



# Design 4 Active Sacramento

Advancing Health and Equity through Active Design in the Sacramento Region

Key Themes | Active Transportation, Social Connection & Safety, Environmental Exposures, Health & Climate Change

## SUMMARY

Design 4 Active Sacramento is a cross-disciplinary team of planners, engineers, non-profit executives, public health professionals, and private healthcare physicians whose mission is to create healthier, more equitable communities through Active Design. Active Design is an evidence-based approach to community and neighborhood development that uses design to encourage and facilitate more regular physical activity and increased social interaction. Working closely with Design 4 Active Sacramento (D4AS), Sacramento County is one of the pioneering jurisdictions to have successfully introduced Active Design into a comprehensive array of building and planning codes and policies, most notably the updated zoning code and design guidelines that were adopted in July 2015.

In addition to developing new policies and guidelines, D4AS highlighted all of the County's Active Design supportive policies with a 'healthy walking person' Icon. The two year effort established a framework for ensuring that health is a primary component for development in the County, and continues to spur collaboration between planning and public health professionals.



**D4AS**  
DESIGN 4 ACTIVE  
SACRAMENTO



## **LEAD AGENCY AND PARTNERSHIPS**

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The work to embed health into the County's General Plan, Zoning code, and Design Guidelines involved strong collaboration between Sacramento County and D4AS. D4AS is housed under WALKSacramento, an active living and healthy communities planning and education non-profit. D4AS is comprised of a diverse team that includes representation from the following professions: academia, private healthcare, public health, non-profit, urban sustainability, transportation engineering, landscape architecture, and regional planning.

## **DRIVERS**

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This project was not driven by a state mandate or a funded program but rather born out of a realization that in order to make a positive, lasting effect on the public's health, the built environment must be planned, designed, and built in such a way that supports and enables healthy choices. The project is the institutionalization of a wide array of research across the health care, public health, and planning fields that make clear the significant role of design in promoting community health, especially in high minority underserved communities. This work has helped inspire efforts throughout the region and state to adopt more of an intentional and integrated approach to health in the built environment through local planning and development policies. Further, there are numerous co-benefits when such an approach is taken, such as increased economic prosperity and resiliency to climate change and its impacts.

## **ENGAGEMENT PROCESS**

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D4AS engaged Sacramento County planning staff and decision makers throughout the policy development and approval process with tools necessary to advance public health. Further, D4AS engaged with other government and non-profit organizations where their work intersected with health. D4AS had dialogues on how the built environment and policies are exacerbating chronic disease and how health outcomes can be improved with a lens focused on health. D4AS also engaged with entities such as the Sacramento Metropolitan Air Quality Management District, Health Education Council,

Sacramento Tree Foundation, Urban Land Institute, La Familia Counseling Center, and all the Healthcare Provider organizations which resulted in their writing letters of support to the County Planning Commission and the Board of Supervisors supporting Active Design in policies and codes, and highlighting health benefits through the use of an icon.

Additionally, D4AS worked to educate the public on the importance of addressing public health through the built environment. One such event involved a County-wide CPAC (Community Planning Advisory Committee) training with a D4AS physician emphasizing the relationship between what a doctor can provide and what a healthy built environment can provide. Essentially, healthcare treats an immediate health problem but it does not support a holistic approach to long-term health and preventative care. The physician cited examples where her patients lived in areas without sidewalks or areas that were not conducive for walking. Because her patients didn't have access for walking or biking, or options to address stress and anxiety, her only recourse was to write prescriptions for anti-anxiety and depression medication. These case examples stressed the importance and health related significance of having walkable and bikeable streets along with; mixed land uses, landscaping and urban tree canopy, and safety all within the context of community health and design. Furthermore, D4AS had conversations with residents and informed them that the county was advancing active design and health benefits in their design guidelines, instead of being excited the resident's responded "I thought you were already doing that!" Community members had formed a conclusion from their expectations that local government would include health in their policies and practices, particularly in community development.

