The Social Determinants of Health for Planners: Live, Work, Play, Learn!

A paper by

California Planning Roundtable

Healthy Communities Work Group
Social Determinants of Health Subcommittee

The California Planning Roundtable

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This report was prepared by a select committee of members of the California Planning Roundtable and invited professionals. It does not necessarily represent the technical findings or opinions of the full membership.

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This publication is dedicated to everyone advancing the understanding and the implementation of healthy communities principles.

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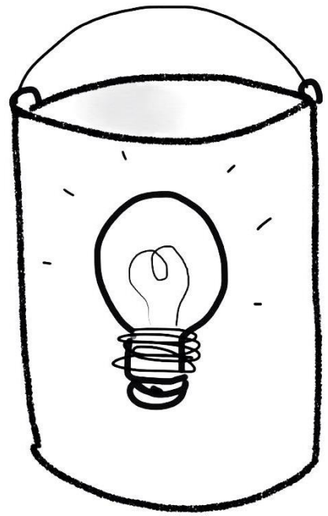
Foreword

Winston Churchill once said, “We shape our buildings; thereafter they shape us.” The logical extension of this thought, and the simple notion behind the Social Determinants of Health, is that we build our cities, towns, and communities, and they build us—physically, mentally, socially, and sometimes spiritually. As planners, we influence and have an important role and responsibility for the public’s health. How we as people choose to organize ourselves—where we live relative to our daily destinations—and the means to get us there (by driving, walking, biking using public transportation, etc.) affects not only our air quality but our physical activity at different stages of life. Our responsibility is not just to those who can afford it but to everyone who seeks it. Of course, there are many other determinants of health besides the built and natural environments. Health outcomes will vary because people vary, but where people live should not be a determinant except by their own choosing. Affordable access to clean homes and buildings, healthy food, clean water, good jobs, quality education, physical activity, and mental respites—these are determinants that fall within planning’s purview, working with others on behalf of the public. Be healthy by living.

-William Anderson, FAICP
Immediate Past President
American Planning Association



“We have traditionally thought about health in a very narrow context. Health is far more broad than what hospitals and doctors and nurses do. So how do we improve health across America? We need to go into the communities and think about the factors that drive health.”

-Vice Admiral (VADM) Vivek H. Murthy, M.D., M.B.A.
United States Surgeon General
Quote from the 2015 Aspen Ideas Festival

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Preface

Planners overwhelmingly agree[1] that an important aspect of planning is to include health considerations into the profession and practice. When the integration of planning and health is carefully applied, positive health outcomes result in the places where people live, learn, work, and play. Over the past five years, the integration of health and planning has gained significant momentum, thanks to the fervent belief of professionals in both fields that "place" is an intrinsic component of individual and community health. The cumulative efforts advancing this narrative at the national, state, regional, and local levels signal an inevitable paradigm shift in policy and the profession and practice of planning.

A plethora of healthy communities resources—including publications, data collection, reports, toolkits, etc.—are steadily being incorporated into planning documents and policies; they no longer exist as a possibility raised by the question, *What if health policies were part of the General Plan?* This trend is happening in a variety of ways. For example, counties, cities, metropolitan planning organizations (MPOs), and councils of government (COGs) across the state are explicitly considering health as a major component of their planning documents; increasingly, public health departments are now employing planners, and planning departments are employing public health professionals; more civic engagement around planning affairs at city hall is increasing as community health advocates become more informed about why place and health matters; and universities across the country are now offering dual master's degrees in planning and public health.

Planners also agree that in spite of the synergy around healthy communities, more tools are needed for planners to advance the understanding of healthy communities planning. The integration of quantitative and qualitative health evidence into planning practices and policy development, access to emerging implementation, and monitoring methodologies are examples of next steps toward more effective healthy communities planning processes. The California Planning Roundtable (CPR) is listening and is taking action to assist the planning community in this arena through its Healthy Communities Work Group. Through its affiliation with the American Planning Association, California Chapter (APA CA), CPR has taken the initiative to become one of the strongest advocates supporting the emerging healthy communities paradigm. To that end, it has included the development of practical healthy communities planning tools and compilation of resources into its work plan.

In 2012, CPR formed a Healthy Communities Work Group with the mission of identifying voids within the existing healthy communities framework and turning them into opportunities. The work group's first major outcome was the publication of a Healthy Communities definition designed to introduce planners unfamiliar with this planning approach and for anyone in need to make a professional reference in conversations, presentations, publications, and actual healthy communities policy making.

As CPR's and APA CA's relationship with public health continues to grow, information and resources are being disseminated and shared. Through this collaboration, the Social Determinants of Health (SDOH) concept came to CPR's attention. This framework—described by the Centers for Disease Control and Prevention (CDC) as factors that contribute to a person's current state of health—is typically known to planners as part of common sentences found in planning documents alluding to ideas related to places *where people live, work, and play.* Underneath the surface, the SDOH concept is built upon a substantial body of scientific public health research supporting the notion that our zip code can actually pinpoint how healthy—or unhealthy—we are.

The CPR Healthy Communities Work Group identified the SDOH as a priority concept for the planners' toolbox. As such, the Work Group formed a Social Determinants of Health Subcommittee that includes non-CPR members who bring expertise on the subject and ample knowledge and leadership. Together, we have prepared this paper to advance understanding of this important concept among the planning community and beyond.

"A healthy community is one that strives to meet the basic needs of all residents; it is guided by health equity principles in the decision-making process; it empowers organizations and individuals through collaboration and through civic and cultural engagement for the creation of safe and sustainable environments. Vibrant, livable, and inclusive communities provide ample choices and opportunities to thrive economically, environmentally, and culturally, but must begin with health."

California Planning Roundtable

[1] Appendix B. CPR Health Matters Survey, 2014

Introduction

The conditions in the communities where we live, learn, work, and play have a crucial role in people's ability to make healthy choices. For example, research shows that communities with smoke-free-air laws, access to healthy foods, quality affordable housing, good schools, and safe places to walk, roll and play are healthier than those that don't have access to these vital resources. In fact, the economic, social, and physical environments that surround us can have a much greater impact on our health than how often we go to the doctor's office. *The intersection of these factors is known as the Social Determinants of Health (SDOH).*

Figure 1 provides an initial snapshot of the major SDOH components, which include neighborhood/housing and built environment (it includes the natural environment as well); economic stability (access to jobs, business opportunities, etc.); social and community context (culture, social norms, sense of place); education (opportunities for education—from preschool to higher education—and workforce development); and health/health care (access to preventive and medical care). Together, they form the foundation of healthy communities planning. Planners can, and should, play a strong role in ensuring that all of them are taken into consideration and are balanced throughout the decision-making process of planning. This public health model also effectively reveals why public health professionals, practitioners, and advocates are essential stakeholders during planning processes.

The purpose of this paper is to be an educational introduction for planners to the SDOH concept. The intention is that planners at all levels—in government and in the private and nonprofit sectors—take proper account of the significant role they play on the spectrum of individual and community health.

This paper does not provide a comprehensive overview of the determinants of health. It does not address exhortations to promote behavior change, or to protect people from environmental toxins or workplace risks. However, it does emphasize the need to understand how behavior and health are shaped by environmental factors and the need for formulating recommendations for planning that is consistent with healthier communities.

Figure 1. Healthy People 2020 SDOH model

Source: http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health

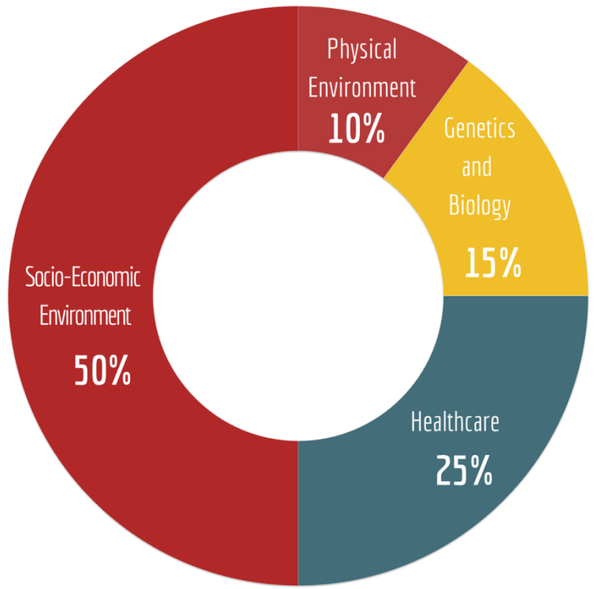
Planning: A Determinant of Health?

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (World Health Organization). Planning for health was once thought to be about little more than the provision and funding of medical care, but this is now changing. While it is recognized that individual genetic and behavioral susceptibilities to illness may be important, we now know that the common environmental, social, and economic conditions that cause or exacerbate illness are more important for the overall health of populations (Wilkinson and Marmot, 2003). According to the Canadian Institute for Advanced Research, about 60% of our health depends on the socio-economic and physical environment, 25% on health care, and 15% on individual genetics and biology (Figure 2). What this means is that mayors, elected city councils, planning commissions, board of supervisors and a wide array of professionals employed by city hall can have greater influence on community health than doctors and nurses practicing at hospitals and clinics. Planners in particular, working on the public, private, and nonprofit sectors, use their expertise to advise not only decision makers but also the communities at large. With an extraordinary power to influence decision-making processes, they make recommendations in the areas of economic and community development, environmental policy, land use planning, housing allocations, mobility, etc. If implemented or not, depending on the nature of their recommendations, they can ultimately lead to the prevalence of positive or negative health outcomes in urban, suburban, and rural communities. Positive health outcomes include being alive; functioning well mentally, physically, and socially; and having a sense of well-being. Negative outcomes include death, loss of function, and lack of well-being (Parrish, 2010).

