Ecological Economics* 52 (2005): 273-288.
[280] Ecological Society of America. *Invasive Species – INVASION! Fact Sheet*. Washington, DC: Ecological Society of America, 2004. http://www.esa.org/education/edupdfs/invasion.pdf.
[281] David Pimentel, Rodolfo Zuniga and Doug Morrison. "Update on the Environmental and Economic Costs Associated With Alien-Invasive Species in the United States," *Ecological Economics* 52 (2005): 273-288.
[282] Matthew J. Rinella, Bruce D. Maxwell, Peter K. Fay, Theodore Weaver and Roger L. Sheley. "Control Effort Exacerbates Invasive-Species Problem," *Ecological Applications* 19, no. 1 (2009): 155-62.
[283] Paul K. Mills and Sandy Kwong. "Cancer Incidence in the United Farmworkers of America 1987-1997," *American Journal of Industrial Medicine* 40 (2001): 596-603.
[284] Vincent F. Gerry, Dina Schreinemachers, Mary E. Harkins and Jack Griffith. "Pesticide Appliers, Biocides and Birth Defects in Rural Minnesota," *Environmental Health Perspectives* 104, no. 4 (1996): 394-399.

[285] Centers for Disease Control and Prevention. *Heat-Related Deaths Among Crop Workers --- United States, 1992—2006*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report 57, no. 24 (2008) 649-653.
[286] Leo Horrigan, Robert S. Lawrence and Polly Walker. "How Sustainable Agriculture Can Address the Environmental and Human Health Harms of Industrial Agriculture," *Environmental Health Perspectives* 110, no. 5 (2002): 445–456.
[287] Ecological Society of America. *Invasive Species – INVASION! Fact Sheet*. Washington, DC: Ecological Society of America, 2004. http://www.esa.org/education/edupdfs/invasion.pdf.
[288] David M. Lodge, Susan Williams, Hugh J. MacIsaac, Keith R. Hayes, Brian Leung, Sarah Reichard, Richard N. Mack, Peter B. Moyle, Maggie Smith, David A. Andow DA, James T. Carlton and Anthony McMichael. "Biological Invasions: Recommendations for US Policy and Management," *Ecological Applications* 16, no. 6 (2006): 2035-2054.
[289] California Invasive Species Advisory Committee (CISAC). *Stopping the Spread: A Strategic Framework for Protecting California from Invasive Species*. Draft, September 23, 2010.
[290] California Invasive Species Advisory Committee (CISAC). *Stopping the Spread: A Strategic Framework for Protecting California from Invasive Species*. Draft, September 23, 2010.
[291] Luisa Franzini, Marc N. Elliott, Paula Cuccaro, Mark Schuster, M. Janice Gilliland, Jo Anne Grunbaum, Frank Franklin and Susan R. Tortelero. "Influences of Physical and Social Neighborhood Environments on Children's Physical Activity and Obesity," *American Journal of Public Health* 99, No. 2 (2009): 271-278.
[292] Billie Giles-Corti, Melissa H. Broomhall, Matthew Knuiman, Catherine Collins, Kate Douglas, Kevin Ng, Andrea Lange and Robert J. Donovan. "Increasing walking: How Important is Distance to, Attractiveness, and Size of Public Open Space?" *American Journal of Preventive Medicine* 28, no. 2S2 (2005): 169-176.
[293] California School Boards Association and California Project LEAN. *California Physical Activity and Physical Education in California Schools: A Survey of District/County Office of Education Perceptions and Practices*, Research Brief, 2009.
[294] Sara L. Huston, Kelly R. Evenson, Philip Bors and Ziya Gizlice. "Neighborhood Environment, Access to Places for Activity, and Leisure-time Physical Activity in a Diverse North Carolina Population," *American Journal of Health Promotion* 18, no. 3 (2003): 58-69.
[295] California School Boards Association and California Project LEAN. *Maximizing Opportunities for Physical Activity through Joint Use of Facilities*, Policy Brief, February 2010.
[296] Christine Shenot and Emily Salomon. *Community Health and Food Access: The Role of Local Government*. Washington, DC: ICMA Press, 2006.
[297] City and County of San Francisco. *Executive Directive 09-03: Healthy and Sustainable Food for San Francisco*, Office of the Mayor, July 9, 2009.
[298] San Francisco Recreation and Parks Department. *Community Gardens Program*, 2010. http://sfrecpark.org/CommunityGardens.aspx.
[299] Centers for Disease Control and Prevention. *Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report 46, no. 6 (1997): 1-36.
[300] Leadership for Healthy Communities. *Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity*. Princeton, NJ: Robert Wood Johnson Foundation, updated February 2010.
[301] Institute of Medicine. *Local Government Actions to Prevent Childhood Obesity.* Washington, DC: The National Academies Press, 2009.
[302] American Heart Association. *Joint Use Agreements: Sharing School Recreational Facilities with the Community*, 2010. http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_312809.pdf.
[303] Jeffrey M. Vincent. *Partnerships for Joint Use: Expanding the Use of Public School Infrastructure to Benefit Students and Communities*. Berkeley, CA: UC Berkeley Center for Cities and Schools, 2010.
[304] Thomas E. Novotny, Kristen Lum, Elizabeth Smith, Vivian Wang and Richard Barnes. "Cigarettes Butts and the Case for an Environmental Policy on Hazardous Cigarette Waste," *International Journal of Environmental Research and Public Health* 6, no. 5 (2009): 1691-1705.

[305] Thomas E. Novotny and Feng Zhao. "Consumption and Production Waste: Another Externality of Tobacco Use," *Tobacco Control* 8, no. 1 (1999): 75–80.
[306] Kathleen M. Register. "Cigarette Butts as Litter: Toxic as Well as Ugly," 2000. http://www.longwood.edu/cleanva/ciglitterarticle.htm.
[307] E. Slaughter, R. Gersberg, K. Watanabe, et al. "Toxicity of Cigarette Butts, and their Chemical Components, to Marine and Freshwater Fish, Atherinops affinis and Pimephales promelas," *Tobacco Control*. In press.
[308] Ocean Conservancy. *A Rising Tide of Ocean Debris*. International Coastal Clean Up Day, 2009.
[309] Thomas E. Novotny, Kristen Lum, Elizabeth Smith, Vivian Wang and Richard Barnes. "Cigarettes Butts and the Case for an Environmental Policy on Hazardous Cigarette Waste," *International Journal of Environmental Research and Public Health* 6, no. 5 (2009): 1691-1705.
[310] R.W. Beck, Inc. *Final Report: Litter: A Review of Litter Studies, Attitude Surveys and Other Litter-related Literature.* Keep America Beautiful, Inc., 2007. http://www.kab.org/site/DocServer/Litter_Literature_Review.pdf?docID=481.
[311] John E. Schneider, Christopher S. Decker, Alexis Doyle, Kandis Meinders and Noemi Kiss. *Estimates of the Costs of Tobacco Litter in San Francisco and Calculations of Maximum Permissible Per-Pack Fees*. Health Economics Consulting Group LLC, June 22, 2009.
[312] California Ocean Protection Council. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*, 2008. http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf.
[313] California Ocean Protection Council. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*, 2008. http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf.
[314] Centers for Disease Control and Prevention. *MAPPS Interventions for Communities Putting Prevention to Work*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Last Updated September 15, 2010. http://www.cdc.gov/chronicdisease/recovery/PDF/MAPPS_Intervention_Table.pdf.
[315] C. Wayne Sells and Robert Wm. Blum. "Morbidity and Mortality Among US Adolescents: An Overview of Data and Trends," *American Journal of Public Health* 86, no. 4 (1996): 513-519.
[316] Edmund G. Brown Jr., *Homicide in California, 2006.* California Department of Justice, Division of California Justice Information Services, Bureau of Criminal Information and Analysis, Criminal Justice Statistics Center. (2008) http://ag.ca.gov/cjsc/publications/homicide/hm06/preface.pdf.
[317] California Department of Public Health, *Death Statistical Data Tables. Table 5-9A, Leading Causes of Male Deaths by Age and race/Ethnic Group and Rates for All Races Combined, California, 2008.* http://www.cdph.ca.gov/data/statistics/Pages/DeathStatisticalDataTables.aspx.
[318] California Department of Public Health, *Child Maltreatment (Child Abuse and Neglect) Prevention.* http://www.cdph.ca.gov/programs/Pages/ChildMaltreatmentPrevention.aspx.
[319] California Department of Health Care Services and California Department of Public Health, *Data Points: Results from the 2005 California Women's Health Survey: Sexual Violence in California, 2005*. http://www.cdph.ca.gov/HealthInfo/injviosaf/Documents/SV-DP2005.pdf.
[320] Michael Lynch. "Consequences of children's exposure to community violence." *Clinical Child and Family Psychology Review* 6, no. 4 (2003): 265-74.
[321] Larry Cohen, Rachel Davis, Virginia Lee and Erica Valdovinos. *Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living.* Prevention Institute, 2010. http://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html.
[322] Center for the Study and Prevention of Violence. *Blueprints for Violence Prevention*. University of Colorado at Boulder: Institute of Behavioral Science, Center for the Study and Prevention of Violence, March 27, 2006. http://www.colorado.edu/cspv/blueprints/.
[323] Etienne G. Krug, Linda L. Dahlberg, James A. Mercy, Anthony B. Zwi and Rafael Lozano, editors. *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization, 2002.
[324] Ann L. Coker, Paige H. Smith, Martie P. Thompson, Robert E. McKeown, Lesa Bethea and Keith E. Davis. "Social Support Protects Against the Negative Effects of Partner Violence on Mental Health," *Journal of Women's Health and Gender-Based Medicine* 11, no. 5 (2002): 465–76.
[325] Larry Cohen and Jeane Erlenborne. *Cultivating Peace in Salinas: A Framework for Violence Prevention*. Salinas, CA: The Office of the Mayor and City Council, 1999.

[326] Larry Cohen and Susan Swift. "The Spectrum of Prevention: Developing a Comprehensive Approach to Injury Prevention," *Injury Prevention* 5 (1999): 203-7.
[327] Larry Cohen, Ted Miller, Monique A. Sheppard, Emily Gordon, Toni Gantz and Rebkha Atnafou. "Bridging the Gap: Bringing Together Intentional and Unintentional Injury Prevention Efforts to Improve Health and Well Being," *Journal of Safety Research* 34 (2003): 473-83.
[328] Sherry Plaster Carter, Stanley L. Carter and Andrew L. Dannenberg. "Zoning Out Crime and Improving Community Health in Sarasota, Florida: 'Crime Prevention Through Environmental Design,'" *American Journal of Public Health* 93 (2003): 1442-1445.
[329] Leadership for Healthy Communities. *Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity*. Princeton, NJ: Robert Wood Johnson Foundation, updated February 2010.
[330] Jesse Jannetta. *CPAP Assessment of CDCR Recidivism-Reduction Programs*. Irvine, CA: UCI Center for Evidence Based Corrections, 2008.
[331] Frances T. Cullen and Paul Gendreau. "Assessing Correctional Rehabilitation: Policy, Practice, and Prospects" in *Policies, Processes, and Decisions of the Criminal Justice System: Criminal Justice 3*, ed. Julie Homey. U.S. Department of Justice, National Institute of Justice, 2000.
[332] Ali H. Mokdad, James S. Marks JS, Donna F. Stroup and Julie L. Gerberding. "Actual Causes of Death in the United States, 2000," *Journal of the American Medical Association* 291, no.10 (2004): 1238-1245.
[333] Centers for Disease Control and Prevention. *State-Specific Trends in Fruit and Vegetable Consumption Among Adults — United States, 2000–2009*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report 59 (2010): 1125-1130.
[334] D. Hyson. *The Health Benefits of Fruits and Vegetables: A Scientific Overview for Health Professionals*. Wilmington, DE: Produce for Better Health Foundation, 2001.
[335] California Department of Food and Agriculture. *California Agricultural Resource Directory 2008-2009*. Sacramento, CA: California Department of Food and Agriculture, Office of Public Affairs, 2009.
[336] PolicyLink. *Why Place Matters: Building a Movement for Healthy Communities*, 2007. http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/WHYPLACEMATTERS_FINAL.PDF.
[337] California Center for Public Health Advocacy, PolicyLink, and the UCLA Center for Health Policy Research. *Designed for disease: the link between local food environments and obesity and diabetes*. Regents of the University of California, PolicyLink and the California Center for Health Policy Research, April 2008.
[338] Centers for Disease Control and Prevention. *State-Specific Trends in Fruit and Vegetable Consumption Among Adults — United States, 2000–2009*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report 59 (2010): 1125-1130.
[339] Mark Zandi. "The Economic Impact of the American Recovery and Reinvestment Act," 2009. http://www.economy.com/mark-zandi/documents/Economic_Stimulus_House_Plan_012109.pdf.
[340] Kenneth Hanson. The Food Assistance National Input-Output Multiplier (FANIOM) Model and Stimulus Effects of SNAP, United States Department of Agriculture, Economic Research Service, October 2010.
[341] Tia Shimada. *Lost dollars, Empty Plates: The Impact of Food Stamp Participation on State and Local Economies.* California Food Policy Advocates, November, 2009. http://cfpa.net/ldep/ldep2009.pdf.
[342] Diana F. Jyoti, Edward A. Frongillo and Sonya J. Jones. "Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills," *The Journal of Nutrition* 135 (2005): 2831-2839.
[343] Jennifer Curtis, et. al. *From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy*. Raleigh, N.C.: Center for Environmental Farming Systems report, April 2010.
[344] Casey Dillon. *Counties and Local Food Systems.* National Association of Counties, Center for Sustainable Communities, 2007.
[345] Christopher L. Weber CL and H. Scott Matthews. "Food-Miles and the Relative Climate Impacts of Food Choices in the United States," *Environmental Science and Technology* 42, no. 10 (2008): 3508-3513.
[346] Clare Hinrichs and Kai Schafft. *Farm to School Programs in Pennsylvania*. The Center for Rural Pennsylvania, 2008. http://www.rural.palegislature.us/farm_school_report08.pdf.

[347] Clare Hinrichs and Kai Schafft. *Farm to School Programs in Pennsylvania*. The Center for Rural Pennsylvania, 2008. http://www.rural.palegislature.us/farm_school_report08.pdf.
[348] Clare Hinrichs and Kai Schafft. *Farm to School Programs in Pennsylvania*. The Center for Rural Pennsylvania, 2008. http://www.rural.palegislature.us/farm_school_report08.pdf.
[349] Casey Dillon. *Counties and Local Food Systems.* National Association of Counties, Center for Sustainable Communities, 2007.
[350] Casey Dillon. *Counties and Local Food Systems.* National Association of Counties, Center for Sustainable Communities, 2007.
[351] M. Tranel and L. Handlin. *Planting Seeds; Growing Communities*. St. Louis, MO: University of Missouri Public Policy Research Center, 2004.
[352] Andrew Bremer, Ken Jenkins and Diana Kanter. *Community Gardens in Milwaukee: Procedures for their Long-Term Stability & their Import to the City*. Milwaukee, WI: University of Wisconsin, Department of Urban Planning, 2003.
[353] Debra Shapiro. "School Garden Plus Nutrition Lessons Equal Science Literacy," National Science Teachers Association, WebNews Digest, February 5, 2007. http://www.nsta.org/publications/news/story.aspx?id=53348.
[354] Barbara C. Bellows, Rex Dufour and Janet Bachmann. *Bringing Local Food to Local Institutions: A Resource Guide for Farm-to-School and Farm-to-Institution Programs*. National Sustainable Agriculture Information Service, 2003.
[355] Ching Lee. "Country-of-Origin Food-Labeling Rules about to Take Effect." California Farm Bureau Federation, Ag Alert, September 24, 2008. http://www.cfbf.com/agalert/AgAlertStory.cfm?ID=1144&ck=4588E674D3F0FAF985047D4C3F13ED0D.
[356] Leopold Center for Sustainable Agriculture and the Iowa State University Business Analysis Laboratory. *Ecolabel Value Assessment: Consumer and Food Business Perceptions of Local Foods.* Ames, IA: Iowa State University, 2003.
[357] Amy Kremen, Catherine Greene, and Jim Hanson. *Organic Produce, Price Premiums, and Eco-Labeling in U.S. Farmers' Markets: Outlook Report No. VGS-301-01*. Washington, DC: U.S. Department of Agriculture, Economic Research Service, April, 2004.
[358] Illinois Food, Farms and Jobs Act. Public Act 095-0145. Illinois General Assembly Public Acts. (2007).
[359] R. Govindasamy, B. Schilling, K. Sullivan, C. Turvey, L. Brown and V. Puduri. *Returns to the Jersey Fresh Promotional Program: The Impacts of Promotional Expenditures on Farm Cash Receipts in New Jersey.* Rutgers University: Department of Agricultural, Food and Resource Economics, Food Policy Institute, 2003.
[360] Buy California Marketing Agreement. *CA Grown*. http://www.californiagrown.org/
[361] American Planning Association. *Policy Guide on Community and Regional Food Planning*. Chicago, IL: American Planning Association, 2007.
[362] New York City Department of Health. "Green Carts: Get the Facts." New York City, NY: New York Department of Health, December 7, 2007.
[363] C. McCullum, E. Desjardins, V.I. Kraak, P. Ladipo, H. Costello. "Evidence-Based Strategies to Build Community Food Security." *Journal of the American Dietetic Association* 105, no. 2 (2005): 278-283.
[364] R. Amaral. *Planning for Healthy Communities: Advocating for Equity in Planning Decisions. [PowerPoint slides]* Fresno, CA: Fresno County Department of Public Health, October 2008. http://www.cpehn.org/pdfs/Land%20Use%20&%20Comm%20Engagement%20-%20Amaral%20(Fresno)%2011-08.pdf.
[365] Samuels and Associates. *Issue Brief. Increasing Access to Healthy Food in the Central Valley through Farmers Markets and Produce Stands*. Fresno, CA: California State University, Fresno, Central California Center for Health and Human Services, Central California Regional Obesity Prevention Program, May 2010.
[366] Community Alliance with Family Farmers. "Memo RE: What the Farm to School Movement Needs to Succeed." Davis, CA: Community Alliance with Family Farmers, February 2010. http://www.caff.org/CAFF_F2S_Policy_Memo.pdf.
[367] Community Alliance with Family Farmers. "Memo RE: What the Farm to School Movement Needs to Succeed." Davis, CA: Community Alliance with Family Farmers, February 2010. http://www.caff.org/CAFF_F2S_Policy_Memo.pdf.

[368] California Department of Education. *A Child's Garden of Standards: Linking School Gardens to California Education Standards.* Sacramento, CA: California Department of Education, 2002. http://www.cde.ca.gov/ls/nu/he/documents/childsgarden.pdf.
[369] California Department of Education. *A Child's Garden of Standards: Linking School Gardens to California Education Standards.* Sacramento, CA: California Department of Education, 2002. http://www.cde.ca.gov/ls/nu/he/documents/childsgarden.pdf.
[370] California Health & Safety Code § 113980.
[371] California Health & Safety Code § 114021.
[372] The Los Angeles Food Policy Task Force. *The Good Food for All Agenda*. Los Angeles, CA: Los Angeles Food Policy Task Force, July 2010.
[373] Community Alliance with Family Farmers. "Memo RE: What the Farm to School Movement Needs to Succeed." Davis, CA: Community Alliance with Family Farmers, February 2010.
[374] K.E. Cunnyngham and L.A. Castner. *Reaching Those in Need: State Supplemental Nutrition Assistance Program Participation Rates in 2007*. Washington, DC: United States Department of Agriculture, Food and Nutrition Service, 2009.
[375] Tia Shimada. *Lost dollars, Empty Plates: The Impact of Food Stamp Participation on State and Local Economies.* California Food Policy Advocates, November, 2009. http://cfpa.net/ldep/ldep2009.pdf.
[376] U.S. Department of Agriculture. *Role in Directly Certifying School-Age Food Stamp Recipients for the National School Lunch and School Breakfast Programs*. Washington, DC: U.S. Department of Agriculture, 2004. http://www.fns.usda.gov/snap/rules/Memo/2004/100804.htm.
[377] U.S. Department of Agriculture. *Agreement Checklist for Direct Certification and Direct Verification of Children in Food Stamp Households – Reauthorization 2004: Implementation Memo – SP- 14*. Washington, DC: U.S. Department of Agriculture, 2005. www.fns.usda.gov/cnd/Governance/Reauthorization_Policy_04/Reauthorization_04/2005-04-19.pdf.
[378] U.S. Department of Agriculture. *Direct Certification in the National School Lunch Program: State Implementation Progress, Report to Congress*. Washington, DC: U.S. Department of Agriculture, Food and Nutrition Service, October 2009. http://www.fns.usda.gov/ora/MENU/Published/CNP/FILES/NSLPDirectCertification2009.pdf.
[379] Food Stamp Program: categorical eligibility. *Assembly Bill 433, Beall*. Filed with Secretary of State September 30, 2008. http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab_0401-0450/ab_433_bill_20080930_chaptered.pdf.
[380] California Food Policy Advocates. *No Asset Test for Food Stamp Applicants with Children*. Oakland, CA: California Food Policy Advocates. Last updated August 31, 2009. http://www.cfpa.net/foodstamps/noassettest.htm.
[381] C. Trippe, L. Schott, N. Wemmerus and A. Burwick. *Simplified Reporting and Transitional Benefits in the Food Stamp Program—Case Studies of State Implementation: Final Report*, E-FAN No. (04003). Washington, DC: U.S. Department of Agriculture, Economic Research Service, May 2004. http://www.ers.usda.gov/publications/efan04003/.
[382] J.D. Shenkin and M.F. Jacobson. "Using the Food Stamp Program and Other Methods to Promote Healthy Diets for Low-Income Consumers," *American Journal of Public Health* 100, no. 9 (2010): 1562-1564.
[383] J.D. Shenkin and M.F. Jacobson. "Using the Food Stamp Program and Other Methods to Promote Healthy Diets for Low-Income Consumers," *American Journal of Public Health* 100, no. 9 (2010): 1562-1564.
[384] United States Department of Agriculture. *Supplemental Nutrition Assistance Program*. Washington, DC: United States Department of Agriculture, Food and Nutrition Service. Accessed 11/14/2010. http://www.fns.usda.gov/snap/snap.htm.
[385] California Center for Public Health Advocacy. *The Economic Costs of Overweight, Obesity and Physical Inactivity*. Davis, CA: California Center for Public Health Advocacy, 2009.
[386] Babey, Susan H., Jones, Malia, Yu, Hongjian, and Goldstein, Harold. "Bubbling Over: Soda Consumption and Its Link to Obesity in California." UCLA Health Policy Research Brief, September 2009. Accessed 11/22/2010. Available at http://www.healthpolicy.ucla.edu/pubs/files/Soda%20PB%20FINAL%203-23-09.pdf.
[387] Babey, Susan H., Jones, Malia, Yu, Hongjian, and Goldstein, Harold. "Bubbling Over: Soda Consumption and Its Link to Obesity in California." UCLA Health Policy Research Brief, September 2009.

Accessed 11/22/2010. Available at http://www.healthpolicy.ucla.edu/pubs/files/Soda%20PB%20FINAL%203-23-09.pdf.

[388] Block, Gladys. "Foods Contributing to Energy Intake in the US: Data from NHANES III and NHANES 1999–2000." *Journal of Food Composition and Analysis*, 17; 3-4(2004): 439-447.

[389] Babey, Susan H., Jones, Malia, Yu, Hongjian, and Goldstein, Harold. "Bubbling Over: Soda Consumption and Its Link to Obesity in California." UCLA Health Policy Research Brief, September 2009. Accessed 11/22/2010. Available at http://www.healthpolicy.ucla.edu/pubs/files/Soda%20PB%20FINAL%203-23-09.pdf.

[390] James, Janet, Thomas, Peter, Cavan, David, and Kerr, David. "Preventing Childhood Obesity by Reducing Consumption of Carbonated Drinks: Cluster Randomized Controlled Trial." British Medical Journal, 328;7450(2009): 1237.

[391] California Department of Health Services. *California Obesity Prevention Plan: A Vision for Tomorrow, Strategic Actions for Today.* Sacramento (CA): California Department of Health Services, 2006.

[392] The City of New York, Office of the Mayor. "Mayor Bloomberg and Governor Patterson Propose Excluding Sugary Drinks from Food Stamp Purchases in New York City," press release, October 7, 2010, http://www.nyc.gov/html/hra/downloads/pdf/Food_Stamps_Press_Release.pdf.

[393] B-H Lin and J.F. Guthrie. *Can Food Stamps Do More to Improve Food Choices? An Economic Perspective—How Do Low-Income Households Respond to Food Prices?* Washington, DC: U.S. Department of Agriculture, Economic Research Service, September 2007. http://www.ers.usda.gov/Publications/EIB29/EIB29-5.

[394] The City of New York, Office of the Mayor. "Mayor Bloomberg and Governor Patterson Propose Excluding Sugary Drinks from Food Stamp Purchases in New York City," press release, October 7, 2010, http://www.nyc.gov/html/hra/downloads/pdf/Food_Stamps_Press_Release.pdf.

[395] The Food Trust. *Farmers' Market Program*. Philadelphia, PA: The Food Trust, Accessed 11/14/2010. http://www.thefoodtrust.org/php/programs/farmers.market.program.php.

[396] Maryland Alliance for the Poor. "Farmers' Market at Pimilico First in Baltimore City to Accept EBT (Food Stamps)," June 3, 2010. http://marylandallianceforthepoor.blogspot.com/2010/06/park-heights-community-farmers-market.html.

[397] Nutrition: Healthy Food Purchase Pilot Program. *Assembly Bill 2384 Leno*. (2006). http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_2351-2400/ab_2384_bill_20060913_chaptered.pdf.

[398] Kenneth Dahlberg. *Food Policy Councils: The Experience of Five Cities and One County*. Tucson, AZ: Paper presented at the Joint Meeting of the Agriculture Food and Human Values Society and the Association for the Study of Food and Society, June 11,1994.

[399] Ken Meter. *Food and Farm Economies: Rural Economics Studies*. Minneapolis, MN: Crossroads Resource Center, 2009.