## HEALTH, ENVIRONMENTAL, AND/OR CLIMATE IMPACT AREA

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Research has shown a strong link to the built environment and health. In fact, zip codes are often highly correlated with health outcomes, where those living in less walkable and bikeable areas tend to suffer higher rates of chronic disease such as diabetes, asthma, obesity, and cardiovascular disease. In Sacramento, older historically disadvantaged communities are often characterized by single-use development patterns, poor pedestrian and bicycle access, poorer air quality, and higher than average rates of chronic diseases. In 2011 it was estimated that 97,000 adults living in Sacramento were diagnosed with diabetes sometime in their lives. The prevalence of diabetes in Sacramento was 9.2% that year, which was higher than the state prevalence of this disease, and diabetes was the 7th most prevalent cause of death in Sacramento that year. The zip codes in Sacramento County with the highest number of deaths due to diabetes from 2007-2011 were 95608 (Carmichael), 95823(Sacramento), 95628 (Florin), and 95822 (Sacramento), which encompass several disadvantaged areas.

Additionally, Sacramento County and the region face some of the worst air pollution in the US — chiefly ozone and particulate matter. Burning fossil fuels for electricity and vehicles is the largest contributor to air pollution and greenhouse gas (GHG) emissions that warm the earth's temperatures to dangerous levels, hurt plant and crop growth, and cause more wildfires. This leads to even more air pollutants and worse respiratory health outcome, a possible increase in the risk of heart attacks and other cardiovascular diseases, decrease in outdoor activities, increased stress, and impacts to daily lives, especially for vulnerable populations like children and the elderly.

Furthermore, ground-level ozone and particulate matter can contribute to chronic diseases such as asthma and Chronic Lower Respiratory Disease (CLRD), a group of respiratory disorders that include asthma, chronic bronchitis, and emphysema. Within Sacramento County the lifetime prevalence of asthma (percent of persons of all ages diagnosed with asthma sometime in their lives) was 14.9% in 2011; 5.7% higher than the life-

time asthma prevalence in California as a whole. CLRD is also higher than the state's average and is one of the top 3 causes of death in the county and across the region.

Land use and transportation policy efforts can advance health outcomes by creating more opportunities for regular physical activity while also combating climate change at the local level. In 2016, the American Public Health Association identified climate change as one of the most pressing threats to public health. Walkable and bikeable communities are associated with lower vehicle miles travelled and increased transit and active transit use which will lead to healthier communities and lower local air pollutants and GHG. At the time of this work, the Sacramento area was in non-attainment with the National Ambient Air Quality Standards for ground-level ozone and particulate matter, both of which can contribute to chronic diseases such as asthma and CLRD. Since then, the Sacramento area has achieved attainment with particulate matter and is working to do so with ozone through several strategies including greater reliance on clean forms of transportation.

Furthermore, the work done by D4AS addresses both public health and climate change through the built environment by embedding Active Design throughout the County's suite of planning tools. Active Design is deliberate in identifying walkable and bikeable streets, mixed land uses, landscaping and urban tree canopy, and safety as critical elements to advancing health. Mixed land use creates destinations and economic development for communities where walking to do errands or meet up socially can be easily achieved. Landscaping, and in particular tree canopy/urban greening, addresses Sacramento's air quality, urban heat island, and drought issues that will help communities be more resilient to our changing climate.

## FUNDING SOURCE

This project was not funded, but rather initiated and implemented by a group of cross-sector professionals committed to ensuring a healthier future for Sacramento County's residents. Integral to the success of this initiative were the various partners who understood that advancing Active Design also strengthened efforts to address safety, sustainability, climate change, economic development, and equity. Early on D4AS recognized that many existing policies can advance health outcomes if they're just looked at through a health lens. Complete Street policies are an excellent example of this, as are policies promoting mixed land uses and accessibility. Although the healthy Development Code work with Sacramento County was not funded, the success of the project laid the foundation for future funding through the Strategic Growth Council (SGC) and Plan4Health, a joint initiative between the American Planning Association and the American Public Health Association. These later initiatives enabled D4AS to expand this approach to other parts of the Sacramento region, engage more communities, host regular convenings of the region's public health and planning decision makers, and provide technical assistance to jurisdictions across the region in connecting planning, transportation, and health.