The conditions (60-25-15) or factors that influence or determine health status (commonly referred to as the Social Determinants of Health, or SDOH) include population distribution, socio-economic status, health behavior, life expectancy, mortality, chronic disease, and quality of life. For example, areas with higher proportions of people with low incomes and education levels are more likely to have populations with poorer health, poorer access to nutritious food options, fewer transportation options, and other health factors (Kawachi, Subramanian, Almeida-Filho, 2002) such as housing, clean water and sanitation.

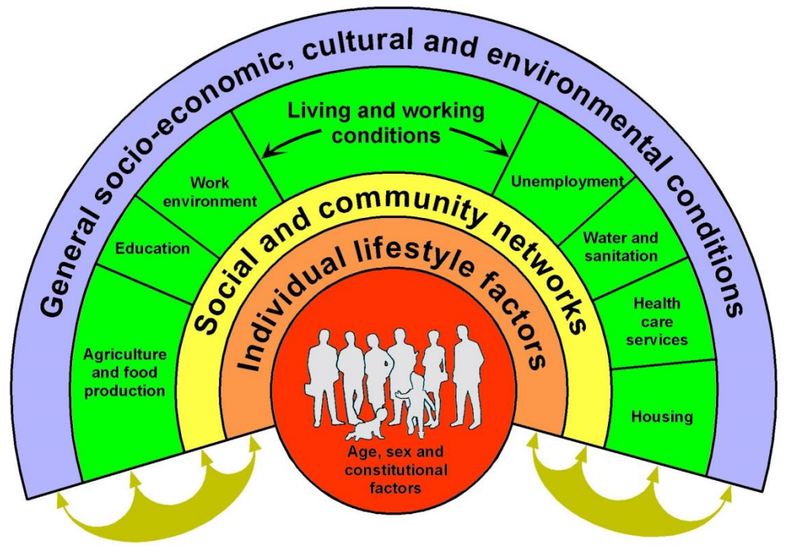
Figure 3 depicts a SDOH model in which the individual's makeup—age, gender, constitutional factors—is at the center. It is surrounded by a myriad of external factors that influence lifestyle and behavior, such as social and community networks and the overall socio-economic, cultural, and environmental conditions influencing health outcomes. Indisputably, planning and planners are the core profession and professionals with one of the greatest influential roles in our communities' health.

Figure 2. Estimated impact of health determinants on health status of the population



Source: Canadian Institute for Advanced Research, Health Canada, Population and Public Health Branch AB/NWT 2002

Figure 3. Factors influencing health status



Source: Dahlgren and Whitehead, 1993
http://hiaconnect.edu.au/wp-content/uploads/2012/09/Dahlgren-and-Whitehead1.jpg

The Roots of Healthy Communities

Policy, program, and project decisions made in sectors that have not considered health as their primary mission generally do not consider the potential effects on human health, often resulting in unintended negative consequences. There has been growing recognition beyond the public health sphere of the substantial impact of the social determinants of health on the health and well-being of communities. While all SDOH affect health outcomes, much focus has grown around a particular SDOH, the physical environment, which includes such issues as land use, housing, and transportation planning.

As we continue to move along this new millennium, planners of today and of tomorrow must exercise their critical-thinking abilities to their maximum capacity. Combining them with cultural competency, emotional intelligence, strategic collaborations, and continuous formal and informal education will help planners to address with greater success our formidable present and future development challenges.

Healthy communities planning, a relatively new planning branch, is leading the profession into an uncharted path in which health has value equal to economic considerations in the decision-making process. The toolbox of planners of today and tomorrow should include basic understanding of the following public health terms, which are as essential as understanding the basic economic terms of supply and demand:

Health disparity is referred to as a type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socio-economic status, gender, mental health, sexual orientation, or geographic location. Other characteristics include cognitive, sensory, or physical disability (Healthy People 2020).

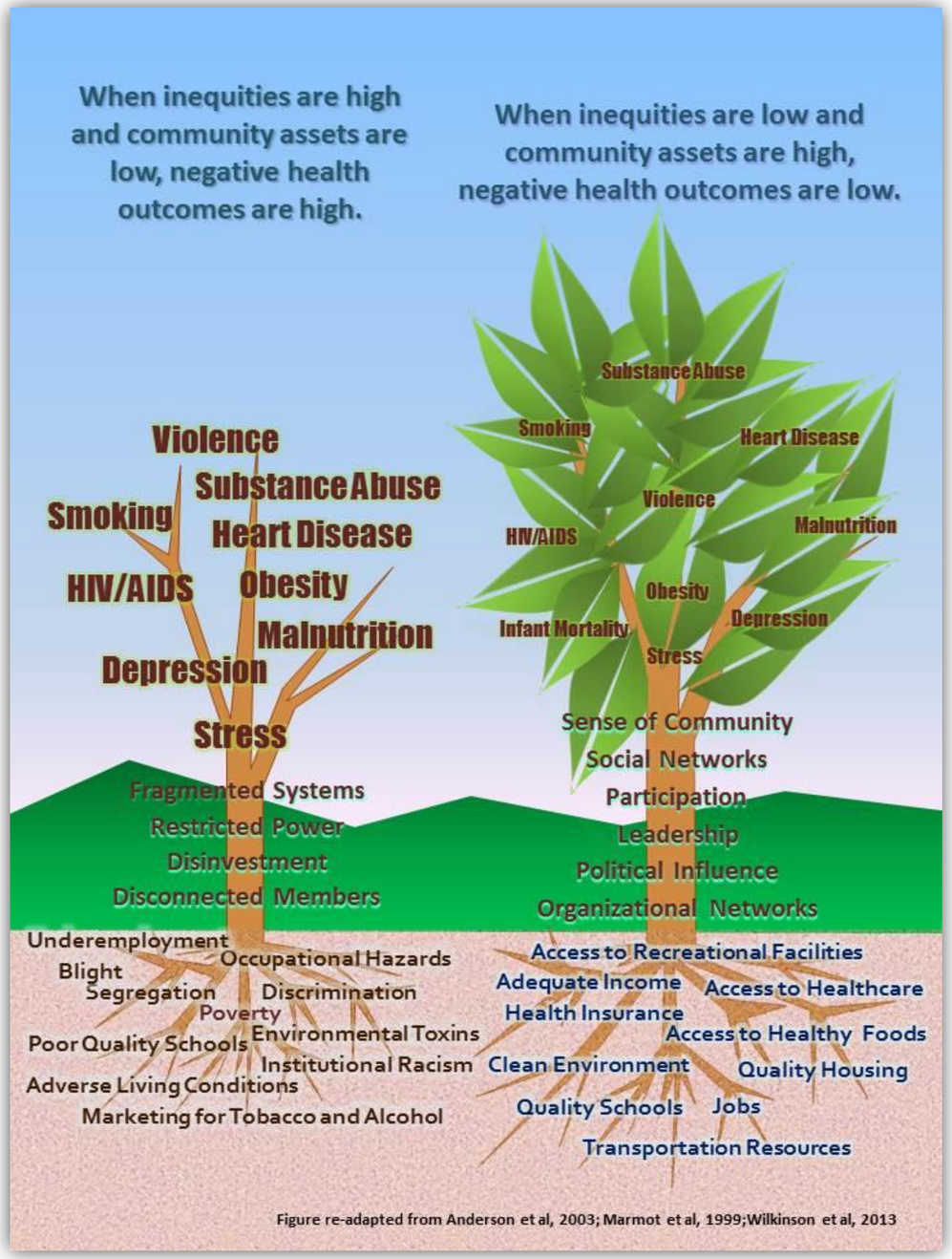
Health inequality means differences, variations, and disparities in the health achievements of individuals and groups of people (Kawachi, 2002).

Health inequity refers to those inequalities in health that are unfair or stem from some form of injustice (Kawachi, Subramanian, Almeida-Filho, 2002). Conversely, *health equity* is evident when all people have "the opportunity to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance'" (Braveman, 2003).

These terms are not restricted to the advocacy and pluralistic planners' toolbox. They are increasingly becoming standard concepts related to communities' competitive advantage and quality-of-life indices typically used by economic development planners and managers.

If the SDOH could be represented in an organic and dynamic way, imagine our societal, economic, and environmental systems in the form of a tree (Figure 4). The overall above-ground physical constitution would largely depend on the health of the tree's root system. When the root system is made out of poor quality schools, adverse living conditions, segregation, structural racism, unemployment, and environmental toxins, then fragmented systems, restricted power, and disinvestment can lead to high rates of stress, depression, infant mortality, violence, obesity, etc. Conversely, when the root system is made out of quality schools, a clean environment, quality housing, access to various safe and affordable modes of transport, healthy foods, etc., then a strong social support, community empowerment, and sense of community can lead to lower rates of stress, depression, infant mortality, violence, obesity, etc. A healthy root system can be secured if the ground has been prepared and fertilized; for the purpose of this analogy, that is the role of planning.