[400] Lane Black. "The Economics of Local Food: All you can eat," *Wall Street Journal Online*, September 8, 2009.

[401] David Swenson. *The Economic Impacts of Increased Fruit and Vegetable Production and Consumption in Iowa: Phase II*. Ames, IA: Leopold Center for Sustainable Agriculture, 2006.

[402] M. Winne. *Food System Planning: Setting the Community's Table*. Planners Network, 2010.

[403] New York State Council on Food Policy. Making Connections: Developing a Food System for a Healthier New York State. Recommended State Food Policies, December 2009.

[404] Mark Winne. *Food System Planning: Setting the Community's Table*. Ithaca, NY: Planners Network, 2010.

[405] B. McCann. *Community Design for Healthy Eating: How Land Use and Transportation Solutions Can Help*. Princeton, NJ: Robert Wood Johnson Foundation, 2006.

[406] Leadership for Healthy Communities. *Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity*. Princeton, NJ: Robert Wood Johnson Foundation, updated February 2010.

[407] American Planning Association. *Policy Guide on Community and Regional Food Planning*. Chicago, IL: American Planning Association, 2007.

[408] Institute of Medicine and National Research Council. *Local Government Actions to Prevent Childhood Obesity.* Washington, DC: The National Academies Press, 2009.

[409] U.S. Department of Justice. *Special Report: State Prison Expenditures, 2001*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, June, 2004. http://bjs.ojp.usdoj.gov/content/pub/pdf/spe01.pdf.
[410] E. Thompson. *Paving Paradise: A New Perspective on California Farmland Conservation*. Washington, DC: American Farmland Trust, November 2007.
[411] California Public Contract Code Section 12400-12404.
[412] American Planning Association. *Policy Guide on Community and Regional Food Planning*. Chicago, IL: American Planning Association, 2007.
[413] Executive Office of the President of the United States. *Report to the President: Solving the Problem of Childhood Obesity Within a Generation*. Executive Office of the President of the United States, White House Task Force on Childhood Obesity, May 2010.
[414] Centers for Disease Control and Prevention. *MAPPS Interventions for Communities Putting Prevention to Work*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Last Updated September 15, 2010. http://www.cdc.gov/chronicdisease/recovery/PDF/MAPPS_Intervention_Table.pdf.
[415] Institute of Medicine, Committee on Nutrition Standards for Foods in Schools. *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*. Washington, DC: The National Academies Press, 2007.
[416] M.B. Schwartz, S.A. Novak and S.S. Fiore. "The Impact of Removing Snacks of Low Nutritional Value From Middle Schools." *Health Education and Behavior* 5, no 5 (2009).
[417] K.W. Cullen and I. Zakeri. "Fruits, Vegetables, Milk, and Sweetened Beverages Consumption and Access to A La Carte/Snack Bar Meals at School." *American Journal of Public Health* 94, no. 3 (2004): 463-7.
[418] K. Glanz and A.L. Yaroch. "Strategies for Increasing Fruit and Vegetable Intake in Grocery Stores and Communities: Policy, Pricing, and Environmental Change." *Preventive Medicine* 39, Suppl 2 (2004): S75-80.
[419] C. Nonas C. "Health Bucks in New York City: The Public Health Effects of Food Deserts." Workshop Summary. Institute of Medicine and National Research Council, 2009.
[420] N. Larson, M. Story and M. Nelson. "Neighborhood Environments Disparities in Access to Healthy Foods in the U. S." *American Journal of Preventive Medicine* 36, no. 1 (2009): 74-81.
[421] Planning for Healthy Places and Public Health Law and Policy. *Healthy Planning Policies: A Compendium from California General Plans.* Oakland, CA: Public Health Law and Policy, 2009.
[422] Institute for Local Government. *Understanding the Basics of Land Use and Planning: Guide to Planning Healthy Neighborhoods*. Sacramento, CA: Institute for Local Government, 2010.
[423] P. Stair, H. Wooten and M. Raimi. *How to Create and Implement Healthy General Plans: a Toolkit for Building Healthy, Vibrant Communities through Land Use Policy Change*. Oakland, CA: Public Health Law and Policy and Raimi + Associates, 2008.
[424] Planning for Healthy Places and Public Health Law and Policy. *Healthy Planning Policies: a Compendium from California General Plans.* Oakland, CA: Public Health Law and Policy, 2009.
[425] Leadership for Healthy Communities. *Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity*. Princeton, NJ: Robert Wood Johnson Foundation, updated February 2010.
[426] U.S. Department of Transportation. *Policy statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations*. Washington, DC: U.S. Department of Transportation, March 15, 2010.
[427] Institute of Medicine and National Research Council. *Local Government Actions to Prevent Childhood Obesity.* Washington, DC: The National Academies Press, 2009.
[428] Institute of Medicine and National Research Council. *Local Government Actions to Prevent Childhood Obesity.* Washington, DC: The National Academies Press, 2009.
[429] National Coalition for Promoting Physical Activity. *The U.S. National Physical Activity Plan*. Washington, DC: National Coalition for Promoting Physical Activity, 2010.
[430] M. Pastor, R. Morello-Frosch, J. Sadd and S. Shonkoff. *The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap*. Los Angeles, CA: USC Program for Environmental and Regional Equity, 2009.
[431] SB 732 (Steinberg, Chapter 729 , Statues of 2008).

[432] World Health Organization. *Adelaide Statement on Health in All Policies*. Adelaide, Australia: World Health Organization, Government of South Australia, 2010.
[433] The Pew Center on the States. *Long-Term Fiscal Planning*. Washington, DC: Pew Center on States, 2010. http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=51282.
[434] California Department of Health Services. *California Obesity Prevention Plan: A Vision for Tomorrow, Strategic Actions for Today*. Sacramento, CA: California Department of Health Services, 2006.
[435] Institute of Medicine. *Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement*. Washington, DC: The National Academies Press, 2009.
[436] United States Department of Health and Human Services. Developing Healthy People 2020, Social Determinants of Health. Washington, DC: United States Department of Health and Human Services, Accessed 11/14/2010, http://www.healthypeople.gov/hp2020/Objectives/TopicArea.aspx?id=44&TopicArea=Social+Determinants+of+Health
[437] Juvenile Crime Prevention: Evidence-Based Programs. *Assembly Bill 2459, Caballero*. California Legislature, 2009-10 Regular Session.
[438] U.S. Government Accountability Office. Interagency Collaboration: Key Issues for Congressional Oversight of National Security Strategies, Organizations, Workforce, and Information Sharing. GAO-09-904SP. Washington, DC: Government Accountability Office, September, 2009.
[439] LeRoy Graymer, Carolyn Penny, Julia Lave Johnston, Karen Beardsley, Katie Benouar, Anna Marie Young, *California State Agency Interagency Coordination and Collaboration Final Retreat Report.* (2008). http://www.opr.ca.gov/sch/pdfs/Retreat_Report-GC.pdf.
[440] L. Kenyon and F. Gordon. "Community Engagement: From a Professional to a Public Perspective." *Community Practitioner* 82, no. 2 (2009): 22–25.
[441] Centers for Disease Control and Prevention. *10 Essential Public Health Services*. Atlanta, GA: Centers for Disease Control and Prevention, National Public Health Performance Standards Program, October 15, 2008.
[442] Mary Anne Morgan and Jennifer Lifshay. Community Engagement in Public Health. Martinez, CA: Contra Costa Health Services, Public Health Division, March 2006. http://www.barhii.org/resources/downloads/community_engagement.pdf.
[443] Institute for Local Government. *How to Harness the Power of Your Community to Address Climate Change: A Local Official's Guide*. Sacramento, CA: Institute for Local Government, January 2010.
[444] Center for Civic Partnerships. *Community Planning for Aging Well: An Overview*. Sacramento, CA: Center for Civic Partnerships, 2010.

Appendices

1. Executive Order S-04-10 …….. 110
2. HiAP 2010 Public Workshops Summary and Participants …….. 113
3. Condensed List of Collected Recommendations ……. 116
4. Issue Briefs …….. …….. 148
Public Health and Healthy Communities …… 149
Agriculture and Health …….. 153
The Attorney General and Health ..…….. 157
Health and Community Services and Development ...…….. 160
The Environment and Health ……..……. 162
Housing and Health ……..……. 166
Natural Resources and Health ……....……..……. 171
Health and Public Safety …...……..……..... 175
Health and Schools ……..……..... 179
Health and Social Services …….. 182
Transportation and Health ..…….. 186
Work and Health ……...……. 190

Appendix 1

EXECUTIVE ORDER S-04-10

WHEREAS the Strategic Growth Council (SGC) was established to enhance collaboration between state agencies in their work to improve air and water quality, protect natural resources and agricultural lands, increase the availability of affordable housing, improve infrastructure systems, promote public health, encourage sustainable land use planning, and meet the state's climate change goals; and

WHEREAS the SGC is the state entity charged with identifying, reviewing, and funding programs that may be coordinated to meet SCG's goals; recommending policies and investment strategies and priorities to the Governor, Legislature, and appropriate state agencies; providing, funding, and distributing data and information to local governments and regional agencies to help develop sustainable communities; and managing and awarding grants and loans to assist to help develop sustainable communities; and

WHEREAS the SGC has taken significant steps to improve inter-agency collaboration and planning in California, through efforts related to land use, transportation, and other planning factors; and

WHEREAS policies related to air and water quality, natural resources and agricultural land, affordable housing, infrastructure systems, public health, sustainable communities, and climate change all significantly influence the physical, economic, and social environments in which people live, shop, work, study, and play; and

WHEREAS these environments, in turn, influence the adoption of healthy lifestyles, by making it more or less difficult for individuals to choose behaviors that promote or diminish health; and

WHEREAS the health and well-being of all people is critical for a prosperous and sustainable California; and

WHEREAS largely avoidable chronic illnesses such as heart disease, stroke, and diabetes are a growing burden for the State and its people, and they negatively affect Californians' productivity, quality of life, life expectancy, and health care costs; and

WHEREAS by considering health when formulating policy, public officials recognize the influence of policies related to air and water quality, natural resources and agricultural land, affordable housing, infrastructure systems, public health, sustainable communities, and climate change on health outcomes; and

WHEREAS to improve health outcomes, agencies should collaborate with each other to ensure that health is considered when policies are developed.

NOW, THEREFORE, I, ARNOLD SCHWARZENEGGER, Governor of the State of California, by virtue of the power vested in me by the Constitution and statutes of the State of California, do hereby order effective immediately:

1. The SGC shall establish a Health in All Policies (HiAP) Task Force to collaborate with existing SGC working groups to identify priority programs, policies, and strategies to improve the health of Californians while advancing the SGC's goals of improving air and water quality, protecting natural resources and agricultural lands, increasing the availability of affordable housing, improving infrastructure systems, promoting public health, planning sustainable communities, and meeting the state's climate change goals. The SGC shall appoint the members of the Task Force, and shall determine their tenure and conditions of their service.

2. The Task Force shall be facilitated and staffed by the California Department of Public Health working with representatives from the agencies and departments represented on the SGC, in addition to representatives from other agencies or departments whose input may be necessary to achieve the Task Force's goals.

3. By December 8, 2010, SGC staff shall submit a report to the SGC outlining recommended programs, policies, and strategies for consideration, and the report shall also describe the benefits for health, climate change, equity, and economic well-being that may result if the recommendations are implemented. This report shall be based on recommendations from the HiAP Task Force. In developing these recommendations, the Task Force may review existing state efforts, consider best/promising practices used by other jurisdictions and agencies, identify barriers to and opportunities for inter-agency/inter-sector collaboration, and propose action plans for recommended programs, policies, and strategies. The HiAP Task Force shall convene regular public workshops to present its work plan, and shall solicit input from stakeholders in developing its report.

IT IS FURTHER ORDERED that the agencies and departments under my direct executive authority shall cooperate in the implementation of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this Order shall be filed with the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 23rd day of February 2010.

ARNOLD SCHWARZENEGGER
Governor of California

ATTEST:

DEBRA BOWEN
Secretary of State

Appendix 2

HiAP 2010 Public Workshops Summary and Participants

As outlined in Executive Order S-04-10, public workshops were held to solicit input from stakeholders on recommended programs, policies, and strategies to be included in the report to the Strategic Growth Council (SGC). Three community workshops were held during the first two weeks of September in Los Angeles, Fresno, and Oakland. Outreach materials were targeted to organizations and individuals already working in policy areas that impact health. The Los Angeles and Fresno workshops averaged 30 participants each and the Oakland workshop had approximately 70 participants. Participants included representatives from local health departments, public health advocacy organizations, academic institutions, health care organizations, and other government and non-government organizations representing fire, forestry, housing, environmental justice and quality, nutrition, redevelopment, and planning. HiAP staff worked with a professional facilitator to develop an agenda that would guide participants to provide constructive, solution-oriented input. All recommendations received during the three workshops were incorporated into the master recommendation list.

The workshop agenda included:

- Introductions
- Attributes of a healthy community
- Sharing best practices regarding working with government
- “If only” recommendations for State action
- What will it take?: who and how to implement recommendations

Workshop Themes

Several themes were raised across all workshops:

- Access to produce and other fresh, quality food
- Farm-to-institution programs and policies (schools and others)
- Healthy transportation (walkability, bicycle lanes)
- Public transportation to parks and essential destinations
- Embedding health as a consideration in policy-making processes
- Government engagement of community members in decision-making processes
- Collaboration
- Enthusiastic participants wanted more time to provide input and work on recommendations

Los Angeles (Tuesday, Sept. 7th, 1pm-4pm; The California Endowment)

- Healthy housing – integrated pest management and lead exposure concerns
- Equity – funding for pedestrians and transit, language access, aesthetic design components, access to clean air, park distribution
- Joint use of facilities

Fresno (Wednesday, Sept. 8th, 1pm-4pm; Fresno County Central Library)

- Rural areas are different than urban and suburban regions
- The Central Valley would like to be heard
- Pesticide use and exposure
- Water supply and access
- Equitable resource distribution to the Central Valley

Oakland (Thursday, Sept. 16th, 1:30pm-4:30pm; Alameda County Public Health Department)

- Political climate influences health – i.e., budget process, ballot initiatives, political will
- Equity – good data is required to highlight areas of need
- Community engagement is essential
- Economics/poverty and health

What State Government Can Do

The best practices section of the agenda offered participants an opportunity to share positive experiences they had working with State governments. Several themes arose from these discussions regarding State government opportunities and roles:

- Provide leadership
- Foster multi/interdisciplinary approaches through collaboration across agencies and sectors and between local and state agencies
- Leverage federal money
- Funnel money through grants and contracts that maintain flexibility
- Target communities in need through funding earmarks and grant criteria
- Promote capacity building for local agencies and community-based organizations through training and technical assistance
- Create model programs and best practices for others to draw upon
- Create and disseminate guidance documents and materials
- Collect, analyze, and disseminate sufficiently detailed data (including community-level data)
- Create and support opportunities for connection and support across jurisdictions
- Provide and support opportunities for early participation in program development and policy-making

Organizations in Attendance at the 2010 HiAP Public Workshops

- American Heart Association
- Alameda County Community Food Bank
- Alameda County Public Health Department
- Alliance for a Better Community
- Asian Health Services
- Asian Pacific American Legal Center
- Bay Area Regional Health Inequities Initiative (BARHII)
- CAL FIRE
- California Center for Public Health Advocacy
- California Department of Health and Human Services
- California Department of Justice
- California Department of Housing & Community Development
- California Housing Partnership
- California Pan-Ethnic Health Network
- California Rural Legal Assistance, Inc.
- California WALKS
- Californians for Pesticide Reform
- CDPH Tobacco Control
- Central California Regional Obesity Prevention Program
- Central Valley Health Network
- Central Valley Health Policy Institute
- Ceres Partnership four Healthy Children
- Child & Family Policy Institute of California
- City Slicker Farms
- Community Health Improvement Partners
- County of Fresno Environmental Health Division
- County of Riverside
- County of San Diego, Health and Human Services Agency
- Division of Chronic Disease and Injury Prevention Los Angeles County Department of Public Health
- Downtown and Community Revitalization Department, City of Fresno
- Environmental Health Investigations Branch
- Environmental Health Services, Kern County
- Fresno County Department of Public Health
- Fresno Metro Ministry
- Fresno-Madera Medical Society
- Governor's Office of Planning and Research
- Greenlining Institute
- Healthy Homes Collaborative
- Human Impact Partners
- Los Angeles and San Gabriel Rivers Watershed Council
- Latino Health Access
- Legal Services of Northern California
- Los Angeles County Department of Public Health
- Los Angeles County Department of Regional Planning
- Madera Community Action Partnership
- Madera Public Health Department
- Mandela Marketplace
- Natural Resources Agency
- Natural Resources Defense Council
- Nature Conservancy
- Nutrition and Physical Activity Collaborative
- PALS for Health and Access to Linguistically Appropriate Services
- Pesticide Watch
- PolicyLink
- Prevention Institute
- Public Advocates Inc.
- Public Health Law & Policy
- Public Policy Institute of California
- Rails to Trails Conservancy
- Regional Asthma Management and Prevention
- Roots of Change
- Safe Routes National Partnership
- Samuels & Associates
- San Francisco Department of Public Health
- San Francisco County Transportation Authority
- San Mateo County
- San Mateo County Health System
- Santa Cruz County
- Shape Up San Francisco
- Sonoma County Asthma Coalition/American Lung Association
- The California Conference for Equality and Justice
- The City Project
- Townsend Public Affairs, Inc.
- TreeTOPs
- Tulare County Redevelopment
- University of California, Los Angeles
- Urban Habitat
- Urban Strategies Council
- West Oakland Environmental Indicators Project

Appendix 3

Following is a summary of over 1,200 recommendations that were received from Task Force members, public workshops, public comment, key informant interviews, and documents submitted to the Task Force.[1,2,3,4,5,6,7,8,9,10,11,12] This condensed list of recommendations is provided only to illustrate the breadth and scope of input received by the Task Force.

The Task Force has not approved this list of recommendations. Task Force staff endeavored to combine similar or duplicative recommendations and to group them for ease of review. This list includes many important public health recommendations - for example those related to lactation support and alcohol – that are not reflected in the Task Force recommendations.

Categories:

A. Transportation
B. Housing
C. Workplace Wellness for State Employees
D. Parks and Urban Greening
E. Schools
F. Program and Service Delivery
G. Health Care
H. Crime and Violence Prevention
I. Alcohol
J. Tobacco
K. Healthy Food
L. Drinking Water
M. Land Use
N. Environmental Quality
O. Guidance Documents
P. Health Impact Review
Q. Collaboration
R. Community Engagement
S. Political Process
T. Continue Health in All Policies

A. Transportation

Safety

- Encourage parking lots to be developed away from pedestrian and bicycle paths to decrease impediments to walking and biking.
- Adopt design standards for streets that ensure safety and mobility for pedestrian and non-motorized modes of transport.
- Develop pedestrian safety improvement programs to identify and improve safety at high-crash concentration locations involving pedestrians.
- Improve pedestrian striping and include standard safety upgrades in routine maintenance and striping projects.
- Work through the Pedestrian and Bicycle Safety Program to institute a “Share the Road” campaign to elevate awareness around bicycle and pedestrian safety.
- Assess both the DMV’s California Driver Handbook and standard traffic school curriculum for information on pedestrian-related laws, collision factors, and defensive walking and make additions/revisions as necessary. Develop and provide complementary ongoing pedestrian safety education materials reinforced with public information programs.
- Encourage use of approved USDOT helmets. Establish opportunities for helmet exchange and discount certificates towards the purchase of a safer helmet.
- Establish a Pedestrian Safety Data Think Tank to improve and institutionalize pedestrian safety data collection and analysis.

Speed Limits

- Reduce the State highway system speed limits, or prioritize highways for speed limit reductions, based on motor vehicle injury/death rates and pollution levels.
- Reduce statewide speed limits in residential areas from 25mph to 20mph to drastically and immediately reduce pedestrian injuries.
- Develop a public education campaign to promote reduced speeds.
- Increase enforcement of and penalties for speeding.
- Allow local use of remote enforcement tools including speed cameras.
- Reduce and enforce maximum speed limits in urban areas.
- Incorporate pedestrian/cyclist/motorist injury risk in setting maximum road speeds.
- Collaborate on a set of evidence-based recommendations to reduce traffic-related injuries and deaths by 10 percent.
- Implement multi-pronged, evidence-based approaches to reducing roadway speeds.

Transportation Planning, Funding, and Programs

- Prioritize uniform application of existing policies to transform "designated" highways into pedestrian "friendly" Main Streets.
- Consider multimodal concurrency by establishing level of service standards that encourage development of a multimodal transportation system.

- Provide information about policies concerning bicycling to transportation professionals, including State and local agencies and transportation consultants.
- Improve data collection of pedestrian, bicycle, and multimodal trips.
- Caltrans should take the lead on developing transportation models that include short trips and measure/model walking and biking as well as incorporate safe routes to schools/work programs into the models.
- Provide age-appropriate instruction on pedestrian and bicycle safety in schools.
- Develop and implement motorcycle media campaigns such as "Ride like you're invisible, not invincible!" using a social marketing approach and using new media.
- Make it a priority of the transportation element of the comprehensive plan to make improvements to the transportation infrastructure (e.g., crosswalks, sidewalks, etc.) around schools and on school routes.
- Ensure Caltrans District Application Review Committee members are trained in SR2S/SRTS principles and objectives, including environmental justice principles, and that each committee has members with experience in the area of health, engineering, education.
- Provide free public transportation to cooling centers during extreme heat events.
- Prioritize intra-agency education on policies and processes regarding highways and main streets so that all regions and their staff know them and can work proactively with cities.
- Within the transportation section of the comprehensive plan, provide for the creation and funding of an integrated network of paved pedestrian and bicycle paths that serve as an alternative to roadways and facilitate non-motorized travel to and through neighborhoods, shopping, parks, and schools.
- Fully account for and disclose the full public costs of vehicle ownership and use including the high cost of parking.
- Provide funding for transportation and sliding scale fee options to increase access to existing physical activity programs for underserved populations.

Transportation for Aging Populations

- Model future transit access to essential destinations, such as parks, health care facilities (business as usual vs. sustainable community strategies) and identify disparities, especially for aging populations.
- Continue to hold the yearly Senior Safe Mobility Summit.
- Provide statewide training, tools, and outreach to physicians and other healthcare providers on driving and dementia.
- Develop models for funding occupational therapist evaluation of older Californians' functional driving skills.

B. Housing

Home Ownership

- Provider homebuyer assistance through support to community land trusts.

Location

- Create economic incentives for businesses and home owners to locate in areas with existing infrastructure.
- Use the split-rate property tax to encourage development on vacant or blighted pieces of land in existing communities.
- Require CDC guidance of affordable housing siting near busy roadways.
- When calculating congestion pricing, incorporate mitigation of impacts on low income households.
- Create special improvement districts for focused investment.
- In the housing element of the general plan, outline a method for encouraging housing development near public transit hubs.
- Ensure that regional housing proportions in the urban cores of a region match the location of the population.
- Make workplaces accessible to employees. Possible methods include: providing incentives for residents to live near where they work, and rewarding communities that create a balance between housing and jobs.

Housing Design and Maintenance

- Develop "healthy housing" standards and enforcement mechanisms that build on the State's green building guidelines to ensure that all Californians live in health-promoting homes.
- Modernize and amend the minimum standards for housing based on established public health evidence, best practices in housing habitability requirements (e.g. Los Angeles, San Francisco), and model national housing codes. Consider statewide sources of funding (e.g., a fee on multi-family housing units) to support compliance efforts.
- Establish healthy housing guidelines.
- Require new/existing development to have land for a community garden.
- Create a mechanism for funding pre-emptive inspections of housing units rather than reactive housing code enforcement.
- Insert health language into State housing health codes.
- Integrate urban heat island mitigation strategies into the California Green Building Code, including cool roofs, cool pavements, and planting of shade trees.
- Ensure that regulations, subsidies, and incentives promote the development of diverse housing types and sizes (e.g., wheelchair accessible ground-floor units, intergenerational housing to address the growing older adult population/aging in place).

Housing Development

- Prioritize rehabilitation of existing housing, to make it safe and healthy for families instead of prioritizing funding for new construction because of lead, rodents, insects, asbestos, mold, deteriorated housing, etc.
- Facilitate programs to encourage home renovation and rehabilitation in existing neighborhoods. Adopt special rehabilitation building codes to regulate the

renovation of existing structures. Provide programs to support weatherization, energy conservation, and other climate change beneficial improvements.

- Enlist local jurisdictions in implementing a regional fair-share housing allocation plan across metropolitan areas.
- Ensure affordable development in safe and healthy neighborhoods, with buffers from agriculture and industry, and the presence of potable water, sewer systems, sidewalks, and good air quality.
- Develop a comprehensive statewide policy to address affordability which could address environmental justice and equity concerns in health, land use and transportation planning.
- Especially in and around transit oriented developments, require rent control, restrictions on condo conversions, transfer taxes, and the protection or extension of existing affordability covenants, etc. to protect affordable housing stock and economically disadvantaged communities from impacts of gentrification.
- Achieve a marked increase in the quality and health of low income rental housing by setting aside 25 percent of WAP, LIEE, and LIHEAP funding specifically for publicly assisted rental housing.
- Prioritize mixed use developments with grocery stores when using Low-Income Housing Tax Credit. Provide tax credits for affordable housing sited near farmers' markets.
- The State should amend the minimum standards for housing based on established public health evidence, best practices in housing habitability requirements (e.g. Los Angeles, San Francisco), and model national housing codes. In the future, the State could also consider statewide sources of funding (e.g., a fee on multi-family housing units) to support compliance efforts, as well as continue to explore the establishment of indoor air quality standards.

Housing for Aging Populations

- Ensure senior housing developments include supportive structures/services, including case management services for disenfranchised seniors.
- Collaborate on aging in place focusing not on developing specific housing for the aged, but on soliciting input from residents regarding where they want to live in the future and allowing this to inform planning.
- Encourage aging in place for universal access to seniors, limited mobility populations in housing codes.