## RESEARCH AND DATA

This effort was inspired by the Center for Active Design and the NYC Active Design Guidelines, the first formal adoption of Active Design into the planning process at the local government level in the country. D4AS did extensive research around the world, engaged with Active Living Research, utilized a host of planning and public health data and research, and published an article in *Preventive Medicine* entitled "Moving toward implementation: The potential for accountable care organizations and private-public partnerships to advance active neighborhood design." Furthermore, D4AS built on the groundbreaking work launched by Dr. Richard Jackson and utilized data from the **California Healthy Places Index** (formerly Health Disadvantage Index), **Cal Enviro Screen**, the **California Health Interview Survey**, the Center for Disease Control and Prevention, along with research and journal publications, work by the Public Health Institute, ChangeLab Solutions, and others.

As the process continues, D4AS continues to work closely with California Department of Public Health



(CDPH), the Governor's Office of Planning and Research, and SGC staff. D4AS members also continue to inform and educate each other as more information and intersections become available. Furthermore, team members continue to bring new information forward on the built environment, climate change, accountable care, health-care, and health. Additionally, knowledge is shared through publications as highlighted by one of D4AS team members, Dr. Sara Carr an Assistant Professor of Environmental Design and Public Health at the University of Hawaii, who published an article in the Hawaii Journal of Medicine and Public Health entitled, "Building Well-Being: Linking the Built Environment to Health." Ultimately, D4AS continues to build on its expertise in order to help advance health in the built environment, and more specifically, into the communities where health conditions and disparities are the most critical.

## CHALLENGES

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An initial challenge was a hesitancy to formally adopt new policies and guidelines that would have required or initiated dramatic changes to planning. In order to address this concern, D4AS first highlighted the existing policies throughout the development code that promoted health and Active Design. For example, within the Commercial Design Guidelines: "Roadway and street design should incorporate various methods of traffic calming to support pedestrian circulation and active transportation objectives. This could include changing paving materials in crosswalks, undulations, reduced speeds, flashing beacons, etc." This approach was useful in acknowledging the work already being done by the County to promote healthy design, and provided staff and decision makers with further justification for embracing an Active Design approach within projects. The approach led to a more meaningful discussion about incorporating additional policies and guidelines as a way of improving health and implementing through Active Design.



## OUTCOMES

Following the adoption of the General Plan, Zoning Code, and Design Guidelines by the County Board of Supervisors, all projects within the Sacramento County are subject to Active Design policies and guidelines. Additionally, a representative from the County Department of Public Health sits on the County's Project Review Committee to analyze development proposals from a health perspective. While this initiative was not explicitly an equity driven approach, it is understood that addressing health through design has the most significant positive benefits in disadvantaged communities where the built environment can be the stressor and a barrier to health.

Additionally, D4AS work has been recognized internationally, nationally, and across the state as a best and innovative approach to advancing health in communities. This effort helped D4AS win a national Plan4Health

Grant through the American Planning Association and American Public Health Association to expand this work throughout the Sacramento Region and include more significant community engagement. Along with a Strategic Growth Council technical assistance grant, Plan4Health provided D4AS with an opportunity to convene the region's public health officers and planning directors for the first time to identify opportunities to collaborate in support of advancing positive health outcomes through community design. D4AS is also helping to inform climate change and health from a "what's good for health is good for climate" perspective, and has worked with CDPH and the Capital Region Climate Readiness Collaborative in developing OutsideIn Health and Climate Fact Sheets. Ultimately, D4AS work continues regionally to further advance health and equity through local planning policy.

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### FOR MORE INFORMATION

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