Figure 4. The health inequity tree metaphor



Source:http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/cfhs/Infant%20Mortality/Gator%20Boards/Social%20Determinants%20of%20Health-IB.pdf

Upstream Planners: Planning with Prevention

In many respects, all planners are de facto public health professionals—they are like the "built environment" doctors. They can also be compared to botanists, based on the previous metaphor. Planners have the know-how to support a healthy root system, and practicing this ability is one of the best possible ways to influence the development of a healthy tree—a healthy community. For example, while they may not be able to officially prescribe a health plan for an individual in need of a healthy diet, they can prescribe a plan for community markets where the ingredients for a healthy diet can be found at an affordable price. A healthy and nutritious diet prescription can be useless if a market that offers affordable healthy foods is hard to get to or does not exist. On the other hand, when planners do not exercise their full capacity to plan for health, they can actually be condemning the people they are planning for to live in an environment of insecurity, stress, and struggle. For example, not planning for access to safe and affordable homes can leave low-income and communities of color vulnerable to unsafe, unhealthy living conditions (e.g., lead paint, unsanitary conditions, poor indoor air quality). It can also force low-income families to commute long distances to work, which can exacerbate air quality problems and negatively impact family time and quality-of-life issues.

While the burden of unhealthy places does not fall on the planners' shoulders alone, they have an immense power of persuasion. Science, data, and the community's voice is at their disposal to craft recommendations geared to improve our communities' health. They are the professionals who in collaboration with all their allies—architects, engineers, transportation officials, environmentalists, public health professionals, community advocates, developers, etc.—can act "upstream" and save people from constantly falling into a flowing stream.

Planners must always strike a balance between social, environmental, and economic considerations, but human health should always be taken into account so that health inequity and health disparities are not perpetuated.

Figure 5. Upstream/downstream fable

Upstream-Downstream? A Tale of Two Terms

All professional groups have their own terminology to communicate, as well as their own culture regarding how to express ideas, tell a story, and share resources.

Health providers and public health professionals do as well. For a long time, a lot of the discussion around health focused on health care access, quality, and coverage. Although having access to good health care is vital when someone is sick, there is growing recognition that the environments where people live, learn, work, and play influence health as well and that many of the factors that set them up for illness are much harder to address in a clinical setting. For instance, if a child suffers from being overweight or obese, a physician at a clinic visit would advise the parent to help the child get more activity in his or her day and to work on eating healthy foods. However, many neighborhoods do not have safe places to be active or access to healthy, affordable foods. Needless to say, it can be a challenge for the clinical provider!

Public health as a profession really works to support prevention—getting ahead of the problem before it even exists—helping the young child maintain a healthy weight. In public health speak, seeing the overweight child in the clinic and recommending lifestyle and behavior change to become healthier would be a *downstream* intervention. Helping to put policy in place to create healthy, safe places to play, with access to nutritious, affordable food, before the child is overweight would be an *upstream* intervention.

The terms *upstream* and *downstream* originate from a parable. The parable has several different renditions:

A young couple was out enjoying a nice picnic lunch near the local river. The sun was glistening on the warm summer day, they were enjoying their delicious meal, when suddenly they heard a person scream, "Help me out of the river!" The couple ran to help the young man and rescue him. After their nerves were calmed, they went back to their picnic. Two minutes later, three more people came down the river screaming, "Help, help!" As the couple rescued them, a few more people appeared in the river. After the third rescue mission, the woman decided to investigate why so many people were falling into the river. She realized that the inviting lookout point *upstream* was damaged. The couple fixed the lookout point and thereby prevented the need for more *downstream* rescues.

These terms are used a lot in public health. Increasingly, practicing physicians are also recognizing the social, economic, and environmental factors that impact health, and there is even a movement called the "Upstream Doctors." Clinical education has also started to screen for social factors and work on policy to effect *upstream* change.

SDOH, Maps, and Data

Planners can gain practical understanding of the SDOH by applying two essential tools from their toolbox: maps and data. Data is the vital component that can turn a map from a simple geographical illustration to a powerful story about people occupying space and how they exert their collective voice in the decision-making process to stay healthy. Moreover, public health data can help planners better understand the distribution of resources and opportunities in a particular community in order to determine priorities.

For example, the following sections provide a glimpse of data resources available for planners to understand what the SDOH are and how to put this knowledge into practice: (1) California Department of Public Health Burden of disease report, (2) Robert Wood Johnson Foundation county health rankings, and (3) UC Davis Regional Opportunity Index.

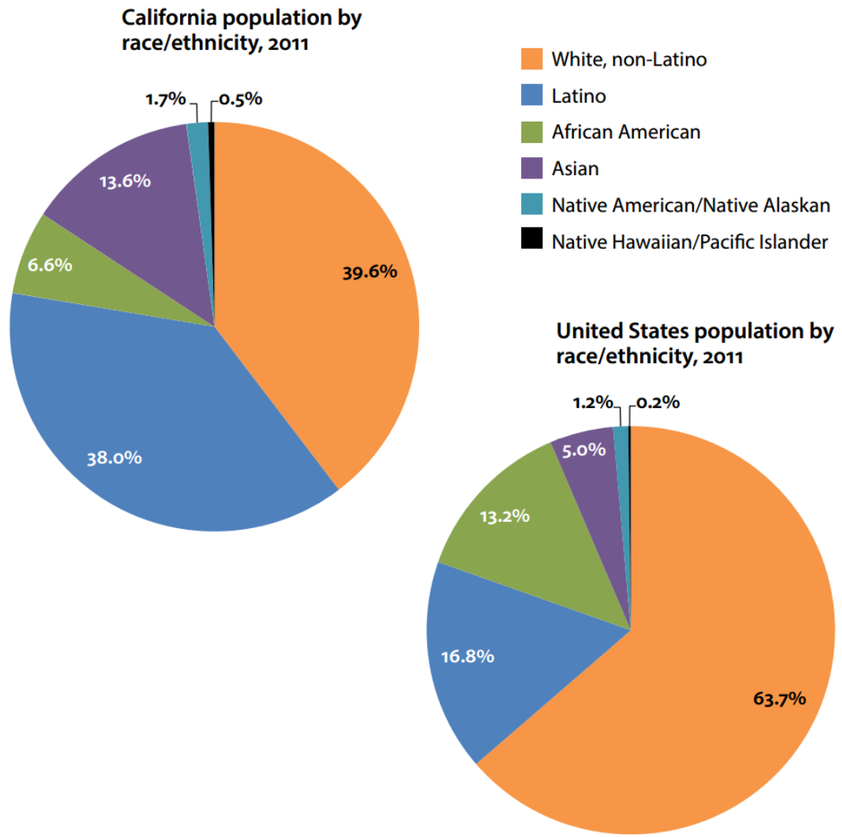
Variations of Health Across California

According to the California Department of Public Health's *2013 California Burden of Chronic Disease and Injury Report*, health begins where we live, learn, work, and play.

The report also provides the following snapshots about the Golden State's health in which many of the indicators are tied to the distribution of people over a wide range of built environments:

- California's population of nearly 38 million is the most diverse in the United States and the world, consisting of immigrants from more than 60 countries. More than 200 languages are spoken and read in California.
- California is a majority-minority state, meaning that no ethnic group within the state is a majority.
- Latinos and whites are the two largest racial/ethnic groups in California. It is projected that Latinos will constitute the majority, 52% of the estimated 60 million residents, in 2050.
- Although we embrace our diversity, millions of Californians face social inequities that contribute to health inequity.
- The median income of white households ($69,224) is roughly 50 % greater than the median income of African American ($46,320), American Indian/Alaska Native ($44,620), and Latino ($43,856) households.
- African Americans, Latinos, and Native Americans/Alaska Natives are more than twice as likely as whites to have an income below the poverty level.

Figure 6. Race/ethnicity diversity in California and in the U.S.



Source: U.S. Department of Commerce, U.S. Census Bureau, 2012

- African American (29%), Latino (26%), and Native American (27%) children are more than three times as likely to live in poverty as white children.

- California ranks third in the United Sates in terms of life expectancy. Californians born today can expect to live almost six years longer than a baby born in 1980. At birth, the average Californian is expected to live 81 years.

- Life expectancy is not the same for all racial/ethnic groups.

- Asian Americans are expected to live the longest (86 years) and African Americans the shortest (73 years) number of years.

- Native Americans have a life expectancy of 78 years.

- Women live longer than men (83 years versus 78 years).