C. Workplace Wellness for State Employees

Wellness Programs

- Co-develop and disseminate resources and guidelines for workplace wellness to supplement current guidelines on occupational health.
- Offer state work-life support programs and provide incentives for state contractors to offer work-life support programs, such as child care at or near the workplace, wellness rooms, policies that allow bringing babies to work, and workplace concierge services.

- Purchase basic health monitoring equipment (such as blood pressure cuff and scale) and place it in a common location for employee use.
- Create incentives for employers to provide wellness programs with significant physical activity and healthy eating components. Encourage participation in wellness programs by offering financial incentives or including wellness programs as part of the employee benefit package.
- Support and promote physical activities through building facilities, including installing on-site lockers and showers; providing locked bicycle storage/cabinets; offering on-site or contracted exercise centers; assuring that stairwells are attractive, well lit, and prominently placed; and programming elevators to stop every few floors (as in the San Francisco Federal Building).
- Support and promote physical activities through programming and educational outreach to encourage the use of stairs, support employee walking programs, including walking meetings, promote the benefits of physical activity, and encourage physical activity at lunch time.
- Offer lower insurance premiums, cash rebates, vacation days, or other incentives for employees who can document participation in regular physical activity. Conduct health assessments. Provide flex time to encourage physical activity before or during the workday.
- Develop a bicycle fleet for State employee use.
- Provide a safe work environment by establishing and enforcing policies that establish zero-tolerance for bullying, assure appropriate lighting in all areas, maintain security, and create a reporting/immediate response system.
- The State can serve as a model for other local governments and businesses to follow to establish workplace wellness initiatives. Offering incentives for businesses and other government agencies to establish healthy workplaces, specifically for workers disproportionately affected by toxins and other adverse environmental issues in the workplace and where they live, can support improved health.
- Support tobacco cessation for state employees, through activities such as cessation support groups, promotion of the California Smokers' Helpline, and other outreach.
- In order to promote the health and wellness of state employees, build on programs that already exist at the state-level, including CalPERS' wellness program and CDPH MCAH's "Here is Where Healthy Starts" awards program, and at the national level, such as the national Fit WIC Project, a campaign that includes walking clubs, salad potlucks, health screenings, activity breaks, yoga, and other health-related classes for staff.
- Provide time off work for volunteering.

Healthy Eating

- Post nutrition information for all menus, menu boards, and food sold in worksite cafeterias or other areas.
- Increase access to fruits and vegetables, provide healthy options in vending machines and cafeterias, and eliminate sugar-sweetened beverages in vending

machines in State worksites. Provide price incentives for the purchase of healthier food at worksite cafeterias, snack bars, and vending machines.
- Establish a farmers' market or community supported agriculture drop-off onsite or near government worksites.
- Offer healthy food and beverages at meetings and functions.
- Make educational materials available about healthy eating, including portion control and nutrients, at worksite concessions.
- Assure drinking water is available for staff and visitors throughout State facilities and worksites.
- Encourage employee gardens at or near worksites.
- Release policy memo to correct misperceptions regarding liability associated with exercise equipment in State building exercise facilities. Explore the feasibility of onsite gym equipment at State worksites or joint-use agreements to share established gym facilities within State buildings.
- Offer and require ongoing training, and offer consultation and marketing assistance through the Blind Vendors program to assure that cafeterias, snack stands, and vending machines meet or exceed State standards for healthy food.

Transportation

- Increase audio/video technology within state buildings and encourage telework possibilities to reduce driving.
- Weigh new State building locations based on accessibility to mass transit.
- Expand current policies and programs to increase walking, biking, and use of public transit to get to/from work. Allow scheduling flexibility to accommodate workers using public transit and active transit.
- Adjust the price of parking to incentivize active transportation choices.
- Expand and make the transit subsidy program more accessible and easy to participate (such as through payroll deduction).
- As a substitute for the Pre-Tax Parking benefit, create a Pre-Tax Health Enhancement Reimbursement Account program through which employees could set aside money for health club memberships and fitness classes, and certain qualifying purchases.
- Collaborate with employers and provide information and incentives for programs to minimize or decrease rush-hour congestion impacts.
- Install bicycle racks and lockers near worksites, shopping centers, transit hubs (public transportation), and other places that would encourage the use of a bicycle for transportation.

Waste Management

- Publish more information to the State website instead of providing hardcopy materials.
- Maximize the purchase of copiers and printers with duplex copying/printing capabilities.
- Eliminate the use of paper products with 100 percent virgin fiber content and switch to paper that contains the highest postconsumer recycled content feasible

for each specific need, but no less than the U.S. Environmental Protection Agency minimums for federal agencies.

D. Parks and Urban Greening

- Capitalize on CAL FIRE's urban forestry strategy for mitigating greenhouse gas emissions to improve neighborhood walkability and add value to disadvantaged communities via the social, economic, and environmental benefits of community trees.
- Ensure all residents have access to parks and green infrastructure and local agencies have resources to properly maintain these facilities.
- Use plants/trees that capture particulate matter well and are low in allergens.
- Develop standards and guidelines for urban greening for cities and towns.
- Develop incentive programs for planting of trees and create/implement existing policies that ensure preservation of existing trees and green space.
- Use parks to educate users about the impacts of climate change, and inspire them to make positive lifestyle changes that reduce climate change impacts.
- Modify average cost-pricing practices in utilities to better account for costs of expanding infrastructure in greenfield areas.
- Implement the state adaptation plan to help people and nature adapt to climate change: direct AB32 revenue to people and nature and prioritize nature-based adaptation "green infrastructure" strategies over "green infrastructure."
- Partner with nongovernmental organizations to acquire and protect land.
- Identify planning opportunities to increase access to green spaces, safe places to exercise, community gardens, etc.
- Develop parks in rural areas.
- Encourage the creation of mixed-use neighborhoods through zoning rules, incentives, and disincentives in the comprehensive plan.
- Coordinate and link local, state and federal planning on land conservation and development.
- Locate civic buildings in already developed areas (infill).
- Adopt and implement walkable community policies by increasing green space, championing alternative forms of transportation, and facilitating active living for all groups.

E. Schools

Physical Activity

- Adopt standards or encourage school districts to develop and implement physical education (PE) curricula that include the requirement that 50 percent of physical education instructional time be spent on moderate-to-vigorous physical activity (MVPA).
- Promote participation in the Governor's Challenge.
- Require the development and implementation of school PE curricula that emphasizes lifelong fitness activities over traditional sports activities.

- Encourage fitness by linking Fitnessgram results to student grades.
- Require that every K-12 student be enrolled in a physical education class during each term of the school year and that classes are held every day of the week.
- Provide regular in-service training to physical education teachers to enhance skills for increasing physical activity during PE classes.
- Encourage school districts to adopt and implement policies that protect student recess breaks for physical activity.
- Require or incentivize the creation of a Director of Physical/Health Education in all schools districts or counties with some minimum number of students.
- Update school physical education content standards to include the requirement of 50 percent of class time spent on moderate-to-vigorous physical activity.
- Require that elementary schools provide at least 30 minutes of recess during the school day so that students can be physically active.
- Dedicate staff time to monitor the required PE minutes and have oversight of district-level compliance with state physical education mandates.
- Provide funding to enhance physical activity facilities at schools such as adding bicycle racks or lockers, installing lights in outdoor fields, building walking trails on school grounds, school gardens, and maintaining well-equipped playing fields and physical activity centers.
- Work with appropriate partner agencies and organizations to train teachers on physical education and share best practices on how this can be done and the positive benefits of doing this. Integrate compliance monitoring into the Coordinated Compliance Monitoring process.
- Partner with the Network for Healthy California in reaching out to low-resource schools via the annual Governor's Challenge.
- Modify policies and practices to increase participation in foods assistance programs and provide referrals for free or low-cost physical activity resources, such as special gym programs, safe parks, community center classes, and Parks and Recreation department activities.
- Establish a bicycle safety improvement program, bicycle safety inspections, and bicycle safety public education for all age groups of road users; and increase bicycle helmet usage through education and promotion.

After-School Physical Activity

- Encourage CDE to transform California's after-school landscape.
- Promote MVPA.
- Include nutrition education to align with the CA Health Education Content Standards, which group Nutrition and Physical Activity together to support obesity prevention.
- Make nutrition education, physical activity, and food security central themes in across-the-board practices that permeate after-school programs.
- Earmark existing after school funding for nutrition-related and/or physical activity programming. Training and technical support are needed, as well as resources that engage students and support the development of these skills. Build on the

Healthy Behaviors Initiative's Exemplary Practices and develop the infrastructure to provide the training, technical assistance and coaching needed.

- CDE/ASPO could actively support the recommendations of the After School Network and its Nutrition and Physical Activity Subcommittee on how to implement the Governor's initiative.
- Promote and diffuse The Network's research-validated and/or evidence-based resources in schools, child development programs and after school programs (e.g., Power Play!, Harvest of the Month, etc.).
- Integrate more nutrition education into the Summer Food Program and encourage families to connect with summer youth organizations to prevent hunger.
- CDE and CDPH should work together to increase the number of schools participating in the Healthier US Schools Challenge and the Governor's Council on Physical Fitness and Sport, and using best practices in afterschool programs for nutrition, physical activity and food security.

Educational Programming

- Promote efforts that demonstrate positive effects in closing the achievement gap. Collaborate on advancing strategies, addressing the major factors that inhibit the learning of all students.
- CDE should require home economics classes in schools (as they used to be in many regions). Home economics teaches basic life skills important to preventing obesity, such as family budgeting, checkbook balancing, and basic child care and child development.
- Develop guidance on school climate change and universal school-based violence prevention strategies.
- Provide parenting education for young people as a proactive means for preventing child abuse, substance abuse, and other kinds of violence.

School Siting

- Make changes to Title 5, California Code of Regulations as outlined in the California Ad Hoc Coalition for Healthy School Siting: Memo on California Department of Education and Healthy School Siting Policies.
- Modify state funding processes and school siting standards to preserve neighborhood schools and build new schools to a "community" level.
- Encourage and incentivize school districts to collaborate with local city and county planning agencies and governments on school siting.
- Streamline the approval process for school siting on infill.
- Encourage school districts to access currently available resources on school siting.
- Prohibit the siting of fast food and convenience stores within one-quarter mile of new or redeveloped school sites.
- Require, encourage, or provide incentives that schools undergoing renovation or building new facilities design parking lots to minimize interference with pedestrian or bicycle traffic.

- Better inform school districts and municipalities of the school siting flexibility already included in Title 5.
- Increase the focus on existing schools in the state's school facility funding program, to encourage modernization and expansion of existing schools over siting new schools where appropriate.

Beverages in Schools

- Discourage or require the elimination of electrolyte replacement beverages in schools (ERBs) and recognize districts that have eliminated ERBs.
- Update the school Wellness Policy guidelines to discourage ERBs.
- Explore barriers or opportunities for schools to establish policies to create price disincentives for sugar-sweetened beverages and other unhealthy foods sold on campus.
- Promote drinking tap water to students. Ensure that all schools have water fountains that work and provide safe, drinkable water. Encourage schools to upgrade water fountains so that reusable bottles can easily be filled.
- Encourage schools to eliminate sugar-sweetened beverages and ensure that healthy choices are available at vending machines.

School Food Policies

- Require or encourage schools to close campuses during the school day in order to increase participation in school meal programs.
- Provide locally grown fruit and vegetable snacks to all children.
- Increase participation in school lunch and school breakfast for eligible students.
- Explore the feasibility of a statewide waiver from the United States Department of Agriculture for universal school breakfasts in qualifying schools/districts.
- Develop a guide to packing a healthy field trip lunch for children visiting state parks on school field trips.
- Reinstate the Garden in Every School Initiative.
- Explore the ability to increase the State contribution to school meals reimbursements by 15 cents per meal within three years. Protect the existing State contribution to Child Nutrition Programs from any further cuts.
- Require that nutrition information be either posted or appear on the food labels of all food sold on school grounds or at school-sponsored events.
- Develop organic standards for food in schools.
- Develop right-to-know policies for parents to know if food is grown organically or with Integrated Pest Management.
- Integrate Farm to School and School Garden Network practices into existing and future USDA and other Federal initiatives.
- Expand the number of schools with access to kitchens and other Farm-to-School infrastructure, by creating incentives for having kitchens on-site, requiring at least one kitchen per district, and identifying existing infrastructure resources.
- Ban the marketing of food and beverages and competitive food sales on school grounds to disallow the soft drink and snack industries' access to schools.

- Develop a policy that specifically permits, requires, or encourage recess to be scheduled before lunch, not after lunch; if permit or encourage, market the idea with teachers, administrators and school nutrition leadership.
- Expand partnerships and solicit funding to diffuse best practices and resources advanced by the CA School Garden Network and the CA Farm to School Taskforce.
- Provide free breakfast and/or free lunch to all students, regardless of their eligibility for free or reduced price meals. Mandate schools with severe need for free breakfast to provide breakfast in the classroom, instead of before school in the cafeteria and take a proactive role to establish 'Breakfast in the Classroom' programs. Support and encourage schools to establish alternative methods of serving breakfast such as offering "Grab and Go" breakfast products, extending the time for offering breakfast, and universal breakfast.
- California schools should be mandated to use fresh food money to buy fresh locally produced fruit instead of juice.
- Require the development and implementation of nutritional standards so that all foods and beverages available on school campuses and at school events are consistent with the Dietary Guidelines for Americans or other nutrient standards.
- Develop culinary academies in vocational high schools and training or apprenticeships on healthy cooking.
- Amend the Education Code to ensure that nonprofit school foodservice proceeds are used to upgrade nutrition programs for operation and/or improvement of the school food services and nutrition education (change the language to be consistent with 7 CFR 210.14 (a)). Add language allowing nutrition education to be included as an allowable expenditure of any excess funds (currently does not allow for these funds to be used "for any educational purpose"). Clarify that "nutrition education" may occur in classrooms, cafeterias, gardens, schoolwide, or with community partners.
- All State agencies serving families with children should provide education on the benefits of breakfast and the alternative options for breakfast service, including breakfast in the classroom.
- Require public posting and parent notification of relevant school wellness policies, including food and beverage contracts.
- Create a nutrition policy for before- and after-school programs.

F. Program and Service Delivery

Social Services

- Promote Positive Parenting and relationship support in child care settings by, for example, increasing parent engagement.
- Implement statewide policies for subsidizing the purchase of bicycles as a part of the Welfare to Work Program.
- Prioritize, encourage, and incentivize the use of evidence-based programs, policies and strategies, where appropriate.

- Child care for children birth to five should be included in regulation development and the current draft of the Quality Improvement Rating System (CAEL-QIS) for child care to give necessary attention to the importance of health issues for developing children.
- Promote better policies around nutrition and physical activity environments and attachment relationships in child care settings. Public health programs should support childhood educators in promoting health.

Youth Development

- Promote and disseminate successful youth development, engagement and empowerment strategies integrating nutrition and physical activity in the CalServe Initiative (Service Learning) and California Partnership Academies (high school).
- Establish protocols and guidance on recognizing and addressing trauma in students.
- Identify and implement best practices to keep pregnant and parenting teens in school.
- Assist in building the education pedagogy evidence base for youth-focused interventions in schools, after school and in child development centers/programs.

G. Health Care

- Require or provide incentives for health insurance companies and health management organizations to include preventive services related to nutrition as part of their benefit packages.
- Use recently completed online survey to assess what local Community Action Agencies and their partners are doing to address health/network with health partners, then identify potential areas for collaboration/expansion.
- Incorporate pending health care reform regulation prevention provisions into policies.
- Resume funding for adult day health care centers.
- Reduce transportation barriers to accessing services by having medical care providers prescribe and dispense at the same location, and by providing transportation vouchers for adolescents to access FamilyPACT services.
- Require that licensed health care professionals demonstrate annual influenza vaccination and other vaccines during epidemics as a requisite for licensure and re-licensure.
- Eliminated copay for services for children.
- Develop methods to ensure that everyone has access to a medical home.
- Develop a process of public oversight for the Department of Mental Health Care Services.
- Long-term reform of the long-term care continuum, including IHSS.
- Managed Care, CHDP, and Federally Qualified Health Centers should adopt, monitor and ensure provider's use of BMI percentile documentation and counseling for nutrition and physical activity during the measurement year.

- Develop health care worker electronic passport documenting where holder is authorized to work.
- Develop a brochure for doctors to distribute or post in waiting rooms that explains links between parks and health and how to access parks, and links to findrecreation.parks.ca.gov.
- Take full advantage of health prevention provisions in the Affordable Care Act.
- Improve maternity care practices in birthing hospitals through the adoption of the Baby-Friendly Ten Steps Hospitals Initiative to Successful Breastfeeding or the California Model Hospital Policies, and widespread implementation and enforcement of workplace lactation support policy (California Labor Code 1030).

H. Crime and Violence Prevention

- Develop an integrated "first-stop" website to serve as a gateway to key violence prevention information for local constituencies.
- Launch a comprehensive and cross-disciplinary training effort for State staff on effective violence prevention practices.
- Expand resources available for probation departments to incorporate evidence-based practices.
- Enhance coordination across relevant State agencies in support of local efforts to prevent violence by streamlining violence prevention and reduction programs in State government, consolidating, and when appropriate, integrating funding streams, and developing common Request for Proposals for funding violence prevention and related efforts.
- Increase and improve lighting in neighborhoods.
- Develop guidance on Crime Prevention Through Environmental Design (CPTED) and other design principles and encourage general plans to include the themes commonly associated with CPTED in the normal review process for development proposals.
- Develop guidance on housing design elements that reduce crime and violence.
- Develop action steps to improve local access to State data and to integrate data reporting requirements and operating systems.
- Clarify opportunities within community planning grants to address violence.
- Encourage State agencies that have client services to identify tools and educational materials for populations at-risk for domestic violence.
- Create killing-free communities, or at least killing-free zones within larger communities.
- Develop guidance on hiring formerly incarcerated individuals; provide training and supports to organizations who hire formerly incarcerated individuals; provide models and examples to reduce barriers to hiring the formerly incarcerated.
- Establish comprehensive reentry plans for all incarcerated individuals, which include quality mental health services, substance abuse treatment, GED and higher education attainment, and job training, and coordinate release with appropriate and adequate services.

- Establish a state-level interagency coordinating group, led or co-led by CDPH. Include other state agencies, such as: Attorney General, Alcohol and Drug Programs, Housing and Community Development, Education, and Emergency Medical Services Authority.

I. Alcohol

- Regulate the siting of alcohol retail and alcohol advertising near parks/playgrounds, educational institutions, community centers, other sensitive sites, and government-owned properties.
- Increase the price of alcohol.
- Alcohol prevention policies should be developed to include the recent recommendations of the FASD Task Force.
- Revenue policies that acknowledge, as San Diego' s Board of Supervisors has done, the costs in the state budget due to alcohol and the need for setting alcohol taxes at a level that is equitable so that alcohol users are responsible for the public costs of their use.
- Implement universal prenatal screening for alcohol and other drugs under Medi-Cal financed prenatal care, using Washington State's model and the recommendations of the report issued by CDPH, prepared by Ira Chasnoff.

J. Tobacco

Smoking Cessation

- Provide mental health services clients with educational materials that link tobacco use and secondhand smoke exposure to chronic diseases, such as asthma, cardiovascular disease, and cancer.
- Integrate a tobacco cessation referral system into mental health assessment and services, including promotion of the California Smokers' Helpline.
- Advocate at federal level for federal match of state dollars expended on cessation quit-lines and cessation pharmacotherapy.
- Include the Healthcare Effectiveness Data and Information Set measure - Medical Assistance with Smoking Cessation as a required measure that Medi-Cal plans should monitor.
- Promote the California Smokers' Helpline's health care provider trainings on best practices for tobacco cessation to Medi-Cal providers.
- Require that Medi-Cal Managed Care plans integrate best practices for tobacco cessation treatment, including identification of smokers through an electronic medical records system and promoting treatments. Require that Medi-Cal work with the California Smokers' Helpline to streamline the nicotine replacement therapy voucher process to decrease barriers to access.
- Require and fund alcohol and other drug and mental health treatment programs to address nicotine dependency.
- Reach migrant and seasonal farm workers and American Indians with tobacco cessation messages and services and promote cessation resources within the

Community Services Block Grant funded Community Action Agencies, and the American Indian and Migrant and Seasonal Farm Worker Programs.

Smoke Free Policies

- Explore incentives for multi-unit housing developments that include smoke-free policies and explore requiring that smoke-free housing options be incorporated into developments.
- Require or incentivize the premises, inside and out, of licensed health care, assisted living facilities, and nursing homes to be smoke-free at all times.
- Work with developers and providers of existing housing to encourage the adoption of smoke-free policies for multi-unit housing, and provide model smoke-free lease agreements.
- Require or incentivize all indoor worksites/campuses owned or leased by a government agency (including those operated by tribes) to be smoke-free at all times.
- Expand the California State law that prohibits tobacco use on the grounds of State mental hospitals (AB 3010, 2008 Blakeslee) to include prohibition of tobacco use at local county mental health facilities.
- Require that any business that provides immunizations (e.g., flu shots) cannot also engage in the sale or marketing of tobacco products.
- Require that the U.S. Housing and Urban Development recommendation to implement non-smoking policies be incorporated into some or all of California's public housing.
- Adopt and enforce smoke-free parks and beaches policies.
- Educate mental health providers on dangers of exposure to secondhand smoke.
- Limit the density of tobacco retailer outlets in low-income neighborhoods.
- Enforce existing laws regarding smoking within given distance of State building entrances and windows.
- Ban all smoking in California.
- Prosecute someone for attempted murder for secondhand smoke.
- Establish individuals as ineligible for publicly funded health care if they have a history of smoking.

Youth exposure to secondhand smoke and youth initiation of smoking behaviors

- Require or incentivize that premises, inside and out, of licensed child care centers and children's residential facilities (e.g., commercial and non-profit child care centers, crisis nurseries, youth group homes, transitional living centers) be 100 percent tobacco-free 24 hours per day, 7 days per week.
- Limit the proximity of tobacco retailer outlets to no closer than 1,000 feet from schools and other youth sensitive areas.
- Establish a Tobacco Retail Licensing fee to reduce tobacco availability to minors.

Tobacco Education

- Encourage interagency collaboration to test and develop messaging that raises awareness and motivates policy, system, and environmental level interventions to reduce the harmful public health and environmental impact of tobacco waste in California.
- Update "Reducing Toxic Air Pollutants in California's Communities" brochure to include Environmental Tobacco Smoke as a Toxic Air Contaminant (TAC).
- Provide education to staff and contractors that environmental tobacco smoke is classified as a toxic air contaminant.
- Prioritize the concept of healthy housing and spread message that healthy housing is smoke-free housing.
- Require that farmers' markets that are certified WIC and SNAP, must prohibit smoking.
- Establish a tobacco-free policy in State parks and recreation services to help prevent children from swallowing cigarette butts and fires from starting accidentally.
- Award bonus points in competitive programs for multi-family housing developments that include smoke-free policies.
- Include language in the California Green Building Code regarding smoke-free environments; do not allow ventilation systems to substitute for smoke-free requirements when determining "green" certification, such as through LEED.
- Stop issuing licenses to retail tobacco shops that allow on-site smoking (cigar bars/lounges).
- Support statewide legislation to minimize/eliminate public exposure to environmental tobacco smoke, in line with TAC Identification and Control Act (AB 1807, Tanner 1983). Encourage the immediate release of the revised Risk Reduction Plan (related to Environmental Tobacco Smoke as a Toxic Air Contaminant).
- Discuss legal promulgation of smoke-free multi-unit housing regulations based on environmental tobacco smoke's status as a toxic air contaminant.

K. Healthy Food

Food Labeling and Marketing

- Require that nutrition labels appear on all fresh meat and poultry products.
- Require restaurants to provide nutrition information.
- Provide incentives for restaurants and/or grocery stores to adopt a nutrition labeling system to identify food items that meet certain nutrition standards.
- Promote legislation to require labeling of produce origin so that purchasers can select local produce if desired.
- Increase regulation of food marketing and product placement, particularly for unhealthy foods marketed to children. Consider supporting a national ban on advertising targeting young children ages 2 - 8 on television (this is effectively done in Europe).

- Implement sales tax for foods and beverages of minimal nutritional value and direct accumulated funds toward health promotion.

Breastfeeding

- Enforce the California Lactation Accommodation Law, requiring that State contractors provide documentation that they are meeting this Law.
- Ensure State buildings have a lactation room or private room for expelling breast milk, women are allowed flexibility in work schedules to expel breast milk, and refrigeration for breast milk is available.
- Consider incentivizing breastfeeding support measures that go beyond the California Lactation Accommodation Law, such as providing flexible work schedules, phased return to work after leave, job-sharing, working from home, part-time work with a benefits package, variable start and end times for the workday, on-site daycare and lactation consultant services for breastfeeding mothers.
- Exempt breastfeeding mothers from jury duty.
- Provide funding to WIC clinics to purchase breast pumps for loan to program participants.
- Eliminate promotion of infant formula in California hospitals.
- Require all healthcare professionals who provide maternal and childcare services to undergo training in lactation support.
- Encourage adoption and implementation of Babies at Work policies to support exclusively breastfeeding mothers.
- Require or provide incentives for insurance companies and health management organizations to provide coverage for telephone or in-person lactation consultation post-delivery.
- Identify and encourage model programs that promote breastfeeding.
- Require or provide incentives for the establishment of breastfeeding policies at childcare facilities that provide for safe storage and procedures for using expressed breast milk, following parent's instructions to feed only breast milk, and provide a place onsite for mothers to breastfeed.
- Exempt materials that are manufactured for the purpose of initiating, supporting, or sustaining breastfeeding from the state sales tax.
- Require that all schools providing training to healthcare professionals integrate breastfeeding training into current curriculum.
- Include breastfeeding promotion in all state wellness programs in the workplace, including weight loss, smoking cessation, exercise, and stress reduction.
- Develop incentive programs that encourage employers to be breastfeeding-friendly.

Procurement and Vending

- State agencies, school systems, and other public institutions should reform procurement and vendor contracting practices to support the availability of local, healthy foods. Consider building incentives into the new procedures that prioritize bids from contractors able to provide local food, and establish a

minimum percentage of food that must be locally produced. Create a system to track and report how much locally produced food is being purchased.

- Assure that Senator Torlakson's sunshine bill requiring public notification of food service and vending contracts is being enforced.
- Create incentives and work with existing or new small businesses, retailers, and farmers' markets, especially in underserved areas, to stock and promote healthier food, like fruits and vegetables.
- Identify planning and zoning opportunities to encourage grocery store siting in underserved communities in order to increase access to healthy foods.
- Review and identify local ordinances and zoning requirements that inhibit mobile vending of healthy food and provide technical assistance, templates, handbooks, model ordinances, success stories, and/or policy descriptions for drafting zoning and General Plans that promote healthy food access.
- Work with the retail food industry to find creative ways to encourage the development of grocery outlets in low-income communities.
- Change permitting laws so that micro-markets (like farm stands) are allowed in residential markets.

"Food to Where You Are" Programs

- Remove legal barriers to community and urban gardens, fruit/vegetable vending, and farmers' markets by preempting local ordinances/zoning requirements that impede produce-vending operations.
- Encourage ordinances allowing micro-markets (mobile fruit and vegetable vendors / farm stands) in residential neighborhoods. Provide easy access to fruits and vegetables through farmers' markets, neighboring produce markets, and optional delivery to workplace.
- Target legislation and designate funds for the highest-need communities in order to eliminate food deserts and increase access to healthy foods, including full-service grocery store development in low-income neighborhoods.
- Encourage United States Department of Agriculture to allow Specialty Crop Block Grant funds to be used to purchase equipment such as mobile fresh fruit and vegetable vans.
- Streamline permitting processes for fruit vendors.
- Support food hubs to enable small and medium-sized local growers to participate in broader distribution and get their produce to institutional buyers.
- Develop sample policies that establish criteria for, and encourage purchasing from, local farmers in institutions across the state, including employers, schools, prisons, hospitals, and grocery vendors.
- Allow and encourage food banks to acquire blemished produce that would otherwise go to waste.
- Provide assistance to small, local farmers to install technology that increases food safety and establish other food safety programs.
- Encourage right to farm ordinances in general plans.

- Work with communities to develop programs that support local agriculture, reduce transportation requirements, and ensure greater access, especially in low-income communities
- Develop zoning requirements that create transit routes (sidewalks, pedestrian malls, bicycle paths) from all neighborhoods to grocery stores and food assistance providers.

School and Community Gardens & Orchards

- Make compost and water available for free or low-cost to community gardens.
- Establish and implement community composting initiatives to support local farms or community and school gardens.
- Develop and transition vacant and/or underutilized government-owned lots to community gardens and enforce land use protections for urban agriculture, community gardens, and farmers' markets.
- Create a topical plan for community gardens and urban agriculture.
- Increase access to land for community gardens by providing allowances for organizations to lease government-owned property that cannot be developed.
- Encourage schools to incorporate vegetable/fruit gardening and cooking lessons into health classes for elementary and high school children. Incorporate farm-to-school into the educational curriculum.
- Incorporate provisions for land and water use, duration of use, and sale of items grown, in city and county general and redevelopment plans.
- Establish an interagency school, urban farming, and community garden task force to develop specific action plans.
- Encourage every community in California to produce an urban greening plan that is linked to their general plan.

Meal Assistance Programs

- Expand available funding for healthy lunch programs for seniors, and encourage preparation of ethnically diverse foods in these programs.
- Provide funding to expand acceptance of state and federal food assistance programs at farmers' markets.
- Encourage and promote the use of CalFresh at farmers' markets. Methods include providing funding for equipment purchase that would allow the use of electronic benefits transfer (EBT) cards and piloting a program like New York City's "Health Bucks" program (gives $2 for purchase of fruit and vegetables at farmers' markets to those who spend $5 with an EBT debit card at a farmers' market).
- Create incentives for purchasing fruits and vegetables with food assistance program funds.
- Encourage the continued development and expansion CalFresh modernization efforts and policy modifications that can expand access and increase participation, including streamlining the eligibility process, greater use of technology, identification of barriers to enrollment, eliminating finger imaging, improving timely processing of applications, and the implementation of relevant federal waivers.

- Expand eligibility for CalFresh to those under 133 percent or 200 percent of the Federal poverty level.
- Ask the United States Department of Agriculture to allow food stamp program extension waivers for vulnerable populations, including former foster children and census workers.
- Automate data matches to facilitate direct certification of student eligibility for free and reduced price lunch if family eligible for CalFresh. Current data-matching program should be expanded to SCHIP and other programs that reach low-income children, such as the foster care program.
- Create infrastructure to allow for a dedicated fruit and vegetable allocation as part of CalFresh benefits.
- Increase enrollment of all food assistance programs.

Farming

- Require more transparency and public awareness of agribusiness practices that affect soils and animals.
- Consider implications of a warming climate and how California agriculture can best adapt to these changes, including evaluation of new crop varieties, assessment of impacts of severe weather events, and adequate preparation for the arrival of new pests.
- Educate farmers regarding benefits of agricultural easements and how to establish one.
- Hold a series of meetings across California to discuss legacy issue of farmland and succession planning for farms.
- Brownfield remediation resources for urban agriculture.
- Mandate mitigation of farmland development through methods such as buying land as easements or paying into a land trust fund.
- Support urban-rural roundtables to discuss urban foodsheds and access to healthy foods, such as those held in San Francisco and Los Angeles.
- Eliminate or override local restrictions of front-yard gardens and allow resident ownership of chickens, ducks, rabbits, beehives, and other domesticated animals.
- Support new technologies and measures to detect invasive species introductions early.

L. Drinking Water

- Commit resources and work with the California Water Quality Monitoring Council to ensure clean, potable drinking water.
- Promote drinking tap water instead of bottled water by providing public information on water quality and increasing access to drinking fountains on government-run properties.
- Increase water infrastructure in schools and unincorporated areas.
- Coordinate and integrate regulatory and enforcement efforts to ensure that all California communities have access to safe and affordable drinking water

including prioritizing funding for low-income communities with sub-standard water quality or with other water-related public health threats (e.g., insufficient wastewater treatment, insufficient storm drainage, etc.); prioritizing and encouraging local, regional and state level planning to facilitate the delivery of safe and affordable drinking water and wastewater treatment services to low-income communities; and developing (and reviewing existing) groundwater protection measures to ensure that drinking water resources are protected (include measures to monitor and regulate pesticide and fertilizer contamination of drinking water resources).

- Indicate potable water through signs at the front of schools, parks, signs on drinking fountains, etc. to ensure residents of unincorporated areas know whether publicly-available water is potable.
- CALGreen should collaborate with other partners to draft a graywater and nonpotable water reuse section for the California Graywater Standards (Chapter 16A).

M. Land Use

General

- Establish zoning restrictions limiting fast food outlets within a specified distance of schools, youth facilities, playgrounds, and hospitals.
- Articulate and promote sound land use planning as it relates to wildland and wildland/urban interface fire risk and individual landowner objectives and responsibilities.
- Mandate improvement to current infrastructure when cities approve annexations of new areas.
- Create a “follow the dollars” community mapping project that tracks public investments in schools, parks, hospitals, and other neighborhood amenities for the purpose of identifying disparities in the allocation of infrastructure support.

Encourage Joint Use

- Provide guidance to school districts/superintendents regarding existing state law that provides liability protection.
- Incorporate incentives for joint use in funding and construction of new schools. Specifically, explore statute changes to allow for the use of State joint use bond funds for outdoor recreational facilities/spaces and to allow local partners more flexibility in fulfilling the required 50 percent local share match for use of these joint use funds.
- Encourage the joint use of parks, open space lands, and recreational facilities between schools and communities for purposes of moderate to vigorous physical activity, gardening, and other recreation opportunities.
- Explore the feasibility of allowing joint use of state properties for community gardens.
- Actively promote the use of school parking lots and school yards as sites for farmers’ markets. Generate guidance for school administrators’ use.
- Apply equity criteria to existing joint use funding streams.

- Establish a statewide interagency taskforce to delineate actions each agency could take to advance joint use policy (of all public facilities) and practice with a particular focus on overcoming issues of liability, operations and maintenance, and equity.
- Explore methods to incentivize public-private partnerships to support joint use maintenance and operations, such as tax write-offs for adopting a joint use facility.
- Encourage the expansion of the use of joint use agreements with local city, county and state government facilities. Explore joint use agreements for kitchen facilities, garden facilities, fitness, and shower and changing areas.
- Develop model language for bonds incorporating requirements for joint use.
- Prioritize or provide bonus points for new school funding applications that incorporate joint use.
- Incentivize cities to change how developer fees are distributed to communities to ensure that low-resource neighborhoods receive fees for updating, building, and maintaining parks and playgrounds.
- Seek federal funding sources and encourage local agencies to apply for available federal funds for joint use.

"Complete Streets"

- Adopt "complete streets" guidelines for general plans and for retrofitting and development of new streets in the earliest phases of design, when appropriate and feasible.
- Incorporate trees and natural drainage systems into "complete streets" designs.
- Reconcile tensions between first-responder access needs and other safety concerns to promote better overall injury prevention outcomes.
- Identify and map the current and future potential for the extent of "complete streets" improvements.
- Cross-train Caltrans employees involved with roadway design, planning, construction, and maintenance, other State agency, and local agencies on the range of benefits of and approaches to "complete streets."
- Provide incentives and funding for "complete streets."
- Support and expand the California Bicycle Coalition Complete Streets Sub-Committee to develop a curriculum and design standards for "complete streets," traffic calming, safe intersection design, and appropriate vehicle speeds.
- Build trails and sidewalks that provide safe and continuous access for all users.

Smart Growth, Infill, and Brownfield Development

- Conduct smart growth audits.
- Provide financial incentives to aid the development of smart growth projects and prioritize growth projects and programs that foster smart growth in the allocation of federal housing and community development block grant (and other) funds.
- Encourage demand for smart growth through consumer incentives. Facilitate the financing of mixed-use properties.

- Engage political support for improved coordination on approval of smart growth projects.
- Cluster freight facilities near ports, airports, and rail terminals and mitigate their impacts on the surrounding communities.
- Offer incentives that encourage local communities to increase density.
- Support regional planning efforts to encourage compact communities.
- Adopt smart growth codes to parallel existing conventional development codes.
- Facilitate the increased use of SMART codes and form-based codes.
- Establish model state-level design standards and codes to encourage compact building design that can be adopted by local communities.
- Conduct an "infill checkup" to evaluate and prioritize infill and brownfield sites for redevelopment.
- Strengthen current State and local brownfields programs.
- Encourage infill development by providing bonus points or other incentives in funding applications, prioritizing infill in infrastructure programming, and improving collaboration.
- Ensure that federal EPA funds for mitigating brownfields become available to support space for recreation and community gardens.

N. Environmental Quality

Air Quality

- Require school districts to have a comprehensive indoor and outdoor air quality policy that supports schools in implementing best practices and puts plans in place to include no-pesticide policies and building materials with low volatility.
- Use real-time air quality monitoring data to inform local policy and individual behavior related to vehicle idling and outdoor activity.
- Require that new truck routes be established away from schools, hospitals, and residential areas.
- Reduce fees for prescribed burns.
- Forum/symposium to discuss tension between air quality health impacts and affordability when siting housing near freeways.
- Add a traffic-related criterion to California Breathing AIR Health Awards.
- Collaborate with air districts and MPOs to set SB 375 targets, integrate SB 375 strategies into air quality plans, and support MPO efforts to develop Sustainable Communities Strategies.
- Increase focus on diesel exhaust in high-traffic areas of Oakland, in collaboration with the Ditching Dirty Diesel Idling Committee.
- Develop joint letter setting context and discouraging interpretation of ARB's land use guidance as black and white.
- Form a task force to develop a plan for on-farm mitigation of greenhouse gas emissions, and seek funding for that plan within broader climate legislation.
- Conduct a health impact assessment that includes provisions for strengthening regional food systems, decreasing long-distance transportation, and high-density

livestock production (feedlots, large dairies) as part of air quality mitigation efforts.

- Make recommendations that would require the California Air Resources Board and the State Air Quality Management Districts to update their procedures and requirements for certification of new alternative technologies. Require that all Environmental Impact Reports must include mitigation that uses MACT and Zero Emissions Technologies. Currently new emerging technologies cannot be certified because certification procedures do not exist and are difficult to develop.

Forests and Wildfires

- Hold a forum or complete a health impact assessment to compare health impacts of wildfire with impacts of controlled burns/fuel management activities.
- Reduce the conversion of forest land into residential developments that decrease the forest capacity to store carbon, and place forests in the wilderness-urban interface at greater risk for wildfires while increasing the need for expensive measures to prevent useful fires or protect human populations from wildfires that would otherwise be allowed to burn and maintain forest health.

Pesticide Regulation

- Allow local municipalities to regulate stricter pesticide rules than the State.
- Create stricter regulations for pesticide use in high-density, urban areas.
- Expand the EPA's Green Chemistry program to include pesticides and expand coordination between State agencies.
- Support sustainable agriculture production strategies and research that help farmers remain competitive and viable, such as organic, integrated pest management, season extension technologies, and nutrient management programs, creating incentives for farmers to incorporate organic processes into food productive, and providing guidance and assistance to help farms shift from conventional practices to organic methods.
- Use chemical-free pest management and lawn care for government-owned properties.

O. Guidance Documents

- Encourage, provide guidance, and offer technical support where appropriate to enhance local jurisdictions' abilities to develop general plans that include healthy and sustainable design and policy objectives.
- Design spaces to reduce crime by making sure that the design ensures users of the space are visible rather than concealed, designating neighborhood centers, guiding the public through clearly delineated spaces, maximizing efficient use of historic downtown centers, preserving unused public school buildings for future use as schools, redeveloping strip malls as part of an urban village, zoning for higher density around community centers, and co-locating and jointly using park, recreation, and school facilities.
- General Plans can facilitate design and planning that promotes: transit use and bicycle and pedestrian access, the inclusion of smaller parks, facilities for

multiple uses, a high quality system of trails, preservation of open space, and shared use of school facilities.

- General plans can encourage safe multimodal transportation by considering pedestrians, bicycles, and drivers in parking lot design, implementing road diets where appropriate to enhance safety and efficiency through smaller streets, coordinating with schools to enhance safe routes to school, featuring shorter blocks, designating a right-of-way hierarchy for streets to promote pedestrian friendly design, designing pedestrian crossings, employing traffic calming techniques, and encouraging shared parking.
- General plans can increase pedestrian and bicycle activity by providing consideration for these users in planning and locating public facilities within walking distance of transit stop, placing schools in walkable neighborhoods, increasing bicycle and pedestrian safety on arterials, providing bicycle racks in the design of spaces, prioritizing connectivity, including trees in streetscape design.
- General plans should require accessible facilities for all residents, plan complete streets, plan for public transit services, provide flexibility by establishing zoning overlay districts, pursue transit-oriented development, reduce parking requirements and/or set maximum parking standards, retrofit existing streets as opportunities arise, use pedestrian-level lighting for safety, and provide design guidelines for pedestrian-oriented business districts.
- Require more frequent updating of General Plans.
- Develop and disseminate resources and guidance to assist local governments with the creation of healthy general plans, including incorporating health into existing documents, and developing a checklist for healthy general plans.
- Encourage local governments to weave health throughout general plans instead of inclusion of separate health element.
- Encourage the adoption of agricultural elements in General Plans to address food access.
- Draft guidance for including health in general plans in collaboration with the state public health department (and other interested stakeholders). Include this guidance in state-issued General Plan Guidelines, and monitor and track the inclusion of health issues in adopted plans through the California Planners' Book of Lists annual survey.
- Require a public health element in county and city general plans.
- Convene a multi-department group to address the best means of incorporating health analysis into General Plans, and identifying highest-impact health promotion measures.
- Align state, regional and local work around HiAP and other SGC goals by making regional and local entities accountable to the state general plan. The general plan should be a complete governance tool, with requirements that regional and local entities report on their work toward that general plan annually; this reporting should be a requirement for state grants (or there should be some other repercussion for failure to comply).

P. Health Impact Review

- Apply health impact assessment (HIA) principles to analysis of budgetary and legislative decisions.
- Develop tools for modeling and monetizing health impacts and their magnitude.
- Add health impact analysis to all bill analysis templates similar to current practices for fiscal impact.
- Begin conducting health impact analyses; agencies could select 2-3 pilot initiatives where they commit to applying the best available evidence to judge health impacts and the distribution of those impacts.
- Develop the quantitative methods (e.g., indicators, forecasting models) for judging health impacts, and then use those tools in their analyses.
- Require that grant applicants over a certain budget to some subset of agencies include a systematic health analysis (e.g., assessment of health indicators, application of a healthy development checklist) of their project and plan proposals. Provide pilot funding for several organizations to model this.
- Mandate health impact assessments be performed on all environmental impact reports.
- Build capacity among State agencies to collaborate on health impact assessment.
- Mandate the preparation of a health impact assessment as part of the CEQA process.
- State Office of Planning and Research elaborates on the role of CEQA in assessing health by confirming that health impacts must be analyzed under CEQA, by creating a HIA/EIA resource documenting experience, knowledge, legal clarifications to integrate health, and examples, by developing guidance on how “health” should be interpreted and assessed in CEQA at different scales (e.g., project, plan, policy), by identifying opportunities to improve health analyses based on what EIRs are currently lacking, and by integrating health impact questions, analytic methods, and mitigation strategies into existing OPR guidance for CEQA analysis.
- Conduct economic and financial research on the expected return on investment from investing in environmental change for obesity and chronic disease prevention.
- Encourage the use of health impact assessments in developing local general plans.
- Provide guidance for health impact analysis. Work with the Attorney General to expand CEQA review and comments to local agencies to include comments on other planning and assessment documents that address climate change, crime and violence, and health.
- Mandate health impact assessment on all transportation or housing projects (above a given threshold or value).
- Broaden the use of Health Impact Assessments in evaluating the state's financial plans.

- Provide technical guidance explaining how local jurisdictions can identify, analyze and mitigate health impacts encountered in the CEQA review of common projects. Revise the CEQA checklist (Appendix G of the Regulations for CEQA) to include the identification of the most commonly encountered potential health impacts.
- Expand CEQA or develop a similar required procedure that local planning departments must complete on all projects that assesses human health impacts, and a process and standards for preventing negative health impacts. Alternatively, establish incentives to accomplish desired outcome.
- Develop a checklist of health issues to be used to review community development proposals and incorporate the use of health impact assessments.
- Integrate HIA into other impact assessments so as to not add new layer of screening for development projects.
- Require HIA on big-ticket projects.
- Collaborate to develop clear guidance on the use of CEQA processes to evaluate health impacts.
- Mandate that a health analysis (e.g., HIA) be conducted in State-funded transportation and housing projects and plans.
- Require social equity/health impacts in all policies/practices (similar to the King county/Seattle Model), including increasing awareness of how different sectors impact equity (co-benefits); developing goals, principles, key indicators, and criteria to assess equity; and requiring agencies to apply goals and indicators to programs/policies.
- Prioritize funding decisions at some subset of agencies using a broad set of health impacts (e.g., air quality, noise, injury/fatality, access to jobs, parks, retail and services, social cohesion) as core criteria in the distribution of funding. Criteria could be based on environmental health risks (e.g., air, noise, water, traffic safety, etc.) and health-supporting infrastructure to encourage active transport (e.g., schools, food retail, transport, parks, etc).

Q. Collaboration

- Improve data sharing and collaborate on data collection to standardize and streamline where appropriate.
- Better integrate CDPH's Occupational Health Branch with Cal/OSHA.
- Build collaboration between the DIR Young Workers Program and CDPH's adolescent health staff to educate new workers and develop policies to protect them.
- Increase intra-agency coordination of programs to better address healthy community needs including: aging in place, hunger, climate change, and chronic disease.
- Fund efforts to coordinate jobs/housing/transportation planning.
- The deans in three UC schools of public health should work with state agencies to develop pre-service and continuing education for public health-related

workforce at local and state levels; identify ways UC can collaborate on research and technology transfer with State agencies on the above topics.

- California Treasurer's Office: Partner with others in the nonprofit, philanthropic, local or federal government, and for-profit sectors to target portions of funds within the Treasurer's office toward large-scale efforts to improve healthy food access in underserved low-income communities across the state. Consider programs within areas such as: the California Pollution Control Financing Authority, the California Infrastructure and Economic Development Bank, the California Tax Credit Allocation Committee, the California Public Employees' Retirement System, and the California State Teachers' Retirement System.
- Coordinate with regional agencies, and provide funding for communities to engage in healthy community development and sustainable planning processes.
- Pool resources across State agencies to direct more total resources toward putting tools and best practices into the hands of those shaping the built environment, especially through increased trainings and technical assistance such as those currently offered through the Healthy Transportation Network.
- Prioritize equity in all healthy policy work, since many preventable public health issues disproportionately impact low-income people and communities of color. Agencies should review their policies for disparate impact and making adjustments as needed. The HiAP Task Force can encourage agencies to target investments in identified high-need areas by integrating social equity and livability principles around infrastructure investments. To do this, agencies must collect and analyze community conditions data that include information on poverty and racial concentration, and public health outcomes. The HiAP Task Force should assess a range of social determinants indicators to prioritize investments in communities of greatest need, with emphasis on communities experiencing high levels of poverty, high levels of unemployment, high levels of chronic diseases such as diabetes, hypertension, and heart disease.
- Plan brown bag lunches, seminars, symposium, and other efforts to facilitate partnerships and mutual understanding between agencies, organizations and departments in order to share resources to improve communities.
- Encourage agencies to train and educate staff on cross-disciplinary issues and innovations. Provide *regular* opportunities for cross-agency learning and information sharing, to address *not only* competing public policy goals, but to identify opportunities for collaboration and synergy. Consider the HiAP Task Force as a mechanism for sustaining HiAP, addressing new opportunities and conflicts, and remaining flexible and responsive to new opportunities.

R. Community Engagement

- Increase funding for staff positions and time for development of and participation in meaningful community engagement processes.
- Create rules or regulations to assure that grantees at the local level integrate meaningful community engagement in decision-making.
- Prioritize clear and understandable communications through translation into multiple languages and lay speak.
- Seek technical assistance to develop public participation processes and educate and engage government staff on best practices and methods to increase and incorporate community engagement.
- Develop processes to ensure communities are engaged early and allowed input before decisions are made. Make meetings accessible by convenient times and location.
- Require deep and broad outreach within communities when conducting planning/comment meetings and other opportunities for community engagement, including actively extending outreach beyond government and sub-regional planning bodies to engage nonprofit, community, and academic partners.
- Provide funding for non-governmental organization and resident participation.
- Increase language assistance access.
- To increase community engagement, State employees should provide education in the exercise of democracy to all clients.
- Provide broadband internet access throughout the state.
- Strengthen requirements for community participation in the redevelopment process.
- Place priority on programs to increase outreach to and access for low-income residents/communities.
- Support community-based organizations involved in revitalizing neighborhoods.
- Provide resource guides to new tenants in public housing that have information about nearby community health clinics, supermarkets, parks, community gardens, recreational centers and other elements of the built environment that influence health.

S. Political Process

- Reduce impact of money in political and campaign process.
- Ensure that the budget process considers health consequences of proposed budget cuts.
- Approve a 50 percent budget threshold.
- Reform initiative process so that the budget is developed through informed policy discussion.

T. Continue Health in All Policies

- Request new governor to recognize health as a priority.
- Develop materials for transition team for next administration that highlight successes, lay out a road map, and provide expected outcomes and tasks.
- Educate policymakers about Health in All Policies.
- Provide training to all staff working in policy, planning and zoning, and legislative activities on the importance of health impact considerations and their role in assuring these issues are addressed.
- Expand the HiAP Task Force to include other agencies.
- Educate and inform elected officials about health policies.
- Continue the HiAP Task Force under the SGC through new Executive Order or legislation.
- Assist each agency to develop internal plans for achieving stated benchmarks and outcomes. Plans should include meaningful community engagement processes to achieve maximum buy-in, support, and effectiveness.
- In order to be most effective, the Task Force should be charged with defining specific agency responsibilities and transforming these recommendations into action plans.
- Continue to meet on an ongoing basis to establish interim benchmarks and outcomes for each agency in pursuit of health goals and priorities. Interim benchmarks and outcomes should consider and address issues of equity, and be revisited and updated on a regular basis to check progress and stay current. Benchmarks and outcomes should specifically address social, economic and physical aspects of community environments that impact health.
- Encourage the formation of an advisory board to the Task Force made up of leaders from organizations and communities around the state who can provide input on the implementation of recommendations and ensure that the overall direction of the Task Force aligns with the realities and needs of communities.

---

[1] State of Washington, Example Comprehensive Plan Policies to Support Physically Active Communities (Department of Community, Trade and Economic Development, 2007).
[2] Todd Litman, Win-Win Emission Reduction Strategies: Smart Transportation Strategies Can Achieve Emission Reduction Targets And Provide Other Important Economic, Social and Environmental Benefits (Victoria Transport Policy Institute, 2007), www.vtpi.org/wwclimate.pdf.
[3] Leadership for Healthy Communities. Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity. Princeton, NJ: Robert Wood Johnson Foundation, updated February 2010.
[4] Smart Growth Network, Getting to Smart Growth: 100 Policies for Implementation (International City/County Management Association), http://www.smartgrowth.org/pdf/gettosg.pdf.
[5] Gosselin, Maggie. "Beyond the USDA: How Other Government Agencies can Support a Healthier More Sustainable Food System." Institute for Agriculture and Trade Policy, February 2010.
[6] Baxter J, Raymond. "Making better use of the policies and funding we already have." *Preventing Chronic Disease* 7(2010).