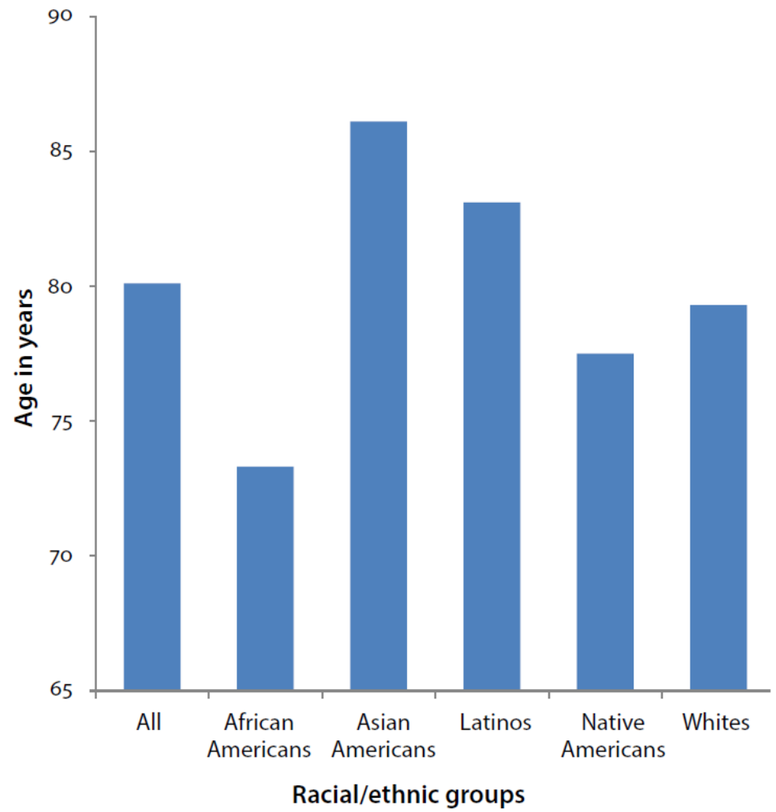
- Life expectancy depends on where you live.

- San Francisco has the greatest life expectancy of the five most populous metropolitan areas in California, at 81 years, and the Riverside–San Bernardino metropolitan area has the shortest, at 78 years.

- Overall, educational attainment is the most important predictor of life expectancy.

- Adults with a bachelor's degree are expected to live an additional full year of life longer that those without a bachelor's degree, after race/ethnicity and income are taken into account.

Figure 7. Life expectancy in California by race/ethnicity, 2006–2008



Source: Burd-Sharps and Lewis, A Portrait of California, 2011

The Latino Health Paradox

Latinos have the lowest levels of educational attainment, high rates of poverty, language barriers, and low rates of health insurance, yet they live three years longer than the average Californian. Latino foreign-born residents tend to have better health outcomes that those born in the United States or who have lived in the United States 15 years or more. The Latino paradox does not guarantee good health. Young Latino men have homicide rates that are three times higher than the California average.

Variations of Health Across California

Planners across the state working at the various planning levels—state, region, county, city, and neighborhood—have one of the highest-order responsibilities in community development: ensuring that the health disparities and health inequities become insignificant or nonexistent in every community. By using demographic and public health data, and stories from the community, planners can develop action-oriented policies tailored to improve health outcomes in communities where life expectancy is lower than in others. For example, when comparing two communities in Alameda County (West Oakland and the Oakland Hills), the data can tell a story of disenfranchisement and neglect in West Oakland: "an unhealthy root system" (Figure 8). At the same time, the data also represents an opportunity for planners to think creatively and solve inequities through innovative thinking that can maintain the high quality of life where it already exists, while elevating it where the standard is low.

Figure 8. Disparity and inequity findings in Alameda County

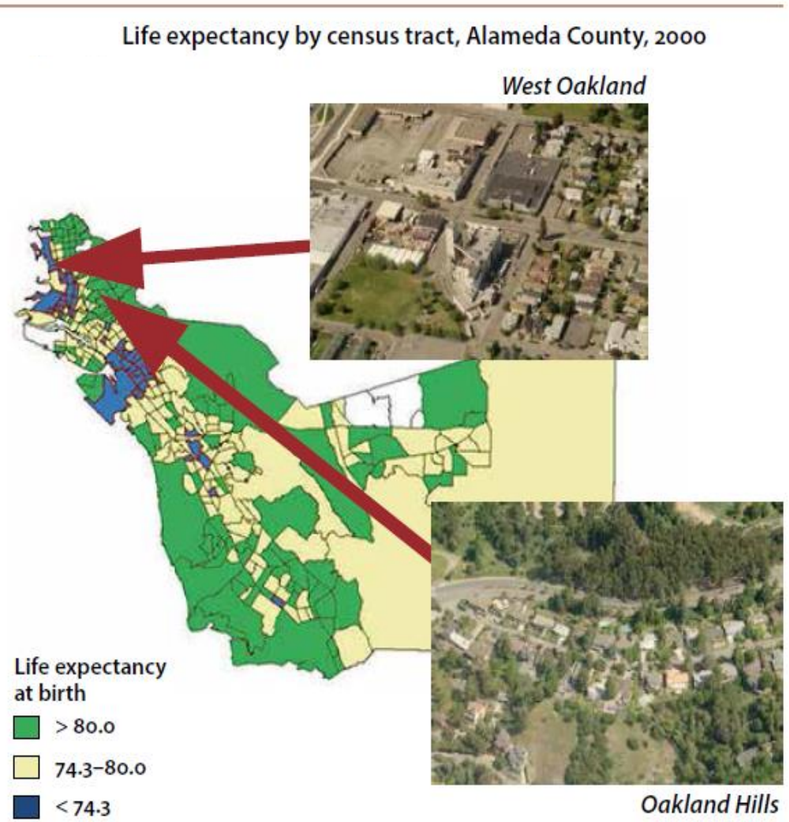
Community in Focus: Alameda County

A white child from the Oakland Hills can expect to live to 85 years old, whereas an African American child living in West Oakland—just a few miles away—can only expect to live to 70.

The child from West Oakland is:
- 1.5 times more likely to be born prematurely;
- 7 times more likely to be born into poverty;
- 2 times as likely to live in a home that is rented.
- 4 times more likely to have parents with only a high-school education.
- 2.5 times more likely to be behind in childhood vaccinations.
- 4 times less likely to read at grade level by 4th grade.
- 4 times as likely to live in a neighborhood with double the density of liquor stores and fast food outlets, and
- 5.6 times more likely to drop out of school.

As an adult, he or she is:
- 5 times more likely to be hospitalized for diabetes.
- 2 times more likely to be hospitalized for heart disease.
- 2 times more likely to die of heart disease.
- 3 times more likely to die of stroke, and
- 2 times as likely to die of cancer.

Figure 7 shows the dramatic social and environmental differences between living in West Oakland and Oakland Hills, California, and their link with life expectancy.



	West Oakland	Oakland Hills
High school grads	65%	90%
Unemployment	12	4
Poverty	25	7
Home ownership	38	64
Non-White	89	49

Percent

Source: Alameda County Public Health Department , 2008, 2012

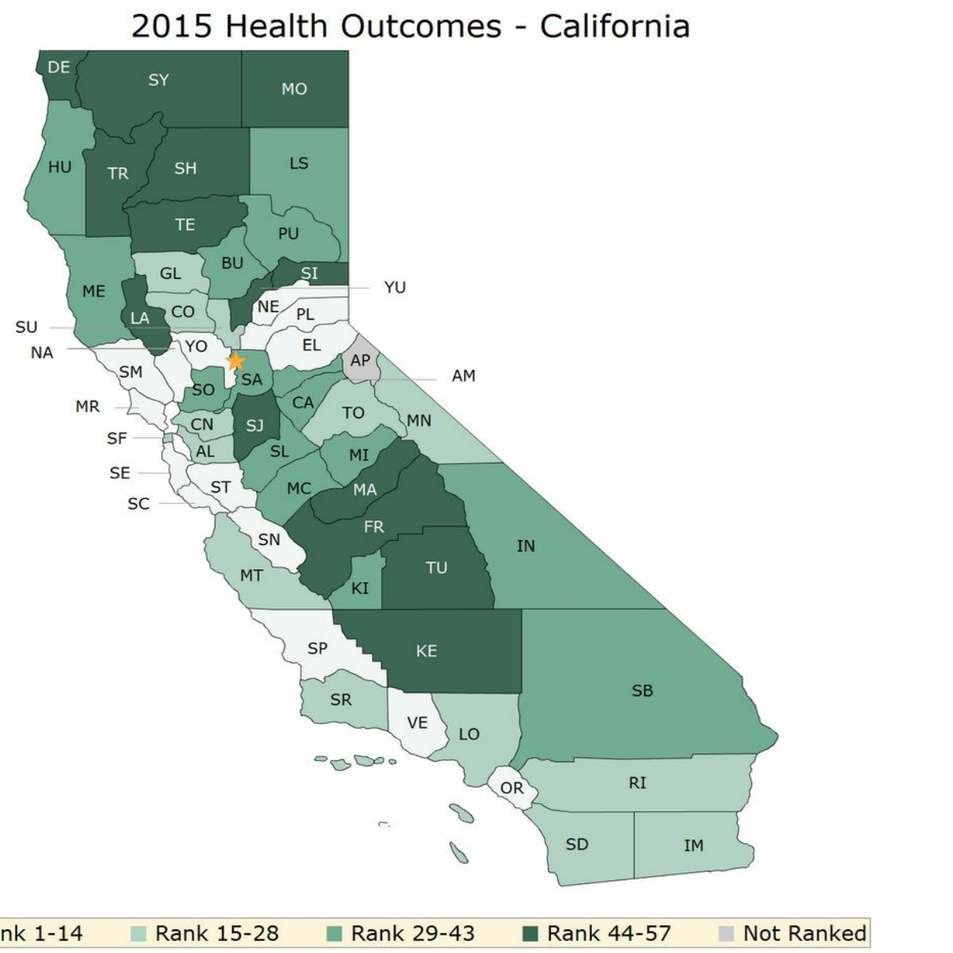
2015 Health Outcomes—California

The Robert Wood Johnson Foundation has developed reports called *County Health Rankings* that measure the health of most counties in the nation (available online at countyhealthrankings.org). These rankings can help planners to understand what influences the health status of residents and how long they will live. The rankings look at a variety of measures that affect health, such as high school graduation rates, access to healthy foods, and rates of smoking, obesity, and teen births. They are based on data available for each county, and thus it is possible to measure the overall health of any county in California.

The map in Figure 9 shows the distribution of California's health outcomes, based on an equal weighting of length and quality of life. Lighter colors indicate better performance in the respective summary rankings. Health outcomes represent the level of health within the population of a county, while health determinants refer to the factors (shown in the map in Figure 9) that influence the health of people in that county.

In general, according to the map, coastal counties have better health outcomes than inland counties. Moreover, the lowest health outcomes in the state happen in the Central Valley—the "bread basket of the world"—and a number of Northern California counties. Can the integration of the SDOH into planning help alleviate these disparities? If we look at Riverside County, for instance, an inland county in Southern California, it is ranked at 24. If we compare this to its ranking in 2011 of 29, the 5-point change may be attributed to various dynamic aspects related to the SDOH. In terms of change in planning policy, for instance, Riverside County adopted a Health Element into its General Plan in 2011, which includes sections and policies to increase access to healthy food choices, such as Policy HC 11.2*: Promote the production and distribution of locally grown food by reducing barriers to farmers markets, food cooperatives, neighborhood or community gardens, ethnobotanical gardens, etc.* Since then, through the Riverside County Health Coalition (RCHC), County staff has worked with various stakeholders to implement this policy. In addition, the RCHC has worked with its 28 jurisdictions to incorporate health into the cities' general plans. To date, three have adopted similar health elements, and three more are in the process of preparing this type of document.

Figure 9. County Health Ranking: Health Outcomes



County	Rank	County	Rank	County	Rank	County	Rank
Alameda	20	Kings	43	Placer	2	Sierra	57
Alpine	NR	Lake	56	Plumas	41	Siskiyou	55
Amador	30	Lassen	36	Riverside	24	Solano	32
Butte	42	Los Angeles	26	Sacramento	29	Sonoma	8
Calaveras	33	Madera	46	San Benito	10	Stanislaus	38
Colusa	17	Marin	1	San Bernardino	37	Sutter	27
Contra Costa	18	Mariposa	31	San Diego	19	Tehama	47
Del Norte	52	Mendocino	35	San Francisco	21	Trinity	54
El Dorado	7	Merced	39	San Joaquin	44	Tulare	45
Fresno	49	Modoc	53	San Luis Obispo	9	Tuolumne	22
Glenn	28	Mono	15	San Mateo	4	Ventura	14
Humboldt	34	Monterey	23	Santa Barbara	16	Yolo	6
Imperial	25	Napa	13	Santa Clara	3	Yuba	48
Inyo	40	Nevada	11	Santa Cruz	12		
Kern	51	Orange	5	Shasta	50		

Source: County Health Rankings

2015 Health Factors—California

The blue map in Figure 10 displays California's summary rankings for health determinants (or factors) based on weighted scores for health behaviors, clinical care, social and economic factors, and physical environment. Lighter colors indicate better performance in the respective summary rankings.

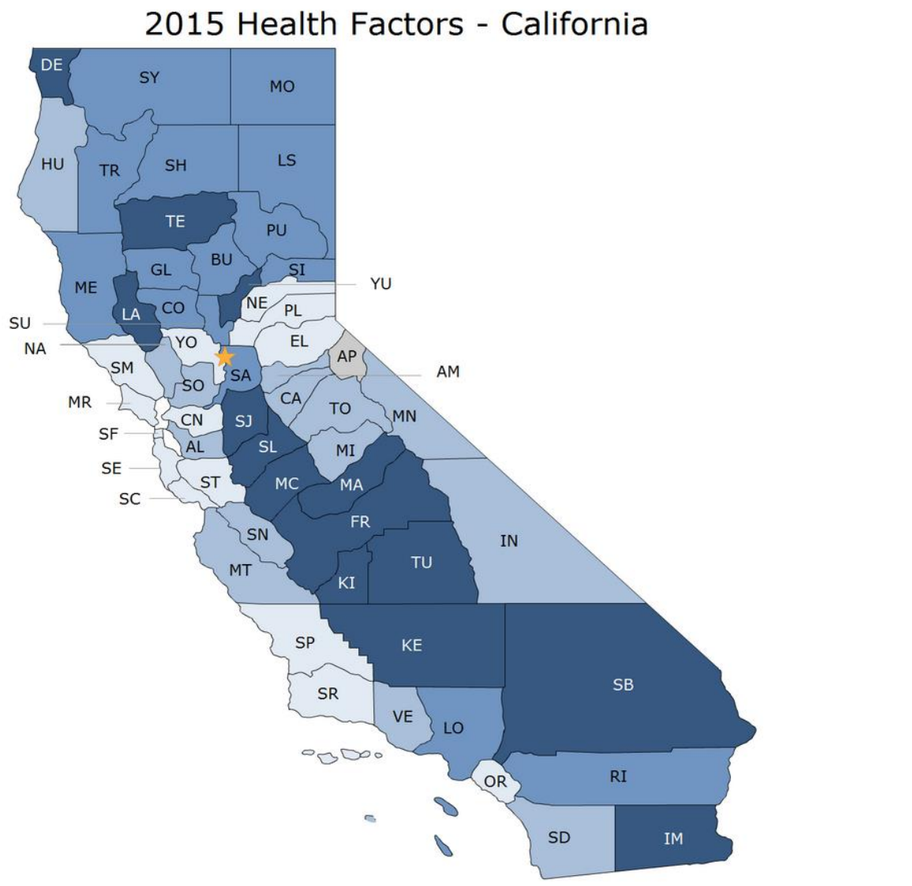
Generally speaking, there is a strong correlation between the outcomes and health factors since factors determine outcomes. What this means is that when a place has a strong educational system, the likelihood of having a more competitive workforce with higher incomes can determine better health outcomes.

According to the map, overall, coastal counties have stronger SDOH systems than inland counties. If we look at Riverside County, for instance, it is ranked at 39. If we compare it with the 42 ranking in 2011, the 3-point change may be attributed in part to reasons similar to those discussed in the previous section.

Alameda County is ranked at 17 and in 2011 was ranked at 18. The 1-point difference still signals a fair stability in terms of health outcomes.

It is important to note that the health factors ranking shown by county are not evenly distributed. What this means is that even in the healthiest counties, the existence of communities disproportionally affected by the lack of basic needs is factual. Other maps, tools, data and analysis are needed to zoom in into the granular picture of how our communities rank which can help reveal disparities.

Figure 10. County Health Ranking: Health Factors



County	Rank	County	Rank	County	Rank	County	Rank
Alameda	17	Kings	49	Placer	2	Sierra	41
Alpine	NR	Lake	53	Plumas	32	Siskiyou	34
Amador	21	Lassen	38	Riverside	39	Solano	24
Butte	30	Los Angeles	36	Sacramento	29	Sonoma	14
Calaveras	22	Madera	45	San Benito	25	Stanislaus	50
Colusa	35	Marin	1	San Bernardino	47	Sutter	37
Contra Costa	12	Mariposa	28	San Diego	19	Tehama	46
Del Norte	44	Mendocino	31	San Francisco	4	Trinity	42
El Dorado	10	Merced	48	San Joaquin	51	Tulare	56
Fresno	54	Modoc	40	San Luis Obispo	6	Tuolumne	20
Glenn	33	Mono	18	San Mateo	3	Ventura	15
Humboldt	23	Monterey	26	Santa Barbara	13	Yolo	9
Imperial	57	Napa	16	Santa Clara	5	Yuba	52
Inyo	27	Nevada	8	Santa Cruz	11		
Kern	55	Orange	7	Shasta	43		