[7] New York State Council on Food Policy, Report to Governor David A. Paterson. "Making Connections: Developing a Food System for a Healthier New York State." Recommended State Food Policies, December 2009.
[8] NYC Department of Health and Mental Hygiene. "Farmers' Markets Initiatives: Promoting Fresh Fruits and Vegetables in Underserved Communities". 2010 Report.
[9] Center for Cities and Schools, The Local Government Commission. "How California's School Siting Policies Can Support A World-Class Educational System." Submitted to the California Department of Education by the Ad-Hoc Coalition for Healthy School Siting, January 31.
[10] State of California Business, Housing, and Transportation Agency. "California Strategic Highway Safety Plan." September, 2006.
[11] Muller, Mark, Tagtow, Angie, Roberts, Susan L. and MacDougall, Erin. "Aligning Food Systems Policies to Advance Public Health." *Journal of Hunger & Environmental Nutrition*, 4;3(2009): 227-230.
[12] Lamson, Erica and Colman, Victor. "Nutrition and Physical Activity: A Policy Resource Guide." Washington State Department of Public Health, February 2005.

Appendix 4

Issue Briefs

The briefs in this Appendix provide background information about the many ways in which the actions of agencies across government may influence the health of California residents and communities.

Each brief provides an introduction to the work of a specific agency and highlights the links between health and the relevant topic area. The briefs provide illustrative examples of opportunities for local, regional, and State agencies to achieve co-benefits, win-win strategies that both improve health and meet other vitally important goals at the same time. The briefs were developed independently of the Task Force's recommendation-collecting process and are not intended to imply specific recommendations for State agency action. The briefs are the products of a collaborative effort between the California Department of Public Health, individual members of the Health in All Policies Task Force, and the Stakeholder Advisory Group.

Public Health and Healthy Communities

What is Public Health?
Public health is "what we as a society do collectively to assure the conditions in which people can be healthy."[1] As the lead agency for public health in California, the mission of the California Department of Public Health (CDPH) is to "optimiz[e] the health and well-being of the people in California."[2] Public health focuses on the health of entire populations (all residents of California) and groups of people (such as people in a neighborhood, adolescents, or African-Americans), rather than on the health of individuals.

Health is not only a fundamental component of quality of life; it is also a critical building block for a sustainable and thriving economy. Health increases workforce participation and productivity, while illness and injury impact the productivity of the individual and of family members who provide care for loved ones. Rising medical care expenditures, now estimated at 17 percent of the U.S. gross domestic product, sap resources that could be directed to other priorities such as education or investments in green energy.[3] Experts estimate that even $10 per person per year invested in prevention would yield $1.7 billion in health care savings in California within 5 years, a return of $4.80 for every $1 spent.[4] In the words of Ralph Waldo Emerson, "The first wealth is health."[5]

Over the last century, the patterns of disease have shifted tremendously, in large part due to public health successes. Twenty-five years of the thirty-year increase in life expectancy experienced by Americans in the 20th century has been attributed to advances in public health, including vaccinations, tobacco control, motor vehicle safety, safer workplaces, safe drinking water, safe food, healthier mothers and babies, healthy and safe housing, sanitation, and many others.[6]

In the early 1900s, infectious diseases accounted for 40 percent of deaths in the U.S. and chronic disease accounted for only 16 percent.[7] Now, chronic diseases and injuries account for over 75% of all deaths in California and chronic disease accounts for over 75 percent of all U.S. health care expenditures.[8,9] Tobacco, poor diet, and physical inactivity are the actual cause of one-third of deaths.[10] Significant differences among socio-economic and racial/ethnic groups in the rates of chronic disease and injury are pervasive, persistent, and preventable. For example, Californians with type 2 diabetes are more likely to be low income, Latino, or African-American, and to live in neighborhoods with high concentrations of fast food restaurants.[11]

Health and illness are influenced by the interaction of many factors, including genetics, biology, individual behavior, access to health care, and the environment.[12] The physical, social, economic, and service environments in which we live, learn, work, and play influence the adoption of healthy lifestyles by making it more or less difficult for individuals to choose behaviors that promote or diminish health.[13,14,15] The socio-economic conditions that shape the health of individuals, communities, and jurisdictions as a whole – for example, income and social status, education, employment, social networks, early childhood experiences, the natural and built environments, and living

conditions – are collectively referred to as the social determinants of health.[16] While medical care is vitally important, it contributes only a small portion (between 10-15 percent) to our overall health and longevity.[17] The social determinants of health have a far greater impact on how long and how well we live than medical care.[18,19,20]

There is also an intrinsic interdependence between the sustainability of the environment and the sustainability of the human species.[21] Global environmental challenges not only have direct impacts on health (e.g., extreme heat events), but also threaten the life-supporting systems on which human beings depend – air, water, food, and shelter. The health effects of air pollution, crop loss, stratospheric ozone depletion, sea level rise, and collapse of fisheries – to name but a few – all suggest that environmental sustainability must itself be a key health goal.

Core public health activities include:

- Promoting healthy lifestyles for individuals and families in their communities and workplaces.
- Preventing disease, disability, and premature death and reducing or eliminating health disparities.
- Protecting the public from unhealthy and unsafe environments.
- Providing or ensuring access to quality, population-based health services.
- Preparing for, and responding to, public health emergencies.
- Producing and disseminating data to inform and evaluate public health status, strategies and programs.[22]

These activities serve to prevent illness and injury from occurring (primary prevention), to detect disease before symptoms develop and take action to prevent its progression (secondary prevention), and to minimize the adverse impacts of injury and illness when they cannot be prevented (tertiary prevention).

Because the social, physical, economic, and service environments in which people live play such a critical role in health, public health achieves its goals first and foremost through partnerships and collaboration with other agencies, the private sector, and community based organizations seeking to build healthier communities. CDPH, in consultation with stakeholders and members of the Health in All Policies Task Force, has developed the framework below outlining the components of a healthy community.

What is a Healthy Community?

A healthy community provides for the following through all stages of life:

- Meets basic needs of all
    - Safe, sustainable, accessible and affordable transportation options
    - Affordable, accessible and nutritious foods and safe drinkable water
    - Affordable, high quality, socially integrated and location-efficient housing
    - Affordable, accessible and high quality health care
    - Complete and livable communities including quality schools, parks and recreational facilities, child care, libraries, financial services and other daily needs

    - Access to affordable and safe opportunities for physical activity
    - Able to adapt to changing environments, resilient, and prepared for emergencies
    - Opportunities for engagement with arts, music and culture
- Quality and sustainability of environment
    - Clean air, soil and water, and environments free of excessive noise
    - Tobacco- and smoke-free
    - Green and open spaces, including healthy tree canopy and agricultural lands
    - Minimized toxics, greenhouse gas emissions, and waste
    - Affordable and sustainable energy use
    - Aesthetically pleasing
- Adequate levels of economic, social development
    - Living wage, safe and healthy job opportunities for all, and a thriving economy
    - Support for healthy development of children and adolescents
    - Opportunities for high quality and accessible education
- Health and social equity
- Social relationships that are supportive and respectful
    - Robust social and civic engagement
    - Socially cohesive and supportive relationships, families, homes and neighborhoods
    - Safe communities, free of crime and violence

Developing Win-Win Strategies

Opportunities abound for collaborations among public health and other agencies that will provide win-win strategies to improve the health of California while also advancing other critical goals. Public health agencies can support the efforts of other agencies in a number of ways.

- *Joint influence:* Public health can provide advocacy support for policies that promote health and achieve other goals. For example, public health can support healthy youth violence policy by maintaining and promoting a focus on prevention before violence occurs.
- *Resources:* Health resources can be channeled into communities in broad ways. For example, to promote healthy eating, public health can promote the production, distribution, and marketing of California-grown fruits and vegetables.
- *Outreach:* Public health works extensively with community groups across California. For example, public health can help agencies engage communities in land use-planning processes impacting local residents.
- *Communication:* Public health can support education, social marketing, and strategic communication goals, including access to programming. For example, to reduce greenhouse gas emissions, public health can communicate the positive health impacts of active transportation.
- *Evidence:* Public health is data driven and can deliver expertise in monitoring and evaluating the effectiveness of different strategies for meeting health goals. For

example, sharing data on health inequities can assist other agencies in developing targeted programs.

Collaboration to implement policies and practices that improve the physical, economic, social, and service environments of communities will improve the health of Californians, build healthy communities, improve the health of Californians, and promote equity and sustainability.

---

[1] Institutes of Medicine. (1988) *The Future of Public Health.*
[2] California Department of Public Health. Strategic Plan 2008 – 2010. Available at: http://www.cdph.ca.gov/Documents/CDPH-Strategic-Plan.pdf.
[3] Kaiser Family Foundation, *Health Care and the 2008 Elections* (October 2008), http://www.kff.org/insurance/upload/7828.pdf.
[4] Trust for America's Health, *Prevention for a Healthier California: Investments in Disease Prevention Yield Significant Savings, Stronger Communities* (2008).
[5] Ralph Waldo Emerson, *The Conduct of Life* (1860).
[6] CDC. (1999). Ten Great Public Health Achievements – United States, 1900-1999. *MMWR. 48*(12):241-243.
[7] Peter Conrad, *The Sociology of Health and Illness* Eighth Ed. (2009): 13.
[8] State of California, *Death Records*.; State of California, *Race and Ethnic Population*.
[9] Ross DeVol and Armen Bedroussian, Anita Charuworn, Anusuya Chatterjee, In Kyu Kim, Soojung Kim, Kevin Klowden, *An Unhealthy America: The Economic Burden of Chronic Disease. Charting a New Course to Save Lives and Increase Productivity and Economic Growth*. Milken Institute (October 2007).
[10] A.H. Mokdad, J.S. Marks, D.F. Stroup, and J Gerberding, "Actual Causes of Death in the United States, 2000," *JAMA, 291*, no 10 (2004):1238-1245.
[11] California Diabetes Program, *Diabetes in California Counties* (Sacramento, CA: Department of Public Health; University of California San Francisco, Institute for Health and Aging, 2009).
[12] RG Evans and GL Stoddart GL, "Producing Health, Consuming Health Care," *Why are Some People Healthy and Others Not? The Determinants of Health of Populations* (New York: Aldine De Gruyter, 1994).
[13] Office of the Governor. Executive Order S-04-10. Available at: http://www.sgc.ca.gov/docs/workgroups/EO_S-04-10_SGC_Health_Task_Force.pdf.
[14] Corburn, J. (2009). *Toward the Healthy City*. MA: The MIT Press.
[15] Bay Area Regional Health Inequities Initiative. *A Public Health Framework for Reducing Health Inequities.*
[16] Raphael, D. (2009). *Social Determinants of Health: Canadian Perspectives*. 2nd Edition. Toronto: Canadian Scholars' Press Incorporated.
[17] JM McGinnis, P Williams-Russo, and JA Knickman, "The Case for More Active Policy Attention to Health Promotion," *Health Affairs* 21, no. 2 (2002): 83.
[18] Robert Wood Johnson Commission to Build a Healthier American, *What Drives Health*, http://www.commissiononhealth.org/WhatDrivesHealth.aspx.
[19] D.R. Williams, M.V. Costa, A.O. Odunlami, and S.A. Mohammed, "Moving Upstream: How Interventions That Address the Social Determinants of Health Can Improve Health and Reduce Disparities," *Journal of Public Health Management Practice Suppl,* (Nov 2008): S8-S17.
[20] Commission on Social Determinants of Health. (2008). *Closing the Gap In a Generation.* World Health Organization.
[21] Valerie Brown, John Grootjans, Jan Ritchie, Mardie Townsend, and Glenda Verrinder, *Sustainability and Health: Supporting Global Ecological Integrity in Public Health,* (Allen & Unwin, Crows Nest, N.S.W., 2005).
[22] California Department of Public Health. Strategic Plan 2008 – 2010. Available at: http://www.cdph.ca.gov/Documents/CDPH-Strategic-Plan.pdf.

Agriculture and Health

Agriculture is a vital California resource. California-grown agricultural products provide a source of economic activity for the state, bringing in revenue and supporting jobs, while also providing a substantial contribution to the food supply that feeds California. The California Department of Food and Agriculture (CDFA) protects and promotes California agriculture in order to establish a thriving agriculture industry and abundant food supply. Access to high quality, affordable, and nutritious foods, including fresh fruits and vegetables, is essential to the health of Californians.

Food Safety, Production, and Health

- Food and nutrition are necessary for health. Eating recommended servings of fruits and vegetables daily can help reduce the risk of obesity, heart disease, stroke, hypertension, and some cancers.[1] Eating vegetables, legumes, and fruits is the most sustainable way of reducing micronutrient deficiencies, including vitamin A, iodine, iron, and folic acid, which can cause birth defects, mental impairment, and death.[2]
- Access to full-service grocery stores and produce vendors like farmers' markets is linked to increased consumption of fruits and vegetables.[3,4] Low-income and minority neighborhoods have less access to these healthy food vendors and higher prevalence of diet-related disease.[5,6,7,8] In communities that do not have supermarkets, many residents do their food shopping in small stores, many of which mostly stock unhealthy foods, tobacco, and alcohol.
- The safety and security of fruits and vegetables, meat, poultry, dairy products, and other foods of animal origin is necessary to ensure the prevention of foodborne illness and the prosperity of California producers. While the majority of the 76 million cases of foodborne disease that occur each year in the U.S. are mild, some require hospitalization and even lead to death.[9]
- Transportation of food over long distances generates air pollution and greenhouse gases. Local and regional food distribution networks support local economies, indirectly influencing health.
- Ensuring a healthy and stable supply of laborers for California farms' full-time and seasonal employment needs is essential to the success of the State's agricultural industry. With many developed operations, farming and agricultural industry workers are at risk for fatal and nonfatal injuries and illnesses due to employment-related exposures.[10,11,12] Proper training and enforcement of existing worker safety laws and regulations are essential to the safety of all employees in California.

Opportunities to Improve Food Safety, Production, and Health

- Adapting the food supply chain to more closely align production and distribution of food products with population health needs can focus resources to support increased production of sustainably produced, organic fruits and vegetables and help ensure that communities lacking access to these foods are not overlooked.
- Expanding farmers' markets and bringing new markets into communities that do not have them is a way to satisfy unmet demand and offer fresh, healthy foods with low

overhead costs. Efforts to increase licensing, offer technical assistance, and facilitate redemption of Federal nutrition assistance program benefits at farmers' markets and produce stands can improve health and increase purchasing of California-grown products.

- Linking more closely the source of food production and point of sale can decrease costs for consumers and producers and expand the availability of fresh produce. For example, coordinating efforts to link fresh, California-grown food with consumers through the federal school meal/snack and commodities programs that are offered through the USDA Farm Bill and Child Nutrition Act can provide a strong resource base to initiate farm-to-school programs. Additionally, farm-to-institution efforts can link hospitals, restaurants, and workplaces with locally grown fresh foods.
- The Federal Fresh Food Financing Initiative and related programs that offer low-interest loans or grants can build the capacity of retailers to sell healthier food items.
- Collaborative efforts between food producers, distributors, inspectors, and health professionals can inform the development of prevention, detection, and eradication policies and plans that address the needs of consumers and producers and more effectively reduce risk of livestock and poultry diseases and dairy and produce contamination incidents that contribute to foodborne illnesses.
- Increasing worker access to early preventive and primary care and supporting working conditions that prioritize worker health can improve farm worker health and save money in the long term by limiting emergency care needs, reducing food-borne illness outbreaks caused by disease transfer from farm worker to food, and reduce lost productivity.

Agriculture, Environmental Quality, and Health

- The preservation of farmland and maintenance of soil quality is essential to food production and thus the sustainability of the human population. Farming practices that increase and sustain soil development can trap carbon within the soil, reducing greenhouse gas emissions.[13] Soil depletion and degradation contributes to farms' overuse of nitrogen as a fertilizer.[14] The urbanization and development of farmland for other uses diminishes California's agricultural production capacity and consumes some of the best farmland.[15]

- The spread of invasive species and monoculture crop planting techniques can threaten the biodiversity of native plants, wildlife, and waterways and can make crops more susceptible to devastating pests.[16] Biodiversity encourages plants to naturally evolve to protect themselves from new diseases, reducing the need for harmful pest and disease control measures.[17]

- Greenhouse gas emissions contributed by the food system include carbon dioxide, methane, and nitrous oxide.[18] Current and projected concentrations of greenhouse gases endanger public health.[19] Farm animal production,[20,21] fertilizer manufacturing, food processing and packaging, and mechanized farming practices all emit greenhouse gases.[22] Through the use of innovative environmental operations such as diary digesters, gasification facilities and the emergence of cellulosic technology; farming operations are lowering their greenhouse gas

emissions. CDFA envisions a future in which farms will be energy self-sufficient and could even put energy back onto the grid, allowing agriculture to contribute to climate change mitigation.

- Synthetic chemical pesticides and fertilizers can pollute soil, water, and air, reducing environmental quality, disrupting the natural balance that can keep pest populations under control, and impacting human health.[23]

Opportunities to Improve Population Health, Plant Health, and Prevent Pests

- Implementing pest control measures that avoid the application of chemical pesticides can minimize the health and environmental impacts of pesticide use, protect farm workers who apply pesticides, and limit the crop yield impacts of invasive species. Least-toxic pest control measures can support farm worker, consumer, and ecosystem health.
- Providing incentives to encourage agricultural producers to adopt sustainable production practices can help preserve and regenerate the topsoil that is necessary for continued agricultural productivity.
- Encouraging the preservation of farmland and compact land development that eliminates sprawl not only protects California's ability to provide food but can contribute to the state's sustainability goals. Efforts like the Williamson Act, conservation easements, agricultural zoning, and right-to-farm ordinances can be useful tools to support the preservation of agricultural land at the local level.
- Providing education and technical assistance to support California producers in developing integrated cropping systems, planting rotational crops, using organic production techniques, and employing integrated livestock/grazing systems can support thriving biodiversity and improve resilience against pests, increasing the state's profitability and agricultural production sustainability, reducing environmental impacts, and supporting improved health.
- Providing food processors, farmers, and other agricultural producers with tools, strategies, and targets to reduce their greenhouse gas emissions can ensure that the agriculture industry adequately participates in climate change mitigation and adapts to the agricultural impacts of climate change.

---

[1] Hyson, D. "The health benefits of fruits and vegetables, a scientific overview for health professionals." Wilmington, DE: Produce for Better Health Foundation, 2001.
[2] Bartley, K.A., Underwood, B.A., Deckelbaum, D.J. "A life cycle micronutrient perspective for women's health." *American Journal of Clinical Nutrition* 81, no. 5 (May 2005): 1188S-1193S.
[3] Morland, K.S., Wing, A., Roux, A.D., & Poole, C. "Neighborhood characteristics associated with location of food stores and food service places." *American Journal of Preventive Medicine* 22, no. 1 (2001): 23-29.
[4] Lopez, R. P. "Neighborhood risk factors for obesity." *Obesity* 15, no. 8 (2007): 2111–2119.
[5] Morland, K., A. V. Diez Roux, and S. Wing. "Supermarkets, other food stores, and obesity: The atherosclerosis risk in communities study." *American Journal of Preventive Medicine* 30, no. 4 (2006): 333–339.
[6] Baker, E. A., M. Schootman, E. Barnidge, and C. Kelly. "The role of race and poverty in access to foods that enable individuals to adhere to dietary guidelines." *Preventing Chronic Disease* 3, no. 3 (2006).

[7] Franco, M., A. V. Diez Roux, T. A. Glass, B. Caballero, and F. L. Brancati. "Neighborhood characteristics and availability of healthy foods in Baltimore." *American Journal of Preventive Medicine* 35(6): 561–567.
[8] Morland, K., S. Wing, A. Diez Roux, and C. Poole. "Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventive Medicine* 22, no. 1 (2002): 23–29.
[9] Centers for Disease Control and Prevention. "Foodborne Illness: Frequently Asked Questions," 2005.
[10] Mills, P. "Cancer Incidence in the United Farmworkers of America 1987-1997." *Am J. of Ind. Med.* 40 (2001): 596-603.
[11] Vincent, F., Gerry and Mary Harkin. "Pesticide Appliers, Biocides and Birth Defects in Rural Minnesota." *Environmental Health Perspectives* (April 1996).
[12] Centers for Disease Control and Prevention. "Heat-Related Deaths Among Crop Workers --- United States, 1992—2006." *MMWR* 57, no. 24 (June 20, 2008): 649-653.
[13] U.S. Environmental Protection Agency. "Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006," 2008.
[14] U.S. Environmental Protection Agency. "Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006," 2008.
[15] Higgins, B., Hudson, J., Summerell, C., Speers, J., Dyckman, C., Feliciano, A, Deletesky, D., Lemp, C. "Institute for Local Government." *Farmland Protection Action Guide: 24 Strategies for California* (2002).
[16] Pimentel, D., Greiner, A., Bashore, T. "Economic and environmental costs of pesticide use." *Arch Environ Contam Toxicol* 21 (1991): 84–90.
[17] Fowler, C., Mooney, P. "Shattering: Food, Politics, and the Loss of Genetic Diversity." Tucson, AZ: The University of Arizona Press, 1990.
[18] Horrigan, L., Lawrence, R.S., Walker, P. "How sustainable agriculture can address the environmental and human health harms of industrial agriculture." *Environ Health Perspect.* 110, no. 5 (May 2002): 445–456.
[19] U.S. Environmental Protection Agency. "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act." *Federal Register*, 40 CFR Chapter I, 74, no. 239 (2009).
[20] Steinfeld, H., Gerber, P., Wassenaar, T., Castel, V., Rosales, M., and de Haan, C. "Livestock's long shadow: Environmental issues and options." Rome: Food and Agriculture Organization of the United Nations (FAO), 2006.
[21] Garnett, T. "Meat and dairy production & consumption: Exploring the livestock sector's contribution to the UK's greenhouse gas emissions and assessing what less greenhouse gas intensive systems of production and consumption might look like." Food and Climate Research Network Report, 2007.
[22] Pimentel, D., Pleasant, A., Barron, J., Gaudioso, J., Pollock, N., Chae, E., Kim, Y., Lassiter, A., Schiavoni, C., Jackson, A., Lee, M., and Eaton, A. "U.S. Energy Conservation and Efficiency: Benefits and Costs." *Environment, Development and Sustainability* 6 (2004): 279–305.
[23] Pesticide Action Network North America Regional Center. "Disrupting the Balance: Ecological Impacts of Pesticides in California." San Francisco: Autumn Press, 1999.

The Attorney General and Health

The Attorney General's Office's policies and priorities have a direct and significant impact on the health and safety of Californians because of the Attorney General's broad purview, expansive power, and mandate to protect the public's safety. This Office affects health in numerous ways, including by protecting consumers, reducing violence, and reducing exposures to toxic chemicals.

Consumer Protection and Health

- Fraudulent activity contributes to increases in foreclosure rates and loss of homeownership has numerous physical and mental health consequences for individuals and families.
- Advertising unhealthy foods to children contributes to poor nutrition and to overweight and obesity among youth.[1]
- Deceptive advertising of certain low-nutrient processed foods to suggest equivalence with fresh foods induces poor food choices and undermines efforts to educate children about proper nutrition.

Opportunities to Address Consumer Protection and Health

- The Attorney General should continue to investigate and prosecute loan modification scam artists and phony foreclosure-relief services.
- The Attorney General should continue to enforce against any violators of state housing law, such as cities failing to meet their share of regional housing needs.
- The Attorney General can take legal action to address deceptive advertising claims on low-nutrient products.
- The Attorney General has a potential role in analyzing legal barriers to siting of healthy food establishments such as full-service grocery stores, farmers' markets, and mobile produce vending operations.

Violence and Health

- Violence is a leading cause of injury, disability, and premature death. There are disproportionately high rates of domestic and neighborhood violence in low-income communities and communities of color,[2] contributing to the poor health outcomes experienced within these populations.
- Persons exposed to violence as children often use behaviors such as smoking and alcohol use as coping mechanisms, putting them at greatly increased risk of developing chronic disease as adults.[3]
- Neighborhood violence, and the fear of it, can undermine attempts to improve outdoor physical activity levels, exacerbating existing illnesses and increasing the risk for onset of disease.[4,5,6,7,8,9,10,11,12,13]

Opportunities to Address Violence and Health

- The Attorney General could revive the programs of its now-defunct Crime and Violence Prevention Center that enhanced multi-sector collaboration to reduce violence (e.g., law enforcement, mental health, social services, community policing), and assist children exposed to trauma and violence in the home (e.g., Safe from the

Start program).

- The Attorney General could renew the Safe Passages Partnership to protect children from violence when traveling to and from school by foot or bicycle, thereby encouraging active transportation.
- The Attorney General can employ the bully-pulpit to advance an integrated prevention-intervention-suppression-enforcement approach to broadly address violence across California.

Environmental and Natural Resources Law

- The Attorney General has the independent power and duty to protect the natural resources of the State from pollution, impairment, or destruction in furtherance of the public interest.
- Exposure to toxins from hazardous waste sites, polluting facilities, air emissions, consumer products, and other sources adversely affects public health.
- The quality of the built environments in which people live, work, and play significantly impacts health. Many decisions surrounding the design, planning, and building of these environments are made at the local level.
- The Attorney General can assert significant influence over the California Environmental Quality Act (CEQA) process, which identifies climate change as an environmental impact within the scope of CEQA.

Opportunities to Improve Health through Environmental and Natural Resource Preservation

- The Attorney General should continue to maintain a web information source of CEQA mitigation measures pertaining to smart growth and non-vehicular transportation, and to provide assistance to localities in incorporating such measures into planning documents. When commenting on Draft Environmental Impact Reports, the Attorney General could make recommendations regarding project alternatives and feasible mitigation measures that provide public health as well as greenhouse gas reduction benefits, such as measures that increase community food security.
- The Attorney General currently represents the Department of Toxic Substances Control in cases regarding violations of hazardous materials and hazardous waste laws, and participates in a variety of Proposition 65 cases regarding toxics exposure. The Attorney General can use his or her prosecutorial discretion to initiate Proposition 65 cases that confer significant public health benefits.

---

[1] Kaiser Family Foundation. "The Role of Media in Childhood Obesity." February 2004.
[2] Sells, C.W. and Blum, R.W. "Morbidity and mortality among US adolescents: An overview of data and trends." *American Journal of Public Health* 86, no. 4 (1996): 513-519.
[3] Feletti, Vincent J. "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study." *American Journal of Preventive Medicine* 14, no. 4 (May 1998): 245-258.
[4] Loukaitou-Sideris, A. "Is it safe to walk?: Neighborhood safety and security considerations and their effects on walking." *Journal of Planning Literature* 20, no. 3 (2006): 219-32.
[5] Weir Weir, L.A., Etelson, D., Brand, D.A. "Parents' perceptions of neighborhood safety and children's physical activity." *Preventive Medicine* 43, no. 3 (2006): 212-7.

[6] Molnar, B.E., Gortmaker, S.L., Bull, F.C., et al. "Unsafe to play? Neighborhood disorder and lack of safety predict reduced physical activity among urban children and adolescents." *American Journal of Health Promotion* 18, no. 5 (2004): 378-386.
[7] Harrison, R.A., Gemmell, I., Heller, R.F. "The population effect of crime and neighbourhood on physical activity." *Journal of Epidemiology and Community Health* 61 (2007): 34-39.
[8] Sallis, J.F., King, A.C., et al. "Perceived environmental predictors of physical activity over 6 months in adults: Activity counseling trial." *Health Psychology* 27, no. 2 (2008): 214.
[9] Eyler, A.A., Matson-Koffman, D., et al. "Quantitative study of correlates of physical activity in women from diverse racial/ethnic groups: The women's cardiovascular health network project summary and conclusions." *American Journal of Preventive Medicine* 25, 3 Suppl 1 (2003): 93–103.
[10] Bennett, G.G., McNeil, L.H., et al. "Safe to walk? Neighborhood safety and physical activity among public housing residents." *PLoS Medicine* 4, no. 10 (2007): e306.
[11]Yancey AK, Kumanyika SK. Bridging the gap: Understanding the structure of social inequities in childhood obesity. *American Journal of Preventive Medicine*. 2007;33(4S1): S172-S174.
[12] Neckerman, K.M., Bader, M., et al. "Measuring food access in urban areas." *National Poverty Center,* Working Paper 2009, accessed on July 30, 2009, www.npc.umich.edu/news/events/food-access/index.php.
[13] Rohrer, J.E., Arif, A.A., et al. "Unsafe neighborhoods, social group activity, and self-rated health." *Journal of Public Health Management and Practice* 10, no. 2 (2004): 124-129.

Health and Community Services and Development

The Department of Community Services and Development (CSD) oversees federal programs to help low-income families achieve and maintain self-sufficiency, meet their home energy needs, and reside in housing free from the dangers of lead hazards. CSD administers California's funding share for several federal programs including the Community Services Block Grant (CSBG), American Recovery and Reinvestment Act (ARRA) CSBG, the Low-Income Home Energy Assistance Program, the Weatherization Assistance Program, the ARRA Weatherization Assistance Program, and the Lead-Based Paint Hazard Control Program. The department fosters strong partnerships with local community organizations to promote people's health.

Community Services Reduce Poverty and Influence Behavior and Living Conditions

- Social determinants of health, including poverty and income, influence quality of life.[1] Low socioeconomic status and poverty increases risk for disease and poor health outcomes including, cardiovascular disease, arthritis, diabetes, respiratory diseases, some cancers, and mental distress.[2]
- Community services can provide access to resources such as emergency food assistance, nutritional education and counseling, job training, employment, asset development, education, housing, emergency shelter, and other necessities.
- Community services can be essential in supporting behaviors such as healthy eating, and as providers of improved living conditions and employment resources, which in turn impact health.

Home Energy and Utility Assistance Reduces Exposure to Hazards

- High household energy costs take resources away from other essentials like food and rent.
- Exposure to carbon monoxide emissions from heat sources not licensed for indoor use, like propane or other barbeques, can increase risk of death.
- Low-income households who receive utility assistance to meet their immediate home heating and/or cooling needs can reduce the likelihood of extreme heat or cold-related illnesses or death.

Weatherization Assistance Improves Energy Efficiency and Protects Household Health and Safety

- Improved building and home weatherization can lead to reduced heating and cooling costs and improved energy efficiency of homes. More efficient homes have lower energy costs, allowing households a greater percentage of income to spend on other necessities, like health care and food, while reducing carbon pollution that contributes to climate change.
- Energy-efficient retrofits reduce climate change impacts, such as the spread of climate-sensitive diseases, reduced air quality, extreme weather events, and direct temperature effects.

Lead-Based Paint Hazard Control Improves Health

- Removal of lead-based paint in low-income privately owned housing can create a healthier environment for those living in the dwelling.
- Targeted removal of lead-based paint in homes with children less than six years of age can dramatically reduce the likelihood of acute or chronic illness or neurological conditions resulting from lead poisoning.

Opportunities for Healthy Community Services and Development in California

- Enhancing job training, asset development, nutrition education, and other programs regarding emergency assistance can increase access to housing, especially for children; increase access to communities with strong resources and infrastructure; and increase the quality of life for California's low income residents.
- Improving energy policy and programming efforts, including utility assistance programs and weatherization efforts, can make adequate heating and cooling of homes more affordable, reduce toxic exposures, increase household economic resources by lowering energy bills and reduce carbon pollution.
- Collaborating with health partners can provide expertise and support during the development and implementation of policies that maintain the health and safety of the current housing stock.
- Channeling resources to neighborhoods with low-income populations can contribute to strong, vibrant, healthy communities.
- Engaging the populations served by community service programs in program development and implementation can contribute to enhanced health and other community benefits.
- Increasing education, social marketing and strategic communication efforts regarding potential hazards in the home and access to local programming and services can increase utilization and improve community health outcomes.
- Monitoring and evaluating the effectiveness of different strategies for meeting housing and health goals and reporting the findings across agencies can inform strategies and approaches to improve communities and promote community health across the state.

CDPH would like to thank the California Department of Community Services and Development for its participation in developing this brief.

---

[1] Brennan Ramirez, L.K., Baker, E.A., Metzler, M. *Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2008.

[2] Pleis, J.R., Lethbridge-Çejku, M. "Summary health statistics for U.S. adults: national health interview survey." National Center for Health Statistics: *Vital Health Statistics 2007* 10, no. 235 (2006). http://www.cdc.gov/ nchs/nhis.htm.

The Environment and Health

The environment can have a big influence on health. The quality of our environment – including the air we breathe, the water we drink, the land we live on, and the materials we surround ourselves with – all impact health. That means that environmental policies have a tremendous and clear influence on health.

Air Quality and Health

- Pollution is produced by a variety of mobile and stationary sources, from cars and trucks and construction equipment to refineries and ports and industrial sites to ships and rail yards.[1] Pollution can also be created by more natural processes, such as wood burning.
- Outdoor air pollution is a serious problem in most urban areas as well as in many rural areas. Nearly all Californians (about 99 percent) live in areas that fail to meet the state's health-based ozone and/or particulate matter standards.[2]
- Air pollution can have both short- and long-term effects on health. Examples include increased respiratory symptoms, decreased lung function, aggravated asthma, irregular heartbeat, heart attacks, and premature death in people with heart or lung disease.[3]
- Each year premature deaths, hospital admissions, respiratory illnesses, and school and work absences caused by the effects of ozone and fine particulate matter at levels above federal air-quality standards in the San Joaquin Valley and South Coast Air Basin (including Los Angeles, San Bernardino, Riverside, and Orange Counties) cost California an estimated $28 billion.[4]
- Sources of air pollution are frequently located near low-income communities and communities of color, leading to inequitable health impacts for those communities.
- Children and the elderly are particularly vulnerable to the health effects of air pollution.

Air Quality and Health Opportunities

- Policies that prioritize ameliorating disparities in air quality would significantly improve the health of low-income communities and communities of color.
- Regulatory actions and other incentives can cut emissions from pollution sources.
- Regulatory approaches can be adopted that account for the cumulative burden of pollution.
- Increasing the enforcement of idling regulations for trucks and buses would reduce exposure to exhaust.
- Continuing to shape policies around California's freight transportation system, can reduce pollution at ports, on truck routes, at rail yards, and in communities.
- Promoting the siting of playgrounds, athletic fields, and housing away from major outdoor air pollutant sources such as high-traffic roads and freeways is another way to reduce exposure.
- The adoption of wood-burning ordinances reduces exposure to harmful particulate matter.
- Any health-based regulations should account for the increased vulnerability of exposure to children.
- Utilizing risk assessment tools that acknowledge the impact multiple and cumulative exposures have on populations across the lifespan can inform the construction of a

more comprehensive and integrated approach to protect communities from environmental health risks.

Land, Soil, Toxics and Health

- Land and soil pollution is often the result of industrial and agricultural processes that release toxic materials into the environment.[5] The most common chemicals involved in soil pollution are petroleum hydrocarbons, solvents, pesticides, lead, and other heavy metals.[6]
- The effects of soil pollution are exacerbated when soil contaminants enter water resources.
- Acute health impacts from exposure to soil contaminants include burning, itching, and stinging of the nose, throat and skin, sometime causing burns and blisters. Nausea, dizziness, and diarrhea are common. Extreme exposure can cause convulsions, difficulty breathing, seizures, and death.[7]
- Chronic health effects of soil contaminants include brain and nervous system damage, birth defects, reproductive harm including infertility, liver, kidney, and lung damage, and blood and immune system disorders.[8]
- Additionally, many soil contaminants have been linked to leukemia, lymphoma, and cancers of the brain, breast, prostate, testis, and ovaries.[9]
- Toxic sites are frequently located near low-income communities and communities of color, leading to inequitable health impacts.[10]
- The public can be exposed to toxic and other unhealthy compounds found in all manner of consumer products.
- Children's developing bodies are more susceptible to exposure to soil pollutants. Children's behavior increases their risk to exposure because they come into more contact with the ground and put their hands to mouth more often than adults.[11]

Land, Soil, Toxics and Health Opportunities

- Land use policies can help ensure that sensitive sites such as housing and schools are separated from industrial facilities and intensive agriculture, reducing exposure to their toxic byproducts.
- Increased resources for brownfield remediation and development afford an opportunity to clean up unhealthy land and provide housing and economic activity on formerly polluted sites.
- Policies that encourage the development of and incentives for alternatives to the most toxic substances can significantly reduce exposure to these substances.
- Clear health protective safety protocols for the use and disposal of toxic materials can minimize the potential for land and soil contamination.
- Educational campaigns and proactive policies can create markets for agricultural products that are not reliant on intensive pesticide use.
- Toxics and other unhealthy compounds can be increasingly regulated and/or prohibited in the manufacturing of consumer goods.
- Employing tools that assess the cumulative risk of pollutants and toxics can support the development of regulations that provide sufficient protection for vulnerable populations, including children.

Water Quality and Health

- Water pollution that impacts health comes from both point sources (e.g., water discharge from an industrial site) and non-point sources (e.g., pesticides from agricultural lands, oil and grease from urban runoff, and deposition from air pollution).[12]
- Poor water quality can result in acute effects that occur within minutes or days after a person consumes the water. Bacteria and viruses, for example, can cause severe gastrointestinal problems.[13]
- Chronic effects occur after long-term exposure to water pollutants, such as chemicals (pesticides and solvents) and minerals (arsenic). Examples of resulting ailments include cancer as well as liver, kidney, neurological and reproductive problems.[14] In addition, pollutants like mercury can accumulate in animals and plants and then be passed on when later consumed by people.
- There is rising and compelling evidence that communities of color and low-income communities disproportionally face a lack of access to clean drinking water, water improvement projects, and clean and safe water bodies.
- Children's developing bodies are particularly vulnerable to the health effects of water pollution, as are those with compromised immune systems.

Water Quality and Health Opportunities

- Policies that reduce inequities in water quality and access and focus on pollution prevention – particularly in low-income communities and communities of color – can reduce health disparities.
- Ensuring timely and effective monitoring and enforcement of water quality standards can reduce health effects.
- Technical assistance allows low-income communities to access existing funding for water infrastructure improvements (including waste water) and helps maintain water quality and access.
- Funding for the ongoing treatment of contaminated water reduces the high cost of water for low-income communities and allows funds to be spent on other necessities.
- Increased public participation in decision-making processes related to water quality and access will provide for more responsive policy making.
- Regularly updating quality standards for all point and non-point water sources ensures lower health risks. Also, proactively investigating the health impacts of water contaminants both individually and cumulatively with a particular emphasis on sensitive populations such as overburdened communities and children can result in more health protective standards. Research should focus both on currently regulated pollutants as well as other contaminants for which no safety data are known.
- Any health-based regulations should account for the increased vulnerability of children to exposure.

---

[1] Bell, J. & Cohen, L. "The Transportation Prescription: How Transportation Policies and Plans Influence Health." PolicyLink & Prevention Institute, 2009.

[2] California Air Resources Board. "Appendix A: Quantification of the Health Impacts and Economic Valuation of Air Pollution from Ports and Goods Movement in California." *Emission Reduction Plan for Ports and Goods Movement* (2006):14.

[3] World Health Organization Regional Office for Europe. A*ir quality guidelines for Europe, 2nd ed.* European Series, No. 91. Copenhagen: WHO Regional Publications, 2000.
[4] California Air Resources Board. "Appendix A: Quantification of the Health Impacts and Economic Valuation of Air Pollution from Ports and Goods Movement in California." *Emission Reduction Plan for Ports and Goods Movement* (2006):14
[5] U.S. Environmental Protection Agency. *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006.* 2008.
[6] Pimentel, D., Greiner, A., Bashore, T. "Economic and environmental costs of pesticide use." *Arch Environ Contam Toxicol* 21 (1991): 84–90.
[7] Pesticide Action Network North America Regional Center. *Disrupting the Balance: Ecological Impacts of Pesticides in California.* San Francisco: Autumn Press, 1999.
[8] Horrigan, L., Lawrence, R.S., and Walker, P. "How sustainable agriculture can address the environmental and human health harms of industrial agriculture." *Environ Health Perspect.* 110, no. 5 (May 2002): 445–456.
[9] Pimentel, D., Greiner, A., and Bashore, T. "Economic and environmental costs of pesticide use." *Arch Environ Contam Toxicol* 21 (1991): 84–90.
[10] Ash, M., Boyce, J., Chang, G., Scoggins, J., and Pastor, M. "Justice in the Air: Tracking Toxic Pollution from America's Industries and Companies to Our States, Cities, and Neighborhoods." University of Massachusetts at Amherst: Political Economy Research Institute, 2009.
[11] Eggleston, P.A., Diette, G., Lipsett, M., Lewis, T., Tager, I., McConnell, R., Chrischilles, E., Lanphear, B., Miller, R., and Krishnan, J. "Lessons Learned for the Study of Childhood Asthma from the Centers for Children's Environmental Health and Disease Prevention Research." *Environmental Health Perspectives* 113, no. 10 (October 2005): 1430–1436.
[12] Majewski, M.S. and Capel, P.D. *Pesticides in the atmosphere: Distribution, trends, and governing factors.* Chelsea, Michigan: Ann Arbor Press, 1995.
[13] Costas, K., Knorr, R.S., and Condon, S.K. "A case-control study of child Leukemia Woborn, Massachusetts: The relationship between Leukemia incidence and exposure to public drinking water." *Science of the Total Environment* 300 (2002): 23-35.
[14] Fewtrell, L. and Bartram, J. "Water quality: Guidelines, standards and health: Assessment of risk and risk management for water-related infectious disease." World Health Organization, 2001.

Housing and Health

The mission of the California Department of Housing and Community Development (HCD) is to provide leadership, policies, and programs to preserve and expand safe and affordable housing opportunities and promote strong communities for all Californians. To achieve its mission, HCD oversees programs that award loans and grants for the construction, acquisition, rehabilitation, and preservation of affordable rental and ownership housing, homeless shelters and transitional housing, public facilities and infrastructure, and the development of jobs for lower-income workers. In addition, HCD develops state wide housing standards, and develops and implements housing and land use policies, including review and certification of local general plan housing elements.

How do housing and health intersect?

Housing is important to healthy and sustainable communities because a community is strongest and most successful when workers and families, especially children, have safe and affordable homes. Housing and neighborhood conditions can promote or adversely impact health outcomes. Health is especially influenced by housing location, home maintenance and design, and housing costs.

Housing Location and Health

- The location and design of housing can increase social interaction and provide access to economic opportunity.[1]
- Housing location affects access to resources such as parks, recreation, grocery stores with healthy food, jobs, schools, and other community necessities. Housing location therefore influences people's behaviors such as physical activity, access to healthy food, and means of transportation, which in turn impact health. For example, fruit and vegetable consumption increases significantly when there are more supermarkets located in a neighborhood.[2]
- Neighborhood characteristics can impact health outcomes. For example, neighborhoods with higher concentrations of liquor stores show higher rates of pedestrian injuries, childhood accidents, assaults, child abuse injuries, alcohol-related hospitalizations, and drunk driving incidents.[3]
- When children have easy access to playgrounds, their physical activity level increases. Safety is particularly important; when people feel safe in their neighborhoods, they spend more time walking,[4] biking, being in the streets and parks, and on public transportation.[5] When children live near their schools and can safely walk or bicycle there, physical activity increases, providing a number of important health benefits.[6] Housing located near high volume highways, ports, and bus terminals without adequate mitigation can expose children to high levels of diesel pollution, contributing to a disproportionately high number of low-income children with poorly controlled asthma.[7]

Housing Location and Health Opportunities

- Land use and transportation policies, including the housing element of general plans, require planning and zoning for housing for all economic segments and support infill or transit-oriented development and can therefore increase access to, and the supply of affordable housing. These policies support other public policy

objectives, such as improved air quality, access to community resources and services, preservation of natural and agricultural resources, lower greenhouse gas emissions, expansion and retention of jobs, and promotion of healthy behaviors.
- Fair housing laws and antidiscrimination policies can increase access to housing, especially for children, increase access to communities with significant public resources and infrastructure, and increase neighborhood redevelopment with access to jobs, resources, and essential services, thereby also improving health.

Housing Conditions, Maintenance, Design, and Health

- Poor building maintenance leading to hazardous stairs, balconies, and windows, and a lack of safety devices such as smoke detectors, can result in injuries, emergency room visits, and hospital admissions.[8] In addition, poor heating and cooling systems have been associated with increased risk of cardiovascular disease,[9] or in extreme conditions can directly or indirectly lead to death, especially for vulnerable populations, like the elderly.[10,11]
- Building design can impair indoor air quality with off-gassing from building materials and furnishings, asbestos, radon, or carbon monoxide.[12] Older homes with deteriorating lead-based paint are the primary source of exposure to lead for children; lead poisoning can cause long-term effects on brain and nervous system development which may lead to reading disabilities, reduced IQ, and behavioral problems.[13,14]
- Over-crowded housing can increase exposure to second-hand smoke or infectious disease.[15] Psychological distress such as being more anxious, aggressive, or socially withdrawn may result from over-crowded housing,[16] and children in these situations have been shown to have poorer cognitive and psychomotor development.[17]
- A lack of natural light has been associated with depression; designs that maximize natural light can improve psychological wellness.[18]
- Poorly maintained homes may contain mold, dust mites, pest infestations, and rodent allergens – all risk factors that trigger asthma or contribute to the development of asthma.[19] In fact, residential exposures are thought to account for approximately forty percent of diagnosed asthma among children.[20]
- Supportive services and universal design can enable healthy aging-in-place in the homes and communities where people already live. Building and neighborhood design, such as the presence or absence of sidewalks, can hamper or promote the ability of disabled persons to engage with and in their communities.[21]

Housing Conditions, Maintenance, Design, and Health Opportunities

- Health and safety code enforcement can remove hazards, promote safety, and maintain the quality of current housing stock.
- Providing guidance and outreach on healthy building materials can help developers, builders, and the public increase the use of safe and healthy building materials and reduce negative environmental and climate impacts.
- Building and development of new housing using existing guidelines for asthma-safe housing is one way to reduce problems associated with asthma and other respiratory illness.
- Supporting universal design in new and rehabilitated housing can allow aging populations to live independently and safely remain in their familiar homes and

communities.

Affordable, Integrated Housing and Health

- Difficulty accessing safe, healthy housing is particularly an issue for lower income populations, minority populations, and populations with disabilities. For example, in 2005, fourteen percent of low-income renters lived in homes with moderate-to-severe physical problems, compared to six percent of all residents.[22]
- When housing is affordable, individuals and families have increased choice of where to live and are less likely to move frequently. Neighborhood and residential stability has a number of benefits; academic, emotional, and behavioral problems, for example, are associated with residential instability for children.[23]
- Affordable housing allows families more resources for other goods and services, health care needs, or even basic necessities like food.[24,25] For example, those who spend more on housing are less likely to buy health insurance.[26] Also, a sufficient supply of affordable housing means that individuals do not have to choose to live in housing with substandard conditions in order to live within their means.[27]
- Children are particularly impacted by residential instability, often showing poor performance and attendance in school, being less likely to have a medical "home," and suffering from other acute and chronic medical conditions.[28]
- The availability of affordable housing reduces homelessness (a major health and mortality risk factor) and stress. In addition, there are affordable housing strategies which increase access to neighborhoods with health and community-promoting resources, such as healthy foods, health care, recreation, and work.[29]
- Racial and economic segregation in housing is associated with poor health outcomes and increased segregation is related to inequities in health outcomes.[30] Mixed-income housing is considered a promising strategy to help reduce violence.[31]

Affordable, Integrated Housing and Health Opportunities

- Fair housing laws and anti-discrimination policies can promote affordable rental and homeownership opportunities.
- Energy policy and programming such as energy assistance programs and green building and efficiency standards can make adequate heating and cooling of homes more affordable, reduce toxic exposures, and increase household economic resources by lowering energy bills.
- Financing for affordable housing, transit-oriented and infill development, homeless shelters, and other services can increase access to safe, stable, and healthy housing.
- Significantly expanding the supply of affordable rental housing is essential, as California has its greatest shortage of affordable units for those who choose or can only afford to rent.

[1] U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Promote Healthy Homes.* Office of the Surgeon General, 2009.

[2] Treuhaft, S. & Karpyn, A.. *The Grocery Gap: Who Has Access to Health Food and Why It Matters.* PolicyLink, 2010.
[3] Pacific Institute. *Liquor Stores and Community Health.* 2009. http://www.pacinst.org/reports/measuring_what_matters/issues/liquor_store.pdf.
[4] Bennett, G.G., et al. "Safe to Walk? Neighborhood Safety and Physical Activity Among Public Housing Residents." *PLOS Med 4*, no. 10 (2010): e306.
[5] Lee, Virginia, Srikantharajah, J. & Mikkelsen, L.. *Fostering Physical Activity for Children and Youth: Opportunities for a Lifetime of Health.* The Convergence Partnership, 2010.
[6] DiGuiseppi, C., Roberts, I., Li, L., & Allen, D. "Determinants of Car Travel on Daily Journeys to School: Cross Sectional Survey of Primary School Children." *British Medical Journal 316 (1998)*: 1426-1428.
[7] Flournoy, Rebecca. *Breathing Easy from Home to School: Fighting the Environmental Triggers of Childhood Asthma.* PolicyLink, 2008.
[8] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[9] Krieger, J. & Higgins, D.L. "Housing and Health: Time Again for Public Health Action." *Public Health Matters 92*, no. 5:758-768.
[10] Low Income Home Energy Assistance Program. *Report to Congress on: Preventing Loss of Life Due to Extreme Indoor Temperatures.* U.S. Department of Health and Human Services, 2007.
[11] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[12] Krieger, J. & Higgins, D.L. "Housing and Health: Time Again for Public Health Action." *Public Health Matters 92*, no. 5:758-768.
[13] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[14] National Institutes of Health. *Lead Poisoning.* http://www.nlm.nih.gov/medlineplus/ency/article/002473.htm.
[15] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[16] U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Promote Healthy Homes.* Office of the Surgeon General, 2009.
[17] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[18] U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Promote Healthy Homes.* Office of the Surgeon General, 2009.
[19] Flournoy, Rebecca. *Breathing Easy from Home to School: Fighting the Environmental Triggers of Childhood Asthma.* PolicyLink, 2008.
[20] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[21] U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Promote Healthy Homes.* Office of the Surgeon General, 2009.
[22] U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Promote Healthy Homes.* Office of the Surgeon General, 2009.
[23] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[24] Robert Wood Johnson Foundation. *Where We Live Matters for Our Health: The Links Between Housing and Health.* Issue Brief 2, September 2008.
[25] Anderson, Laurie M., et al. "Providing Affordable Family Housing and Reducing Residential Segregation by Income." *American Journal of Preventive Medicine 24*, 3S (2003): 47-67.
[26] Levy, Helen and DeLeire, Thomas. "*What Do People Buy When They Don't Buy Health Insurance and What Does That Say About Why They Are Uninsured?"* Working Paper 9826. Cambridge, MA: National Bureau of Economic Research, 2003.
[27] Coburn, J. *Toward the Healthy City*. MIT Press: Cambridge MA, 2009.
[28] Anderson, Laurie M., et al. "Providing Affordable Family Housing and Reducing Residential Segregation by Income." *American Journal of Preventive Medicine 24*, 3S (2003): 47-67.

[29] Enterprise Community Partners & Center for Housing Policy. *Affordable Homes Matter: Summary of Health and Education Comprehensive Research Analyses.* http://www.enterprisecommunity.org/about/media/news_releases/documents/2007/july/housing_impacts_fact_sheet.pdf.
[30] Acevedo-Garcia, D., Lochner, K.A., Osypuk, T.L., and Subramanian, S.V. "Future Directions in Residential Segregation and Health Research: A Multilevel Approach." *American Journal of Public Health* 93, no. 2 (2003): 215-221.
[31] Baer, N. & Rattray, Tracey. *Planning Communities: What Health Has To Do With It.* Contra Costa Health Services, June 2007.

Natural Resources and Health

Having access to green and open spaces, parks, and recreational facilities impacts health. The California Department of Parks and Recreation manages more than 275 park units, including over 280 miles of coastline; 625 miles of lake and river frontage; nearly 15,000 campsites; and 3,000 miles of hiking, biking, and equestrian trails. The California Department of Forestry and Fire Protection protects and improves timberlands, wildlands, and urban forests and manages eight Demonstration State Forests that provide for public recreation and research and demonstration of good forest management practices. Together, these departments play an important role in the management of natural resources and hence the health of people and their environment.