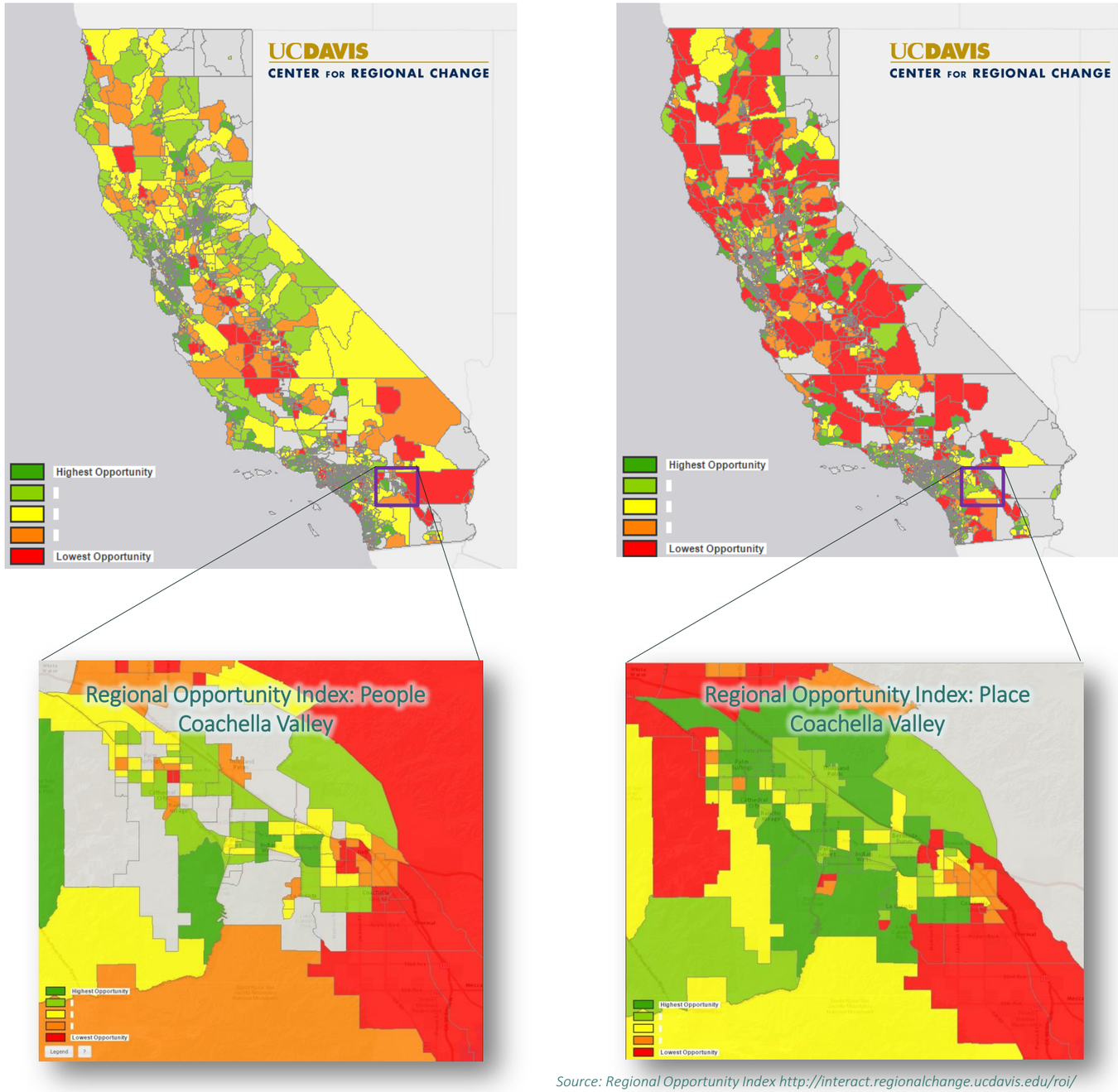
Source: County Health Rankings

Regional Opportunity Index—People and Place

The UC Davis Center for Regional Change has developed the Regional Opportunity Index (ROI), an index of community and regional opportunity for understanding social and economic opportunity in California's communities. The goal of the ROI is to help target resources and policies toward people and places with the greatest need, to foster thriving communities of opportunity for all Californians. It does this by incorporating both a "people" component and a "place" component, integrating economic, infrastructure, environmental, and social indicators into a comprehensive assessment of the factors driving opportunity.

ROI can also be used as a tool for identifying areas where health outcomes vary by census tract. The maps shown depict localities in the state by census tracts and identified in a range of colors from red, where the least opportunity exists, to green, where the greatest opportunity is. The two side-by-side maps represent the index of opportunity for both people and place (Figure 11). The zoomed-in areas capture the Coachella Valley in Riverside County, in which stark disparities exist between gated country club communities shown in green and small rural communities of farmworkers in the southwest corner. These disparities are being addressed through innovative approaches, collaboration between nontraditional partners, programs, and policies. For example, the City of Coachella (which is a composite of reds and greens on the index map) has recently incorporated a Health and Wellness Element into its General Plan. Additionally, health policies have been included in the Circulation Element and the Climate Action Plan. The assumption is that once the city begins to implement the various health policies, the color in the red areas will begin to change to yellow over time.

Figure 11. Regional Opportunity Index comparison: Coachella Valley



Source: Regional Opportunity Index http://interact.regionalchange.ucdavis.edu/roi/

A Framework for Reducing Health Inequities

BARHII, the Bay Area Regional Health Inequalities Initiative, has developed the framework shown in Figure 12 to demonstrate that the determinants of health are intricately linked and should not be considered in isolation. Social factors such as racism, poverty, and lack of education can have a profound impact on people's health, including death.

The model distinctively show how current public health practice (case management, individual health education and health care) is being transformed from a downstream approach to an emerging practice the flows from upstream (community capacity building, organizing, community engagement, forming strategic partnerships and advocacy). Planners should find a comfort zone within the policy realm related to living conditions in which land use, transportation, environmental quality, access to employment, opportunities, healthy foods, health care and services are some of the core competencies of the profession. At the same time, planners should find opportunities to address the root causes of disparities in the built environment which may be engrained in social inequities and/or imbalance of representation within institutional power systems. A few examples of how planners fit the BARHII model are provided to put into context the relationship between their work and the SDOH:

Social Inequities and Institutional Power

The City of Jurupa Valley has included an Environmental Justice Element in its General Plan. This document addresses issues such environmental justice communities and discriminating state tax allocation policies. These sections reveal an objective analysis of the burdens created as a result of lack of policies designed to ensure community health. The document also provides policies to address meaningful public input and capacity building:

EJ–2.10: Ensure that low-income and minority populations have equal access and influence in the land use decision-making process through such methods as bilingual notices, posting bilingual notices at development sites, conducting information meetings with interpreters, etc.

Planners should increasingly address this upstream area into their practice, which holds the root causes of social alienation, environmental degradation, and economic disadvantage. Planners holding key management positions such as elected officials, appointed commissioners, and city managers/county executives, etc. should be the ones leading these conversations with the community at large and directing the creation of policies to address social inequities and institutional power.

Living Conditions

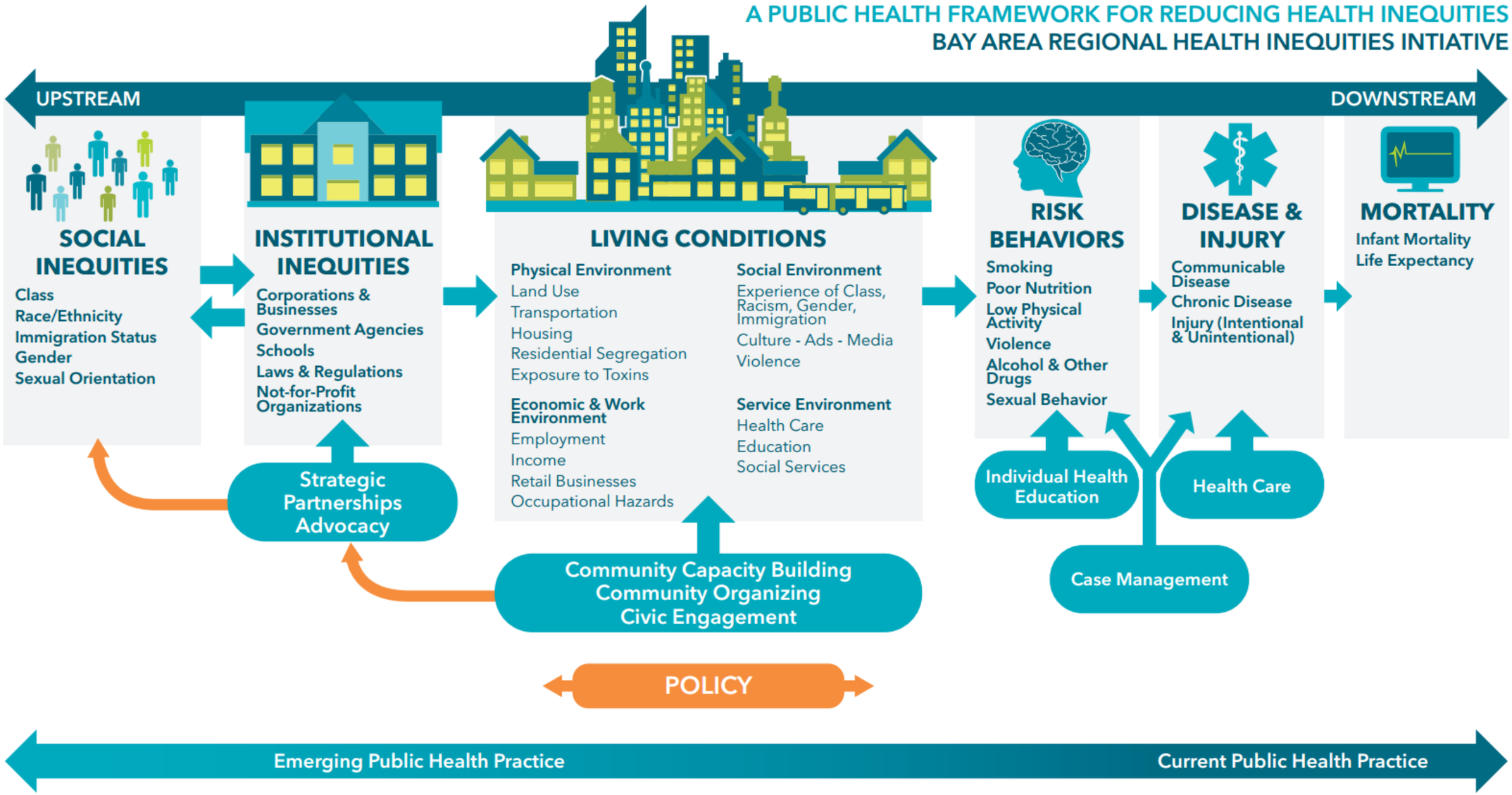
Planners are the stewards of the built environment. They are responsible for signing off on any legal permit that allows any subdivision of land, its modification, and its ultimate use. Planners have the power and the responsibility to ensure that every aspect affecting the environment, the economy, and society is taken into account. Health is a common denominator across the three considerations when planning for open space and recreation, for a transportation system, for a master planned community, and even when granting a certificate of occupancy for a small retail operation.