Background

- Contact with nature, including open and green spaces, forests, and outdoor parks and recreational facilities, increases opportunities for physical activity, which is protective against premature death and chronic diseases including cardiovascular disease, type 2 diabetes, some cancers, hypertension, obesity, and osteoporosis.[1] Physical activity also improves mental and psychological health, reducing depression, anxiety, and stress.
- Research indicates that children who spend more time in nature demonstrate more advanced cognitive and emotional development.[2]
- Air pollutants can lead to hospitalization and early death from cardiovascular disease. Trees and other vegetation can improve air quality by filtering out pollutants (e.g., ozone and nitrogen dioxide), intercepting particulate matter, and sequestering greenhouse gas emissions.[3] Diminished air quality due to high concentrations of these pollutants can cause breathing problems, trigger asthma, irritate eyes, reduce lung function, and cause lung diseases.[4]
- Shade from trees reduces buildings' demand for energy and can provide some protection from high temperatures during extreme heat events.[5] Shade from trees can also provide protection from cancer-causing UV radiation. High temperatures increase risk of heat-related illness and death, while increased energy demand can contribute to air pollution and burden low-income households with higher energy expenses.
- The quantity and quality of ground and surface water is critical to human and ecosystem health.[6]
- Plant life protects California's water supply by protecting watersheds, providing flood protection and permeable surfaces in urban areas to reinforce storm water management, and reducing pollutant loads in runoff as it recharges groundwater aquifers.

Parks, Recreation Facilities, and Health

- Respondents in a recent state wide survey reported spending time being physically active in parks, demonstrating the importance of recreation areas in promoting physical activity.[7] The most popular outdoor activity listed (by 74.2 percent of the respondents) was walking for fitness or pleasure.[8]

- Proximity of parks to where people live influences frequency of park visits. People who have more access to parks are more active.[9]
- Easily accessible park and recreation facilities can play a vital role in preventing significant health ailments and subsequent healthcare costs. Adequate lighting, availability of restroom facilities and drinking water, park design, and maintenance affect park use.[10] When people have limited- or no-access to parks they have lower physical activity rates.[11] Park access is usually lower in poor neighborhoods, exacerbating the other health impacts of poverty by reducing access to activity-promoting facilities.[12]
- Parks offer opportunities to observe nature, which can improve concentration, increase productivity, and support recovery from stress.[13] Contact with nature can promote healing from severe trauma, cancer, depression, and anxiety.[14]
- Well-maintained parks and recreation facilities can help reduce crime in a community. The presence of park users in and around facilities can increase surveillance and discourage criminal activities.[15] The physical and psychological consequences of crime and fear of crime negatively impact health. People who feel safe are more likely to be physically active.[16]

Opportunities to Support Parks, Recreation Facilities, and Health

- Integrating greenway plans, trails, and parks with land use, transportation, and economic development plans can ensure access to natural areas and spaces for physical activity.
- Subdivision ordinances that require reserving a portion of land for parks, trails, and greenways support the development of sustainable active communities.
- The development and maintenance of recreational facilities and preservation of green and open spaces in park-poor communities with a high incidence of obesity, unemployment, and high risk behaviors helps achieve higher health gains.
- Identifying and developing areas for physical activity, including unstructured play, in parks and other open space areas can encourage physical activity and exploration
- Land acquisitions and outdoor recreation improvements that enhance or preserve parks, forests, open space, and wetlands can improve health by making nature more available and by mitigating the health impacts of climate change by capturing carbon.
- Funding efforts to rehabilitate, and provide ongoing maintenance for, existing facilities or utilizing joint-use agreements can maximize the current availability of recreational trails and facilities that support outdoor-based activity including walking, jogging, hiking, biking, and swimming, improving access to health-promoting spaces.

Forestry, Fire Protection, and Health

- Forests offer opportunities for physical activity as well as contact with nature. Management and protection of natural resources and forests support not only the health of the diverse ecosystems, wildlife, and watersheds across the state, but increase the protection of residents from wildfire. Smoke from wildfires contains a mixture of gases and particulate matter and can impart significant health risks from diminished air quality. Exposure to smoke can cause respiratory irritation, aggravation of pre-existing respiratory and cardiovascular disease, and death.[17]

- Mature tree canopies can reduce air temperature five to ten degrees, helping to counteract the urban heat island effect and reduce the production of harmful ground-level ozone.[18] Ground-level ozone is a major component of smog, which can irritate eyes and lungs and exacerbate asthma. [19]
- Urban shade trees can reduce building air conditioning needs, lower household energy costs, and decrease energy demand, which can in turn decrease pollutant emissions from electric power plants and support improved air quality.[20,21]
- Trees and other vegetation can reduce stormwater runoff volume and remove pollutants from the water, protecting watersheds that are vital to ecosystem integrity.[22]
- Trees and other vegetation can reduce crime in urban areas, rather than serving as hiding places for crime as widely believed.[23,24]
- Trees increase bikeability and walkability in cities by providing shady, pleasant places to engage in physical activity, thus increasing the likelihood of physical activity.[25]
- Trees in California provide an average yearly return on investment of between 2:1 and 4:1, depending on the climatic region of the state.[26] Benefits include energy savings, air quality improvement, stormwater control, and property value increases.

Opportunities to Support Forestry, Fire Protection, and Health

- Protecting the existing tree canopy and supporting sustainable growth of the tree population in California can remove significant amounts of harmful pollutants from the air.
- Facilitating the planting of trees in urban areas and the development of strong tree management plans and programs will arrest the decline of urban forest resources, provide employment opportunities, and increase the environmental, economic, and social quality of urban communities.
- Vegetation management programs that establish fuel breaks and eliminate heavy fuel accumulations reduce the risk of wildfire incidents and subsequent air quality impacts.
- Planting tree species that are highly efficient at removing pollutants and particles from the air can maximize air quality improvements.[27,28,29]
- Protecting the state's watersheds, wildlife habitat, timber, and recreation resources ensures the health and productivity of these resources and ecosystems and the availability of employment and economic opportunities that are critical to the sustained prosperity of communities across the state.

---

[1] U.S. Department of Health and Human Services. "Physical activity fundamental to preventing disease." *Office of the Assistant Secretary for Planning and Evaluation*, 2002.
[2] Burdette, H. & Whitaker, R. "Resurrecting free play in young children: Looking beyond fitness and fatness to attention, affiliation, and affect." *Archives of Pediatric & Adolescent Medicine* 159 (2005): 46-50.
[3] Nowak, D. "The effects of urban trees on air quality." Syracuse, NY: USDA Forest Service, 2002.
[4] World Health Organization Regional Office for Europe. *"A*ir quality guidelines for Europe."(2nd ed.) Copenhagen: WHO Regional Publications*, European Series* 91 (2002).
[5] Burden, S. "22 Benefits of Urban Street Trees." *American Journal of Preventive Medicine (*2004).
[6] United Nations Environment Programme Global. *Water Quality for Ecosystem and Human Health.* (2nd ed.), 2008.
[7] California Department of Parks and Recreation. *California Outdoor Recreation Plan-2009-2014.*
[8] California Department of Parks and Recreation. *California Public Opinions and Attitudes Survey 2007.*

[9]Emily, B., Kahn, et al. and the Task Force on Community Preventive Services. "The Effectiveness of Interventions to Increase Physical Activity." *American Journal of Preventive Medicine* 22, no. 4S (2002): 87–88.
[10] Frumkin, Howard. "Healthy Places: Exploring the Evidence." *American Journal of Public Health* 93, no. 9 (September 2003): 1451.
[11] Gordon-Larsen, Penny, et al. "Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity." *Journal of the American Academy of Pediatrics* (Feb. 2006): 417–24.
[12] Wolch, Jennifer, Wilson, John P. and Fehrenback, Jed. "Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis." *Urban Geography* 26, no. 1 (2005): 16.
[13] Leather, P., Pyrgas, M., Beale, D. and Lawrence, C. "Windows in the Workplace." *Environment and Behavior* 30 (1998): 739-763.
[14] Maller, C., Townsend, M., and Brown, P. "Healthy Parks Healthy People: The health benefits of contact with nature in a park context: a review of current literature." Victoria: Deakin University and Parks, 2002.
[15] Kuo, F.E., & Sullivan, W.C. "Environment and crime in the inner city: Does vegetation reduce crime?" *Environment and Behavior*, 33, no. 3 (2001): 343-367.
[16]Harrison, R.A., Gemmel, I., and Heller, R.F. "The population effect of crime and neighbourhood on physical activity: an analysis of 15 461 adults." *J Epidemiol Community Health* 61, no. 1 (Jan. 2007): 34–39.
[17] U.S. Environmental Protection Agency. *How Smoke from Fires can Affect Your Health.* Office of Air and Radiation, 2003
[18] C*alculating the Value of Boulder's Urban Forest.* City of Boulder Water Conservation Office, 2002.
[19] Lovasi, G.S., Quin, J.W., Neckerman, K.M., Perzanowski, M.S., and Rundle, A. "Children living in areas with more street trees have lower prevalence of asthma." *J Epidemiol Community Health* 62 (2008): 647-649.
[20] Wolf, K.L. "City Trees, Nature and Physical Activity." *Facility Management Journal* 20, no. 1 (Jan/Feb 2010): 50-54.
[21] Geiger, J.R. "Fact Sheet #1: Benefits of the Urban Forest." Davis, CA: Center for Urban Forest Research, Pacific Southwest Research Station, USDA Forest Service, March 2001.
[22] Schueler, Thomas R., Holland, Heather K., editors. "Why Stormwater Matters. The Practice of Watershed Protection, an Edited Anthology." Maryland: Center for Watershed Protection, Article 63 (2000).
[23] Kuo, F.E., & Sullivan, W.C. (2001). "Environment and crime in the inner city: Does vegetation reduce crime?" *Environment and Behavior*, 33(3), 343-367.
[24] Donovan, G.H., Prestemon, J.P. "The effect of trees on crime in Portland Oregon." *Environment and Behavior* 1-28 (published online before print October 19, 2010).
[25] Wolf, K.L. 2010 (January/February). City Trees, Nature and Physical Activity. Facility Management Journal 20, 1: 50-54.
[26] US Forest Service, Center for Urban Forest Research. *Urban Forests and Climate Change: Project Reporting Protocol.* 2010.
[27] McPherson, E.G. "Atmospheric carbon dioxide reduction by Sacramento's urban forest." Journal of Arboriculture. 24, no. 4 (1998): 215-223. http://www.fs.fed.us/psw/programs/cufr/products/cufr_26_EM98_9.pdf.
[28] Nowak, D.J. "Strategic tree planting as an EPA encouraged pollutant reduction strategy: How urban trees can obtain credit in State Implementation Plans." Syracuse, NY: Northeastern Research Station, USDA Forest Service, 2007: pg. 7. http://www.wflccenter.org/ts_dynamic/research/22_pdf_file.pdf
[29] Scott, K.I., McPherson, E.G., and Simpson, J.R. "Air pollutant uptake by Sacramento's urban forest." *Journal of Arboriculture* 24, no. 4 (1998): 224-234. http://www.fs.fed.us/psw/programs/cufr/products/cufr_27_KS98_43.PDF

Health and Public Safety: Promoting Effective Gang and Youth Violence Policies

The Governor's Office of Gang and Youth Violence Policy focuses on preventing and reducing gang and youth violence by:[1]

- Monitoring, assessing, and coordinating the state's programs, strategies and funding that address gang and youth violence in a manner that maximizes effectiveness and coordination.
- Identifying and evaluating state, local, and federal gang and youth violence prevention, intervention, and suppression programs and strategies.
- Promoting and funding programs and strategies that rigorous research shows are effective in preventing and reducing gang and youth violence.
- Communicating with local agencies and programs in an effort to promote the best practices for addressing gang and youth violence through prevention, intervention, and suppression.
- Increasing the capacity of probation departments to implement evidence-based practices.

Violence is a leading cause of injury, disability, and premature death.

- In a 2009 CDC survey of US high school students, 7.4 percent reported having been forced to have sex at some point in their lives, 17.5 percent reported carrying a weapon (e.g., a gun, knife, or club) on at least 1 day during the 30 days before the survey, 5.0 percent had not gone to school at least once in the past the 30 days because they felt they would be unsafe at school or on their way to school 10.6 percent had been in a physical fight on school property, and 13.8 percent had seriously considered attempting suicide during the previous 12 months.[2]
- In the US in 2007, more than 696,000 young people aged 10 to 24 years were treated in emergency departments for injuries sustained from violence.[3] Violence costs the United States an estimated $425 billion in direct and indirect costs each year, with approximately $90 billion spent on criminal justice, $65 billion on security, $5 billion on victim treatment, and $170 billion on lost productivity and quality of life.[4]
- In California, 32.7 percent of homicides in 2009 were gang related.[5] In 2008, 5 percent of California's homicides were domestic violence fatalities, with 99 female and 14 male victims.[6]
- Exposure to violence and abuse is associated with increased utilization of mental health services and visits to general practitioners, emergency departments, and hospitals, with those who have experienced abuse accessing health care 2 to 2.5 times as often as those not exposed to abuse.[7,8,9,10]
- Witnessing and experiencing violence at any point in life can contribute to violent behavior and mental health problems such as depression, post-traumatic stress disorder, and anxiety.[11]

Violence disproportionately affects young people of color.

- Homicide is the second-leading cause of death for persons 15 to 24 years of age. It is the leading cause of death for African Americans, the second-leading cause of

death for Hispanic youths, and the third leading cause of death for American Indians, Alaska Natives, and Asian Pacific Islanders in this age group.[12]

- Among males 10 to 24 years of age, the homicide rate for non-Hispanic African-Americans is 58.3 per 100,000 and 20.9 per 100,000 for Hispanics, compared to 3.3 per 100,000 among non-Hispanic Whites.[13]

Violence contributes to chronic disease by impacting healthy eating and active living behaviors and environments.

- Perceptions of safety from crime, violence, and injury are critical determinants of physical activity.[14] Safety perceptions influence people's decisions to walk or bicycle, residents fearful of crime and violence are less likely to use recreational facilities and achieve adequate physical activity.[15,16]
- Safety concerns impact access to food outlets.[17] Psychological and emotional impacts of violence can lead to stress and depression, and cause inability to eat.[18,19]
- Blight contributes to residents' fears of crime and violence, and contributes to increased criminal activity. Neglected buildings, litter, graffiti, deteriorating parks and recreation facilities, and broken windows make residents feel unsafe and contribute to the cycle of community disinvestment.[20] Violence reduces social interactions that would otherwise contribute to community cohesion, which can shape social norms to support health behavior.[21]

Adverse childhood experiences including abuse, neglect, and the incarceration of a family member, increase the risk of multiple health problems and unhealthy behaviors.[22]

- Adverse childhood experiences correlate strongly with health-related behaviors and outcomes during childhood and adolescence, including early initiation of smoking, sexual activity, and illicit drug use, adolescent pregnancies, and suicide attempts.
- Child abuse and other forms of household dysfunction have been linked to poor health outcomes.[23,24] When they reach adulthood, children who were abused or neglected are more likely to smoke cigarettes, abuse alcohol, take illicit drugs, and develop allergies, arthritis, asthma, bronchitis, high blood pressure, and ulcers.[25,26]

Supporting Evidence-Based Gang and Youth Violence Strategies in California

The Governor's Office of Gang and Youth Violence Policy, through its broad purview, proximity to the Governor, and mandate to reduce gang and youth violence, is well positioned to positively impact the health of Californians through reducing violence and the threat of violence.

- Advancing violence prevention efforts that prioritize public health and community improvement benefits can increase support for interventions that extend beyond the criminal justice sphere.
- Ensuring that resources to address violence are distributed appropriately among prevention, intervention, and suppression efforts can support a dynamic system of violence prevention efforts.
- Improving the analysis and online accessibility of publicly available juvenile justice

data and coordinating data systems across multiple sectors can support enhanced planning and the development of coordinated strategies that engage multiple sectors in violence prevention.

- Coordinating or blending funding streams can enable communities to address underlying conditions that contribute to violence and other poor health outcomes. For example, the Office of Gang and Youth Violence Policy has leveraged public funds with support from foundations to provide technical assistance to California cities receiving the Governor's California Gang Reduction, Intervention and Prevention (CalGRIP) initiative grants to implement Safe Community Partnership, a proven gang violence reduction strategy.
- Joint planning and coordination at the local level can encourage multi-sectoral efforts that pair violence prevention strategies with healthy eating and active living efforts to bolster communities' resilience and revitalize neighborhood centers.
- Developing the capacity of community-based service providers to implement and evaluate evidence-based programs can ensure efficacy of locally developed strategic plans designed around evidence-informed strategies, practices, and programs that measure outcomes.
- Developing and implementing performance criteria can support the adoption of uniform community level indicator data that can continuously inform the gang and violence prevention system to reduce duplication of effort, leverage existing initiatives, increase community capacity to deliver effective strategies, and comprehensively monitor agency outcomes.

CDPH would like to thank the Governor's Office of Gang and Youth Violence Policy for its participation in developing this brief.

---

[1] "Governor's Office of Gang and Youth Violence Policy," Accessed on August 3, 2010, http://www.calgrip.ca.gov.
[2] Center for Disease Control and Prevention. (2010). "Youth Risk Behavior Surveillance—United States, 2009." *Surveillance Summaries MMWR* 59, SS-5 (2010).
[3] Prevention Institute. *A Public Health Approach to Preventing Violence: FAQ*. Accessed on August 3, 2010, http://www.preventioninstitute.org/component/jlibrary/article/id-143/127.html.
[4] "Youth Violence: A Report of the Surgeon General," US Department of Health and Human Services.
[5] Sugarman, Josh, et.al. "Youth Gang Violence and Guns: Data Collection in California." *Violence Policy Center* (2009). Accessed on August 3, 2010, http://www.vpc.org/studies/CAgang.pdf.
[6] California Department of Justice. "Homicide Calls 2008." *Criminal Justice Statistics Center's Homicide File 2008*.
[7] Koss, M. P., and Heslet, L. "Somatic consequences of violence against women." *Arch Fam Med* 1, no. 1(September 1992): 53-9.
[8] Middlebrooks, J.S., and Audage, N.C. "The Effects of Childhood Stress on Health Across the Lifespan." Atlanta: Centers for Disease Control and Prevention: National Center for Injury Prevention and Control, 2008. Available at www.cdc.gov/ncipc/pub-res/effects_of_childhood_stress.htm.
[9] Campbell, J., Jones, A.S., Dienemann, J., Kub, J., Schollenberger, J., O'Campo, P., Gielen, A.C., and Wynne, C. "Intimate partner violence and physical health consequences." *Archives of Internal Medicine* 162, no. 10 (2002):1157-63.
[10] McDonald, D. "Violence as a Public Health Issue." Australian Institute on Criminology, 2000. *Trends and Issues in Crime and Criminal Justice series* 163. Available at http://www.aic.gov.au/publications/tandi/ti163.pdf.

[11] Middlebrooks, J.S., and Audage, N.C. "The Effects of Childhood Stress on Health Across the Lifespan." Atlanta: Centers for Disease Control and Prevention: National Center for Injury Prevention and Control, 2008. Available at www.cdc.gov/ncipc/pub-res/effects_of_childhood_stress.htm.
[12] Center for Disease Control and Prevention. *Injury Prevention and Control: Data and Statistics (WISQARS).* (2010) Accessed on Aug 3, 2010, http://www.cdc.gov/injury/wisqars/fatal.html.
[13] Center for Disease Control and Prevention. *Injury Prevention and Control: Data and Statistics (WISQARS).* (2010) Accessed on Aug 3, 2010, http://www.cdc.gov/injury/wisqars/fatal.html.
[14] Shenassa, E.D., Leibhaber, A., and Ezeamam, A. "Perceived safety of an area of residence and exercise: A pan-European study." *American Journal of Epidemiology* 163 (2006): 1012-1017.
[15] Wood, L., Shannon, T., Bulsara, M., Pikora, T., McCormack, G., and Giles-Corti, B. "The anatomy of the safe and social suberb: An exploratory study of the built environment, social capital, and residents' perceptions of safety." *Health and Place* 14 (2008): 15-31.
[16] Handy, S.L., Boarnet, M.G., Ewing, R., and Killingsworth, R.E. "How the built environment affects physical activity: Views from urban planning." *American Journal of Preventive Medicine* 23, 2S (2002): 64-73.
[17] Odoms-Young, A.M., Zenk, S., and Mason, M. "Measuring food availability and access in African-American communities: Implications for intervention and policy." *American Journal of Preventive Medicine* 36, 4S1(2009): S145-S150.
[18] Chilton, M., and Booth, S. "Hunger of the body and hunger of the mind: African American women's perceptions of food insecurity, health and violence." *Journal of Nutrition Education and Behavior* 39, 3 (2007): 116-125.
[19] Clark, C., Ryan, L., et al. "Witnessing community violence in residential neighborhoods: A mental health hazard for urban women." *Journal of Urban Health* 85, 1 (2008):22-38.
[20] Loukaitou-Sideris, A. "Is it safe to walk?: Neighborhood safety and security considerations and their effects on walking." *Journal of Planning Literature.*20, 3 (2006): 219-32.
[21] Cradock, et al. "Neighborhood social cohesion and youth participation in physical activity in Chicago." *Social Science & Medicine* 68 (2009): 427–435.
[22] Lynch, M. "Consequences of children's exposure to community violence." *Clin Child Fam Psych Rev* 6, 4 (2003): 265-74.
[23] Flaherty, E.G., et al. "Effect of early childhood adversity on health." *Archives of Pediatrics and Adolescent Medicine* 160 (2006): 1232-1238.
[24] Felitti, V. J. (2002). The relationship of adverse childhood experiences to adult health: Turning gold into lead. Zeitschrift für Psychosomatische Medizin und Psychotherapie 48(4), 359-369.
[25] Dube, S.R., Anda, R.F., Felitti, V.J., Chapman, D., Williamson, D.F., and Giles, W.H. "Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from the Adverse Childhood Experiences Study." *Journal of the American Medical Association* 286 (2001): 3089-3096.
[26] Springer, K.W., Sheridan, J., Kuo, D., & Carnes, M. "Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women." *Child Abuse & Neglect* 31 (2007): 517-530.

Health and Schools

Schools play a key role in the health of children and of the community. The health of school communities is influenced by educational programs, curriculum, school health programs and services, nutrition programs, and school environments. The California Department of Education (CDE) shares the desire to ensure that a healthily sustainable community with healthy children exists in all areas of the state. Schools can both impact health and be impacted by health.

- The health of California's students has a direct impact on school dropout rates, attendance, academic performance, school revenues, and the ability to reach the achievement goals set by the state.
- Healthy students perform better, and academic success is correlated with overall childhood well-being and positive adult health outcomes.[1] Healthy, happy, active, and well-nourished youth are more likely to attend school, be engaged, and ready to learn. Yet, an overwhelming number of students come to school with a myriad of health problems that can compromise their ability to learn.
- Studies consistently document the powerful connection between health and academic failure, with poor health affecting students' attendance, grades, and ability to learn in school. Poor health, chronic medical conditions, and stress-induced inability to concentrate translate into lost dollars due to absences and lack of achievement for our youth. Because California schools are reimbursed based on the Average Daily Attendance of students, absences mean significant lost revenues for school districts.

Educating Children about Health

- Instructional programs encouraging nutrition and exercise may enhance students' health knowledge, behavior, and attitudes.[2,3] Because instructional programs alone are not effective in improving healthy behavior, students need access to healthy foods and time to be active in school settings.[4]
- School programs can provide an opportunity to educate children and families about healthy living, and establish routines of physical activity along with healthy food choices. Even school programs primarily designed to improve academic performance can support student health by increasing school achievement and reducing school dropout rates.
- Physical activity in children is consistently related to higher levels of self-esteem and lower levels of anxiety and stress. Physical activity is positively associated with academic performance. More schooling is associated with higher levels of social support, increased earning capacity, and greater access to health information and resources – all of which contribute to improved health.[5]
- School-based instructional programs that focus on skill training, are stable and extensive, target children before they start using drugs or drop out of school, and combine prevention-related instruction and school-wide special events can have success in reducing alcohol use, alcohol-impaired driving, and tobacco use.[6,7]

Keeping Students Healthy

- Educational achievement and time spent in school is associated with increased life expectancy, reduced burden of illness, decreased risky health behaviors, and reduced disparities in health.[8] Early intervention may improve high school completion rates and lower juvenile crime. Schools with school-based health centers report increased school attendance, decreased dropouts and suspensions, and higher graduation rates.
- Comprehensive interventions, like the policies and strategies outlined in the Comprehensive School Health Program, combine teacher training, parent education, and social competency training for children to ensure long-term positive impacts, including greater commitment and attachment to school, less school misbehavior, better academic achievement, and improved health outcomes.[9,10]
- Youth violence is a significant health problem. Universal school-based violence prevention programs are effective in preventing and reducing violent or aggressive behavior and have ancillary benefits of reduced truancy, improved school achievement, attention to social skills, and reduced anxiety and depression.[11]

School Breakfast, Lunch, and Snacks

- Over 908,000 California students eat a federally funded school breakfast. Increasing access, participation, and nutrition quality in school breakfast, lunch, and snack programs would significantly improve student health. School breakfast programs increase learning and academic achievement, improve student attention to academic tasks, reduce absenteeism and visits to the school nurse, and decrease behavioral problems among low-income students.[12]
- The Fresh Fruit and Vegetable Program (FFVP) provides a free fresh fruit and vegetable snack to elementary students during the school day to encourage proper nutrition. The program operates at schools through grants.
- CDE provides statewide trainings and technical assistance to schools to help them implement garden-enhanced nutrition education. Garden-enhanced nutrition education helps students discover fresh food, make healthier food choices, and be physically active. Planting and harvesting fruits and vegetables makes kids more likely to eat them.[13]

School Environments

- The physical condition of a school is related to overall student academic achievement. Students who develop a positive affiliation or social bonding with a school are more likely to remain academically engaged and less likely to be involved with misconduct at school. The Healthy Children Ready to Learn: Facilities Best Practices guide encourages school districts to create healthy environments within school campuses.
- School sites anchor communities, impacting home buying and travel patterns, engaging parents in civic activities, and providing a space that can be shared to encourage communities to be active. Siting school locations on large plots, outside community centers, and without consideration for the transportation needs of all students can increase traffic, reduce opportunities for active transportation, and increase health-harming emissions.[14]

Opportunities for Healthy Schools in California

- Implementing the Comprehensive School Health Program's integrated set of planned, sequential, school-affiliated strategies, activities, and services can promote the optimal physical, emotional, social, and education development of students. Funding to fully implement the Health Education Content Standards and the Physical Education Content Standards for California Public Schools, Kindergarten through Grade Twelve would help to develop and sustain healthy schools.
- Policy makers could provide funding to increase mental health, physical activity, and nutritional services and programs to support academic achievement.
- Policy makers could provide funding to increase services in schools serving students from low-income families to support academic achievement.
- Providing guidance to support schools interested in entering into joint-use agreements with local governments, other schools, and community based organizations can encourage expanded access to physical activity, garden, and other facilities.