Risk Behaviors

Planners do not traditionally have the necessary training to persuade someone to cease smoking or to eat healthy foods. What they can do, however, is work with partners such as public professionals and social workers who can ensure that cigarette signage does not overwhelm the street environment, or they can plan for allowing the development of community gardens.

Appendix A includes a few of the key determinants identified in the BARHII model, where they are explored in greater detail in terms of what we know about them, their impact on health and mortality, strategies for their application, and resources for planning professionals.

Figure 12. Within the BARHII framework for reducing health inequities, planners can help in various upstream and downstream areas in addition to the traditional living conditions area of influence.



Source: Bay Area Regional Health Inequalities Initiative
Graphic extracted from Portrait of Promise: The California Statewide Plan to Promote Health and Mental Health Equity

Communities Putting Prevention to Work

In March 2010, the U.S. Centers for Disease Control and Prevention (CDC) created the Communities Putting Prevention to Work (CPPW) program to apply practice and evidence-based strategies to reduce obesity and tobacco use across the nation. The program was funded through the American Recovery and Reinvestment Act of 2009. CPPW awarded a total of $373 million to local communities over a two-year period.

The County of San Diego Health and Human Services Agency (HHSA) received $16.1 million through CPPW to fund projects in the San Diego region that increase levels of physical activity and access to healthy food and nutrition. The goals of the San Diego CPPW program, also called Healthy Works, were achieved through partnerships between HHSA, service providers, planning agencies, and community partners. HHSA partnered with the San Diego Association of Governments (SANDAG) to implement projects related to regional planning, active transportation, and Safe Routes to School. This work was supported by $3 million in grant funds and was completed by March 2012.

In September 2011, HHSA received another CDC grant, the Community Transformation Grant (CTG), and chose to partner with SANDAG again to build on the successes of the Healthy Works Phase I projects. SANDAG and HHSA initiated the Healthy Works Phase II projects in July 2012. The projects included Safe Routes to School Strategic Plan Implementation, Public Health and Wellness Policies for Regional Plans, Complete Streets Policy and Implementation, Regional Monitoring for Physical Activity and Public Health, and Health Benefits and Impacts Analysis Program. One of the many tools that resulted from this work was the Healthy Communities Atlas.

The Healthy Communities Atlas, completed in 2012, reflects the Healthy Works program's focus on obesity prevention through physical activity and access to healthy foods. A set of Geographic Information System (GIS) tools were used to display environmental factors related to health outcomes based on public health research. Data is aggregated at the Census Block Group Level for the San Diego region. As there were many requests by community-based organizations, university researchers, and local cities to have better access to data, the atlas maps became available as an online tool in April 2014 on the SANDAG website.

Other health-related planning tools SANDAG has developed include the Healthy Communities Assessment Tool, which is a pilot program developed by the federal Department of Housing and Urban Development. The tool provides data on a wide variety of social, economic, and physical factors important to community health. Users can examine how 152 neighborhoods across the region perform on each factor and compare neighborhoods on their overall ranking of core indicators from a Healthy Communities Index. Data is aggregated at the neighborhood level for the San Diego region.

In 2012, SANDAG received a Caltrans Environmental Justice Planning Grant to examine some of the health and transportation challenges facing the border community of San Ysidro. The Border Health Equity Transportation Study identified health disparities in San Ysidro and quantified the possible impacts of transportation and other improvement projects on community health to help both community members and city planners to prioritize projects and programs to reduce health disparities. The final study identified 16 key recommendations that show the most promise for improving community health. The final report is a template that can be easily replicated by other agencies to examine mobility, built environment, and health factors in their communities.

SANDAG

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

healthy WORKS℠
Paths to Healthy Living

Recommendations for Policy and Planning

- Ensuring that public health departments have a place when land use planning decisions are on the table.
- Planning staff should work with public health departments and community-based organizations to identify opportunities to train staff on the SDOH.
- Planners should work with public health experts, allied professionals such as transportation engineers, and community members to identify and articulate the SDOH impacts of land use decisions.
- Under the leadership of the planning department and in collaboration with the local health department, cities and counties should ensure that every employee at city hall, the county government, and the Metropolitan Planning Organization is aware of the SDOH implications for community development.
- Through the "Health in All Policies" (HIAP) approach, California state departments should continue familiarize themselves with the SDOH concept in order to better collaborate with the Department of Public Health.
- Academic institutions granting planning degrees should incorporate an explicitly SDOH module into their curricula.
- Private sector planners and consultants should always advise their clients about the potential detriments of not considering the SDOH.
- Planners should work to use best evidence and stakeholder input to explore the health equity impacts of various planning scenarios.
- Planners should always approach the solving of a problem by examining its root cause and should furnish recommendations from an upstream perspective.
- Apply a HIAP approach, bringing together public health, planning, and other sectors to ensure that health, equity, and sustainability are considered during the decision-making process.
- Health Impact Assessment (HIA) is an emerging tool at the disposal of planning departments. This methodology mirrors similar processes used for environmental impact reports (EIRs), the only difference is the focus on disease and injury prevention and exhaustive demographic analysis that reveals distribution of effects over the population affected.
- Planners should evaluate key indicators such as access to healthy food, walkability/bikeability, physical activity, outdoor air quality, indoor air quality, green space, job creation, climate risk reduction, health status, etc.
- Align healthy planning goals and objectives with existing policies and processes (e.g., business planning cycles, projects, processes, and templates). In annual operating budgets, align healthy planning funding to community planning efforts (e.g., funding for bike lanes and sidewalks, play lots, parks, tree cover, green spaces, greenbelts and livable corridors, cooling centers, public transportation that provides easy access to social and health centers).
- Foster collaborative processes that involve community members and input from multiple sectors to broaden the ways in which planning professionals think about health.
- Many cities and counties may already have health-supportive policies in place. However, they may not necessarily be framed with a health lens. As such, planners can revisit them to ensure that health is explicitly mentioned. Complete Street policies are an excellent example of where health concepts, data, outcomes, etc. can have a prominent presence.

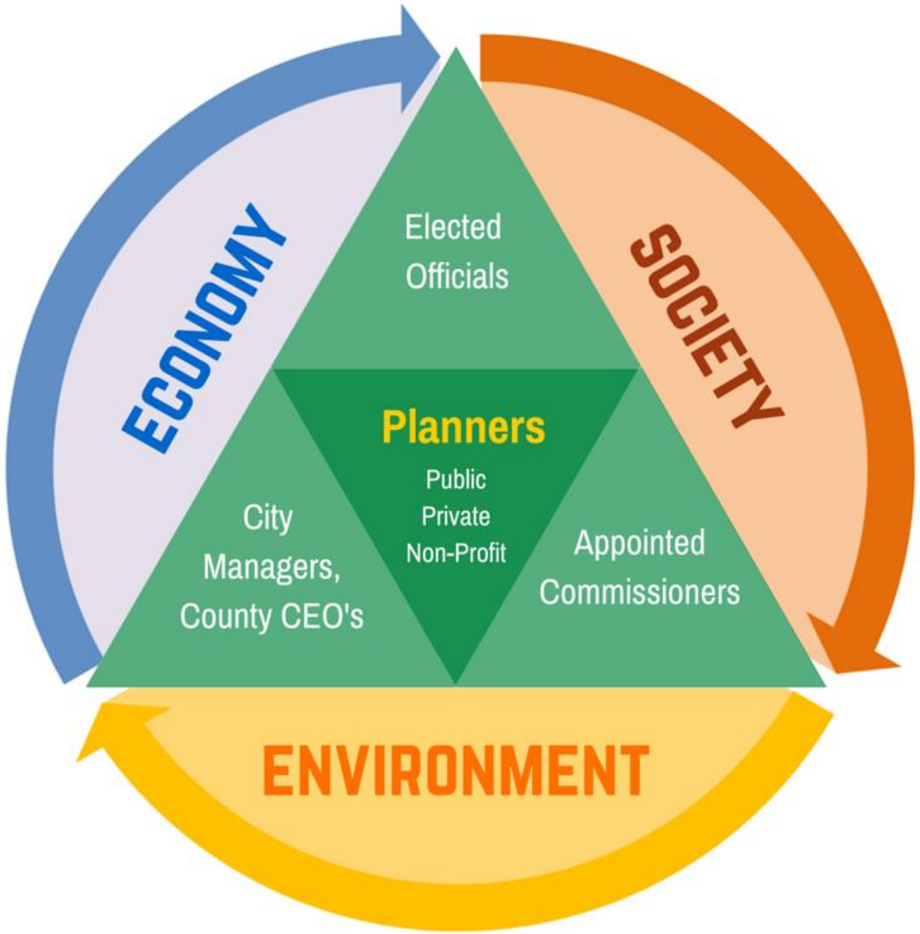
Conclusion

Everyone in society plays a key role on a daily basis to various degrees in developing healthy communities. As the stewards of the built and natural environments, planners have a crucial role to play. They are the subject matter experts who connect the complexities of social issues, environmental considerations, and economic growth. They translate community input into recommendations for decision makers to select the best possible choice that will yield the most positive health outcomes. If health considerations are not fully analyzed in planning processes, however, the risk of people continuing to fall into the stream of chronic diseases is imminent.