---

[1] Vernez, G., Krop, R.A., and Rydell, C.P. "The public benefits of education." In: *Closing the Education Gap: Benefits and Costs*. Santa Monica, CA: RAND Corporation, 1999: 13–32.
[2] Connell, D.B., Turner, R.R., and Mason, E.F. "Summary of findings of the School Health Education Evaluation: health promotion effectiveness, implementation, and costs." *J Sch Health* 55, no. 8 (1985): 316–21.
[3] Tolsma, D.D. and Koplan, J.P. "Health behaviors and health promotion." In: *Last, J.M., Wallace, R.B. Public health and preventive medicine (13th ed.).* Norwalk, CT: Appleton & Lange, 1992: 701–14
[4] Centers for Disease Control and Prevention. "Guidelines for school health programs to promote lifelong healthy eating." *MMWR* 45(No. RR-9), 1996.
[5] Freudenberg, N., and Ruglis, J. "Reframing school dropout as a public health issue." *Preventing Chronic Disease* 4, no. 4 (2007).
[6] Centers for Disease Control and Prevention. "Guidelines for school health programs to prevent tobacco use and addiction." *MMWR* 43(No. RR-2), 1994.
[7] Silvia, E.S. and Throne, J. "School Based Drug Prevention Programs: A longitudinal Study in Selected School Districts." U.S. Department of Education, February 1997.
[8] Winkleby, M., Jatulis, D., Frank, E., and Fortmann, S.P. "Socioeconomic status and health: how education, income, and occupation contribute to risk factors for cardiovascular disease." *Am J Public Health* 82, no. 6 (1992): 816-20.
[9] Allensworth, D.D. and Kolbe, L.J. "The Comprehensive School Health Program: Exploring an Expanded Concept." *Journal of School Health* 57, no. 10 (1987): 409–412.
[10] Cottrell, R.R., Girvan, J.T. and McKenzie, J.F. *Principles and Foundations of Health Promotion and Education,* 2nd edition. San Francisco: Benjamin Cummings, 2002.
[11] Hahn, R., Fuqua-Whitley, D., Wethington, H., et al. "Effectiveness of universal school-based programs to prevent violent and aggressive behavior: A systematic review." *Am J Prev Med* 33, Suppl 2 (2007): S114 –S129.
[12] Chandran, Kumar. *Running on Empty: A Report on the School Breakfast Program in California*. California Food Policy Advocates, September 2007.
[13] California Department of Education, School Garden Overview. *A Healthy Nutrition Environment: Linking Education, Activity, and Food through School Gardens.* Nutrition Services Division, March 2007.
[14] United States Environmental Protection Agency. *Travel and Environmental Implications of School Siting.* Development, Community, and Environment Division, September 2003.

Health and Social Services

Social service policy and practice seeks to protect individual and community well-being by supporting healthy and stable community environments, housing, employment, childcare, and nutrition, as well as protecting vulnerable individuals, including disabled persons and refugees. Services that protect needy and vulnerable populations, strengthen and preserve families, encourage responsibility, and foster independence can provide people and communities with the support they need to live healthier, more productive lives.

Access to Resources and Employment

- Healthy, safe, and meaningful employment is critical to communities' health. Higher-income, stable jobs support people to eat better, live in healthier housing and communities, pay for quality child care, and educate themselves and their children. Unemployment can affect mental and physical health by making it difficult to afford nutritious food, healthy housing, or appropriate medical care, and by increasing stress and risk of heart disease, obesity, injuries, anxiety, and depression.[1]
- Limited local and affordable access to fresh fruits and vegetables affects the health and nutrition of many lower-income Californians.[2] Eating recommended servings of fruits and vegetables can help maintain appropriate weight, reduce risk of obesity, and significantly reduce the risk of many other diseases, including heart disease, stroke, and hypertension.[3] Conversely, diets high in processed, high calorie, low-nutrient food contribute to obesity, heart disease, high blood pressure, and some cancers.[4]
- CalFresh, California's version of the federal Supplemental Nutrition Assistance Program (formerly known as Food Stamps), provides critical resources to people in need. The number of people enrolled is projected to grow to 4 million in the 2010-2011 fiscal year, or 1.7 million households.[5] While there are thousands of approved retailers accepting CalFresh benefits, in some areas healthy food choices are rare or difficult to access.

Opportunities to Improve Health, Access to Resources, and Employment

- Providing guidelines and leadership across divisions and layers of government to streamline administration and coordinate policy development and business processes to facilitate access to public benefit programs can ensure families get the support they need to be productive and healthy.
- Improving coordination of aid and resource assistance programs can increase service efficiency and reduce administrative costs. For example, coordinating employment support services with other resources can reduce household stress and increase household stability during work transitions, supporting sustained employment and improving outcomes for independence.
- Ensuring that Californians have access to fresh, healthy produce by facilitating the use of CalFresh benefits at farmers' markets and mobile produce vendors can support a healthy diet for families.
- Ensuring safe, healthy, and active community care environments, that have an

emphasis on prevention of illness, injury, and isolation, can alleviate abuse and neglect of elderly, blind and disabled Californians and support dignified care that maintains quality of life.

Children and Family Care Environments and Resources

- Poverty is the strongest predictor of abuse and neglect in households.[6] The quality of life of older, blind, and disabled persons who have little or no income and are financially unable to purchase needed services can be improved through social services, which can also increase community stability, reduce the burden on safety net providers, and strengthen and encourage individual responsibility and independence for families.
- Child abuse and other forms of household dysfunction have been linked to poor health outcomes.[7,8] When they reach adulthood, children who were abused or neglected are more likely to smoke cigarettes, abuse alcohol, take illicit drugs, and develop allergies, arthritis, asthma, bronchitis, high blood pressure, and ulcers.[9,10] Young adults abused as children have a greatly increased risk of developing at least one psychiatric disorder by age 21.[11] Child abuse and neglect can delay language and cognitive development, contributing to poor academic achievement.[12] Approximately one-third of adults and teens abused as children will end up abusing their own children.[13]
- Abuse and neglect contribute significant costs to society. Short-term financial costs include maintaining the child welfare system, hospitalization, mental health treatment, police services, and special education.[14] Long-term costs of child abuse and neglect include the financial costs associated with criminal activity, mental illness, substance abuse, and domestic violence, the lost productivity costs of unemployment and underemployment, and increased utilization of health care services.[15] For example, approximately 70 percent of correctional inmates have been involved in the foster care system at some point in their lives.
- Permanent and stable living environments are critical for children's healthy development. Neglect is the top reason citied for children's removal from their homes and into foster care.[16] Child welfare and family maintenance services can protect children from abuse and neglect, and foster care and adoption services provide an opportunity for children to be placed in a stable environment.
- Resilience, or "the ability to survive and thrive under negative life experience," is protective against some of the effects of abuse and neglect. Community resiliency is strengthened through social networks with positive role models, neighborhood stability, and access to safe schools, health care, and social supports.[17]

Opportunities to Improve Health for Children and Families

- Identifying people in need and providing prevention and early intervention services to troubled families who previously received little or no assistance from the child welfare system because of abuse or neglect, can improve health outcomes for those families and limit the need for future interventions that can be more costly in the long run.
- Bundling childcare, housing, medical care, and transportation assistance opportunities and offering them through community-based programs can help at-risk families access the assistance they need before their problems become crises.
- Ensuring the availability of resources to provide case management and other necessary support to explore reunification, kinship care, adoption, guardianship, and transitional services for children, youth, and families can support healthy communities by providing care that is in the best interest of children.

---

[1] Human Impact Partners. *General pathway diagram showing links between jobs and health.* 2010.
[2] Chapter 236 (AB 2384), Statutes of 2006, Legislative findings and declarations.
[3] Hyson, D. "The health benefits of fruits and vegetables, a scientific overview for health professionals." Wilmington, DE: Produce for Better Health Foundation, 2001.
[4] Centers for Disease Control and Prevention. "State-Specific Trends in Fruit and Vegetable Consumption Among Adults — United States, 2000–2009." *MMWR* 59 (2010): 1125-1130.
[5] California Department of Social Services. *Fiscal year 2010-2011 budget facts.* 2010. Accessed June 27, 2010 at: http://www.dss.cahwnet.gov/cdssweb/entres/localassistanceest/may10/CDSSBudgetSummaryMayRevisionFINAL.pdf.
[6] Berrick, J.D., Frame, L., Langs, J., Varchol, L. "Working Together for Children and Families: Where TANF and Child Welfare Meet." The Haworth Press, Inc., 2006.
[7] Flaherty, E.G., et al. "Effect of early childhood adversity on health." *Archives of Pediatrics and Adolescent Medicine* 160 (2006):1232-1238.
[8] Felitti, V.J. "The relationship of adverse childhood experiences to adult health: Turning gold into lead." *Zeitschrift für Psychosomatische Medizin und Psychotherapie* 48, no. 4 (2002): 359-369.
[9] Dube, S.R., Anda, R.F., Felitti, V.J., Chapman, D., Williamson, D.F., & Giles, W.H. "Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from the Adverse Childhood Experiences Study." *Journal of the American Medical Association* 286 (2001): 3089-3096.
[10] Springer, K.W., Sheridan, J., Kuo, D., & Carnes, M. "Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women." *Child Abuse & Neglect* 31 (2007): 517-530.
[11] Silverman, A.B., Reinherz, H.Z., & Giaconia, R.M. "The long-term sequelae of child and adolescent abuse: A longitudinal community study." *Child Abuse and Neglect* 20, no. 8 (1996): 709-723.
[12] U.S. Department of Health and Human Services. *National Survey of Child and Adolescent Well-Being: One year in foster care wave 1 data analysis report.* 2003.
[13] Child Welfare Information Gateway. Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.
[14] Fromm, S. *Total Estimated Cost of Child Abuse and Neglect in the United States.* Statistical Evidence, 2001.
[15] Prevent Child Abuse America. *Total estimated cost of child abuse and neglect in the United States.* 2001.

[16]Needell, B., Webster, D., Cuccaro-Alamin, S., Armijo, M., Lee, S., Lery, B., Shaw, T., Dawson, W., Piccus, W., Magruder, J., and Kim, H. "Child welfare services reports for California." Accessed June 27, 2010 at: http://cssr.berkeley.edu/ucb_childwelfare.

[17] Fraser, M.W., & Terzian, M.A. "Risk and resilience in child development: principles and strategies of practice." In G. P. Mallon & P. M. Hess (Eds.), *Child welfare for the 21st century: A handbook of practices, policies, and programs*. New York, NY: Columbia University Press, 2005: 55-71.

Transportation and Health

Transportation engineering, education, and enforcement are essential for business, economic development, and the welfare of all California residents. California's transportation system is supported and managed by the California Department of Transportation (Caltrans), the California Office of Traffic Safety, and a wide variety of regional and local entities. The Office of Traffic Safety (OTS) effectively and efficiently administers traffic safety grant funds to reduce traffic deaths, injuries, and economic losses. OTS distributes funds statewide in the form of traffic safety grants that are awarded to political subdivisions of the state based upon certain criteria. OTS develops a yearly Highway Safety Plan that identifies the primary highway safety problems in the State and provides potential solutions. Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System and the portions of the Interstate Highway System that exist within the state's boundaries. Caltrans also helps oversee intercity passenger rail service, works to improve the freight transportation system in California, and pursues projects to improve transportation safety.

Transportation Planning & Design: Health Impacts

- Transportation systems indirectly impact health by influencing the level of access to jobs, medical care, healthy food, educational opportunities, and other necessities.
- Transportation systems indirectly impact health by influencing physical activity opportunities. Active transportation (walking, biking, and wheeling to destinations) can improve both mental and physical health.[1,2,3] When replacing vehicle trips, active transportation can also reduce emissions and improve air quality.
- Transportation systems that support multimodal travel -- walking, cycling, wheeling, and public transit, in addition to the automobile -- can enhance community economic viability by giving families lower-cost transportation options and linking residents to job centers.[4] Public transportation systems are essential to facilitate multimodal trips that can incorporate transit use and walking, for example, in the same trip as a more feasible, time- and cost-efficient option for traveling to some destinations than walking as the sole mode.
- Motor vehicle crashes are a leading cause of injury and death for individuals less than 34 years old.[5] According to the National Highway Traffic Safety Administration, injuries and fatalities have been decreasing compared to the prior five to ten years.
- Air pollutants from car, bus, truck, rail, plane, and seaport emissions impact health directly by contributing to impaired lung development, lung cancer, asthma and other chronic respiratory problems, and heart disease.[6] Diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants.[7,8] Diesel particulate matter contributes to premature deaths, hospital admissions, asthma and other respiratory diseases, and lost workdays. Low-income communities and communities of color are most impacted by transportation-related pollution, as they tend to live and work closer to highways, busy arterials, ports, and bus depots.[9]

- Transportation systems indirectly impact health through their contributions to greenhouse gas (GHG) emissions, contributing 40 percent of California's GHG emissions.[10]

Transportation Planning and Design Opportunities

- Including bicycle, pedestrian, and public transit modes in statewide strategies for safety and mobility and in system performance measures can contribute to an integrated, multimodal transportation system that supports safe and active transportation, increases physical activity, reduces preventable injury and death, and reduces vehicle miles traveled (VMT), air pollution, and GHGs.
- Providing tools and establishing processes to identify and address the needs of users of all ages and mobility levels early and continuously throughout planning and project development activities, and balancing education, engineering, and enforcement in transportation system plans can result in a balanced, responsive, user-focused transportation system.
- Awarding grant money for "Safe Routes to Schools" (SR2S) projects and "Transportation Enhancement Activities" (TEA) in communities with high rates of vehicle related injuries, asthma and respiratory disease, or obesity can provide the greatest benefits to those most in need.
- Creating and maintaining bicycle and pedestrian amenities like benches, bicycle lanes, curb ramps, trails, and landscaping can increase safety and make active and public transportation a more attractive option for getting places.
- Federal funds spent on sidewalks, crosswalks, traffic-calming, and other safety enhancements can support the implementation of planning and design efforts to increase safety and support active transportation.
- Providing guidance, technical assistance, and training to facilitate transportation system integrity improvements that reduce preventable injuries, increase equity and accessibility for all populations, and improve opportunities for walking, biking, and wheeling to more destinations can support GHG and VMT reduction goals and reduce nonattainment areas that exceed ambient air quality standards.
- Taking regulatory action and providing incentive programs that support cleaner engines and fuels, fleet modernization through retrofits and replacements, reduced speed limits, and idling limits, and shore-based power for boats and tugs can reduce the health impacts of goods movement in California.
- Enhanced funding to implement the approved action items from the California Strategic Highway Safety Plan, reduce speeding infractions, increase DUI checkpoints, and bring efforts like the *Avoid DUI Task Force* program, *Report Drunk Drivers – Call 911,* and *Click It or Ticket* campaigns to more communities can save lives and improve safety.

Transportation System Investments and Improvements: Health Impacts

- Transportation facilities, including bicycle lanes and sidewalks, are long-term investments that remain in place for many years. Biking and walking for transportation and recreation are low-cost, low-polluting alternatives to driving that incorporate physical activity into daily life.[11]

- Reducing speed limits and implementing traffic calming measures, like bicycle lanes, reduces emissions and risk of injury and death.[12]
- Landscaping can enhance multimodal infrastructure and improve safety, air quality, and the appeal of active and public transportation options. For example, vegetation barriers/landscaping can shield pedestrians from traffic noise, enhance pedestrians' sense of safety, offer shade, collect particulate matter, filter air pollutants, and enhance the aesthetic appeal of walkways and bicycle corridors.[13]
- Vegetation within transportation infrastructure that is low water, low-allergen, and provides pervious surface areas can reduce transportation system impacts on air and water quality.
- New vehicle, engine, and fuel technologies and improved operational techniques can further reduce GHG and other polluting emissions in the transportation sector that contribute to heart and respiratory disease.

Transportation System Investments and Improvements: Opportunities

- Accommodating bicyclist and pedestrian needs during resurfacing and other maintenance projects can leverage maintenance funding to improve existing facilities while enhancing safety and accessibility for all users. For example, pavement overlay projects offer opportunities to restripe the roadway to accommodate bicycles and add advanced field lines at marked crosswalks.
- Ensuring landscape vegetation planted within transportation systems enhances vehicle, bicycle, and pedestrian safety, utilizes low-water vegetation, and improves aesthetics can enhance community character, reduce environmental impacts, and improve safety for all users.
- Encouraging early and broad adoption of technologies and operational practices, including port electrification, vessel exhaust gas after-treatment technologies, use of cleaner fuels, and vehicle speed reductions can reduce congestion and improve air quality.

---

[1] Frank, L.D., Andresen, M., & Schmid, T. "Obesity relationships with community design, physical activity, and time spent in cars," *American Journal of Preventative Medicine* 27(2004):87-96.
[2] Frank, L.D., Andresen, M., & Schmid, T. "Obesity relationships with community design, physical activity, and time spent in cars," *American Journal of Preventative Medicine*, 27(2004):87-96.
[3] U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996):4–8. http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf.
[4] UCLA School of Public Health. "Health Impact Assessment Policy Brief: State Funding for Mass Transit." Health Impact Assessment Project, August 2007.
[5] Centers for Disease Control and Prevention. *CDC Recommendations for Improving Health through Transportation Policy*. 2008.
[6] Bell, J. & Cohen, L."The Transportation Prescription: How Transportation Policies and Plans Influence Health." PolicyLink & Prevention Institute, 2009.
[7] California Air Resources Board. "Health Effects of Diesel Exhaust Particulate Matter." Accessed August 16, 2010. http://www.arb.ca.gov/research/diesel/dpm_health_fs.pdf.
[8] California Air Resources Board. "Appendix A: Quantification of the Health Impacts and Economic Valuation of Air Pollution from Ports and Goods Movement in California." *Emission Reduction Plan for Ports and Goods Movement* (2006):14. Accessed August 16, 2010.http://www.arb.ca.gov/planning/gmerp/march21plan/appendix_a.pdf.

[9] American Lung Association. "Highlights of Recent Research on Particulate Air Pollution: Effects of Long-term Exposure." 2008.
[10] Energy Information Administration. *Emissions of Green House Gasses in the United States 2005.* DOE/EIA-0573(2005). Washington DC: U.S. Department of Energy, 2006.
[11] Moudon, A.V., Lee, C., Cheadle, A.D., Collier, C.W., Johnson, D., Schmid, T.L., & Weather, R.D. (2005). "Cycling and the built environment, a US perspective." *Transportation Research Part D-Transport and Environment*, 10(3): 245-261.
[12] Newman, P., Kenworthy, J., & Robinson, L. *Winning Back the Cities*. Australia: Pluto Press, 1992.
[13] Cervero, R. & Duncan, M. "Walking, Bicycling, and Urban Landscapes: Evidence from the San Francisco Bay Area." University of California Working Paper, 2003.

Work and Health

Work can have a big influence on health. Whether we have a job, what kind of work we do, how much income or satisfaction our work provides, access to employer-provided benefits including health care and wellness activities, job stability, workplace conditions including health and safety hazards, stress, discrimination or harassment, social support, work hours, and commute time all impact health. In addition, how well we are able to balance work and family/life responsibilities has implications for health. A healthy workforce in turn supports productive businesses and a vibrant economy. This means that labor policy can influence health by affecting employment opportunities, workplace conditions, and work-life balance.

How Does Work Impact Health?

Employment Resources and Opportunities

- Employment provides the main source of income for most people. Higher-income, stable jobs support people to eat better, live in healthier housing and communities, pay for quality child care, educate themselves and their children, and enhance their lives in many ways.
- Work can provide mental health benefits including a sense of identity, purpose in life, and social support.
- Unemployment can affect mental and physical health by making it difficult to afford nutritious food, healthy housing, or appropriate medical care, by increasing stress and associated negative health outcomes, by eliminating the positive mental health benefits linked to work, and by increasing unhealthy coping behaviors such as smoking, alcohol, or drug use.[1]
- Job insecurity or threat of job loss can adversely impact health in similar ways.
- Many workers receive health insurance through their employers, increasing the likelihood that they get appropriate medical care and preventive health services.
- Some employers offer other benefits including paid sick leave and personal leave, child care or elder care assistance, training and education assistance, and retirement benefits. Access to these benefits can reduce stress and its negative health impacts, keep workers from coming to work sick and infecting others, and promote job satisfaction.

Workplace Conditions

- Certain industries and occupations are known to have higher rates of illness, injury, or death on the job because of the type of work tasks and related health and safety hazards.
- Job hazards include unsafe equipment, exposure to toxic chemicals' excessive noise, heat or radiation, and excessive physical demands. These can lead to acute or chronic illness, injuries, disability, and premature death.
- Workplace injuries or illnesses that involve lost work time can result in decreased income, less job advancement, and undue stress on family life. These impacts may be worse if a worker cannot return to his/her usual occupation or can no longer work at all due to disability.

- Sedentary jobs or long hours spent commuting in a car provide little opportunity for movement or exercise, contributing to obesity and chronic diseases such as diabetes.[2]
- Work schedules, such as evening and night shifts, holding multiple jobs, and working excessive overtime, can lead to fatigue, sleep disturbance, and other long-term impacts on health.
- Work-related chronic stress initiates physiological processes that over time damage the immune system and vital organs, leading to heart disease, chronic illnesses, and accelerated aging, as well as mental health problems. Causes of workplace stress include high demands with little decision-making control, poor supervision, gender or racial discrimination, and disrespect or intimidation.

Work-Life Balance

- Job demands and inflexible policies that make it difficult for workers to balance life and work responsibilities can cause additional stress, with related physical and mental health impacts.
- Workers who work long hours, need to work two or more jobs to earn adequate income, or have long commutes have less time available for family, social, and other healthful activities.
- Workplace policies that allow for flexible schedules, provide leave time for family sickness or other personal needs, and support breastfeeding and quality child care can improve the health and well-being of workers and their families.

How Does Health Impact Work?

- Good health is often necessary for employment, especially for work with physical demands.
- Healthy workers are likely to have lower medical costs, which can save money for employers who provide health insurance or reduce the use of government-provided health care.
- High absenteeism or disability among workers due to illness or injury decreases the productivity of businesses, increases employer costs to provide substitute workers, and may increase workers' compensation premiums paid by employers.
- Workers without paid sick leave are more likely to go to work sick.[3] Workers who report to their jobs while sick may infect co-workers or others at the facility (e.g., patients, students, residents). Workers with chronic physical or mental health problems may be less productive even if they are able to come to work (referred to as "presenteeism").[4]
- Healthy workers can choose to remain in the workforce longer, continuing to contribute their expertise toward our economic growth.

How Can Labor Policies Promote Health and Well-Being?

- Workforce development policies that increase workers' skills and prepare them for higher-paying, stable jobs can improve health and well-being.
- Economic development policies focused on creation of new jobs in industries with higher-level skills and income potential are good for the health of California's economy and its workforce.

- Incentives for business owners to offer health insurance and worksite-based wellness programs can help workers obtain preventive health care, adopt healthier behaviors, and improve health outcomes.
- Protective occupational health and safety standards and policies that support their enforcement can reduce worker injury, illness, and deaths on the job.
- Laws that protect workers who report poor working conditions and violations of the law from retaliation promote a healthy workforce.
- Public campaigns, training programs, and informational materials can educate workers and employers about workplace hazards and their rights and responsibilities.
- Labor polices that provide for adequate collection of relevant data will enhance our ability to base future policies on accurate information.
- Workers' compensation laws ensure that sick or injured workers receive benefits and the medical care they need in a timely manner and, if disabled and unable to return to their usual work, have opportunities for retraining.
- Similarly, laws governing unemployment provide replacement income and benefits that allow workers to afford life necessities essential to health.
- Labor policies can promote better work-life balance and decreased job stress. Protecting the right to breastfeed and ensuring adequate rest or meal breaks can benefit all employees and may have amplified impacts for workers in low-paying, low-skill jobs who might also experience increased risks from exposure to hazardous conditions in the workplace.
- Laws promoting paid sick leave can help workers recover more quickly, prevent co-workers and others in the work setting from being exposed to infectious diseases, and protect income.

---

[1] Jin, RL, Shah, CP, and Svoboda TJ. "The Impact of Unemployment on Health: A Review of the Evidence." *Canadian Medical Association Journal*, 1995 Dec 1;153(11):1567-8.
[2] Choi, BongKyoo, Schnall, Peter L., Yang, Haiou, Dobson, Marnie, Landsbergis, Paul, Israel, Leslie, Karasek, Robert, and Baker, Dean. "Sedentary Work, Low Physical Job Demand, and Obesity in US Workers." *American Journal of Industrial Medicine,* July, 2010.
[3] Vicky Lovell, No Time to be Sick: Why Everyone Suffers When Workers Don't Have Paid Sick Leave, Institute for Women's Policy Research, Washington, DC, 2004.
[4] M. Keech, A. J. Scott, and P. J. J. Ryan, "The Impact of Influenza and Influenza-Like Illness on Productivity and Healthcare Resource Utilization in a Working Population," *Occupational Medicine* 48 (February 1998): 85-90.