The Social Determinants of Health Model (SDOH) can assist planners in developing the logic and the narrative to successfully integrate health into land use policy. The concept also provides the common ground needed for collaboration with health advocates and community organizers. Understanding it could lead to improving communication, relationships, and equitable allocation of resources, with virtually every stakeholder engaged in community development in the public and private sectors.

Finally, the SDOH provides the framework for planners to successfully communicate and integrate health into daily planning activities.

Figure 13. The Planner's Decision-Making Milieu



Source: Scheme developed for this publication -Miguel A. Vazquez, AICP

Moving Forward

It is important to remind planners, and to those involved in planning, that the American Planning Association has adopted a set of ethical principals[1]. They serve as a "guide to ethical conduct for all who participate in the process of planning as advisors, advocates, and decision makers. It presents a set of principles to be held in common by certified planners, other practicing planners, appointed and elected officials, and others who participate in the process of planning." The following excerpt is provided as these principles can serve as the catalyst for planners to join a growing conversation and action around **health equity** taking place throughout the nation:

The planning process must continuously pursue and faithfully serve the public interest.

Planning Process Participants should:

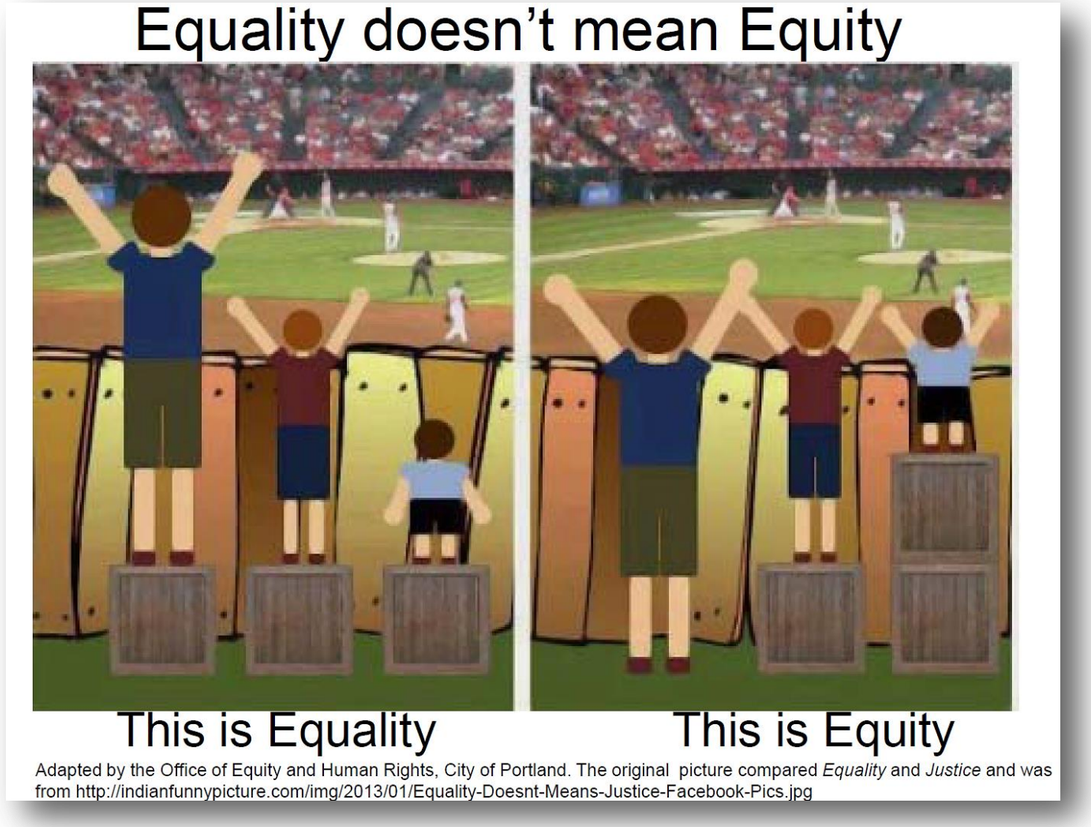
1. Recognize the rights of citizens to participate in planning decisions;
2. Strive to give citizens (including those who lack formal organization or influence) full, clear and accurate information on planning issues and the opportunity to have a meaningful role in the development of plans and programs;
3. Strive to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of disadvantaged groups and persons;
4. Assist in the clarification of community goals, objectives and policies in plan-making;
5. Ensure that reports, records and any other non-confidential information which is, or will be, available to decision makers is made available to the public in a convenient format and sufficiently in advance of any decision;
6. Strive to protect the integrity of the natural environment and the heritage of the built environment;
7. Pay special attention to the interrelatedness of decisions and the long range consequences of present actions.

Figure 14 is a visual depiction of the difference between equality and equity which planners should be able to discern. The planning profession creates more than just policies and laws, it sets a direction and vision for growth, creates opportunities, and helps allocate resources. With these principles at the forefront of decision making, planners have the ability to make lasting, impactful change.

[1] Ethical Principles in Planning https://www.planning.org/ethics/ethicalprinciples.htm

"Health equity refers to efforts to ensure that all people have full and equal access to opportunities that enable them to lead healthy lives."
(CA Health and Safety Code Section 131019.5)

Figure 14. Equality vs. Equity



Source: Office of Equity and Human Rights, City of Portland.

Resources

Health Atlases / Mapping Sources

California Department of Public Health –Network for a Healthy California
http://gis.cdph.ca.gov/cnn/
The Health Atlas, City of Los Angeles
http://healthyplan.la/the-health-atlas/
San Diego Association of Governments
https://hci-sandiego.icfwebservices.com/
UC Davis Regional Opportunity Index
http://interact.regionalchange.ucdavis.edu/roi/

Healthy Communities Planning

American Institute of Architects, Design and Health
http://www.aia.org/practicing/designhealth/
American Planning Association, Planning and Community Health Center
https://www.planning.org/nationalcenters/health/
Governor's Office of Planning and Research Healthy Planning Leadership Series
http://www.opr.ca.gov/s_healthyplanning.php
Healthy by Design: 2010 A Public Health and Land Use Planning Workbook
http://www.cdph.ca.gov/programs/cclho/Documents/HealthyByDesign.pdf
Urban Land Institute, Building Healthy Places Toolkit
http://uli.org/research/centers-initiatives/building-healthy-places-initiative/building-healthy-places-toolkit/

Health Elements

City of Coachella
http://www.rivcoph.org/Portals/0/pdf/FINALHCE3_23_2011.pdf
City of Richmond
http://www.ci.richmond.ca.us/DocumentCenter/Home/View/8579
County of Riverside Department of Public Health
http://www.rivcoph.org/Portals/0/pdf/FINALHCE3_23_2011.pdf
City of San Pablo
http://www.sanpabloca.gov/DocumentCenter/Home/View/669
City of Jurupa Valley-Environmental Justice Element
http://jurupavalley.org/LinkClick.aspx?fileticket=JZt5BZnnUzA%3D&portalid=21

Health Equity

The California Statewide Plan to Promote Health and Mental Health Equity, California Department of Public Health
https://www.cdph.ca.gov/programs/Documents/CDPH_OHE_Disparity_Report_Final_Jun17_LowRes.pdf

Health Impact Assessment

Health Impact Assessment: Quick Guide
http://activelivingresearch.org/files/NACCHO_HIAQuickGuide_0.pdf
Health Impact Assessment Resource List of Toolkits & Guides
http://www.naccho.org/toolbox/tool.cfm?id=3147
Health Impact Assessment in the United States
http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/hia-map
Planning for Healthy Places with Health Impact Assessments
http://advance.captus.com/planning/hia2/home.aspx

Relevant SDOH sites

Bay Area Regional Health Inequities Initiative
http://www.phi.org/focus-areas/?program=bay-area-regional-health-inequities-initiative
Built Environment Public Health Clearinghouse
http://www.bephc.gatech.edu/
California Public Health Association-North
http://cphan.org/
ChangeLab Solutions
http://www.changelabsolutions.org/
PolicyLink
http://www.policylink.org/
Public Health Alliance of Southern California
http://phasocal.org/
Public Health Institute
http://www.phi.org/
The California Endowment
http://www.calendow.org/
Robert Wood Johnson Foundation—County Health Rankings and Roadmaps
http://www.countyhealthrankings.org/
Southern California Public Health Association
http://scpha.org/

Social Determinants of Health

Center for Disease Control and Prevention
http://www.cdc.gov/nchhstp/socialdeterminants/index.html
Healthy People 2020
http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health
World Health Organization
http://www.who.int/social_determinants/en/

Video Links

Social Determinants of Health
https://www.youtube.com/watch?v=I7iSYi3ziTI
Upstream Downstream Fable
http://www.seekwellness.com/wellness/upstream-downstream.htm

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www.cproundtable.org