The Impact of the Built Environment on Community Health:

The State of Current Practice and Next Steps for a Growing Movement

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Executive Summary

In the recent past, a remarkable amount of new attention and activity have been generated about the importance of community design and development as influential factors in public health. The growing prevalence of obesity and related chronic conditions, such as diabetes, has been coupled with the recognition that suburban sprawl and urban disinvestment contribute in various ways to the persistence of these problems. Across the nation, public health organizations have focused their energies on local land use planning and other aspects of the built environment—as broad as the patterns of growth in metropolitan regions and as narrow as the design of homes and playgrounds. In parallel, urban planners and elected officials who shape the footprint of their cities and counties, as well as builders—both nonprofit community developers and private market-rate developers—are considering health issues as they create neighborhoods and revitalize others. Activity in the overlay between community design and public health has included basic and applied research in a variety of fields, training community activists, public education and awareness campaigns, creating model ordinances, and techniques to introduce health factors into land use planning.

California has been the site of a great deal of action and innovation in these arenas. Focusing on the built environment to improve health outcomes is proving to be relevant in all kinds of communities and for all kinds of people. However, particular challenges and opportunities are being addressed in lower-income communities of color to overcome racial and ethnic health disparities.

This report summarizes an analysis of these trends and activities around the state and a discussion among the leaders in the field of the strategies to take the work to the next level of impact and effectiveness. PolicyLink conducted 25 interviews and reviewed the documents and websites of a large number of organizations. A convening of 50 of California's leading researchers, advocates, trainers, and government officials in public health, city planning, and related fields provided insights into their experiences, priorities, and aspirations. The report provides both a framework for understanding the necessary elements for building a movement for policy change and better planning as well as numerous illustrations of innovative practices and projects.

Several critical components have emerged in the blossoming of this movement:

Research, which is showing the general connection between features of the built environment and the growth in chronic health conditions, especially those tied to obesity, lack of exercise, and poor nutrition. The research is becoming increasingly specific in its capacity to identify problems and causes and, more importantly, to compare and evaluate alternative designs and policy solutions. This report highlights some specific opportunities for undertaking such research. It also discusses promising trends, such as the development of accessible, user-friendly research summaries by Active Living researchers, or compelling maps that analyze green space from an equity perspective in Los Angeles and San Francisco.

Collaboration, primarily among public health practitioners and those in urban and regional planning, rekindling the connection between these professions that was originally formed 100 years ago in the efforts to improve tenement housing conditions, fight communicable diseases, and establish safe water supplies. Recent exchanges have led to many useful tools and sources of support for local planners and public health officials; surveys indicate a high degree of enthusiasm in the public health profession for this kind of collaboration. Preliminary findings of one of these surveys are contained within this report, which also profiles several exciting collaborative efforts that are underway, such as the Healthy Places Working Group—a multi-organization effort working throughout California—and the collaborative efforts between planners and public health officials being spearheaded by the Bay Area Regional Health Inequities Initiative (BARHII).

Training, for health professionals and resident activists about land use planning and zoning, redevelopment, economic development, the state policy process, techniques for assessing health impacts of new development, and many other topics. A parallel expansion of training for urban planners and public officials about health issues has also occurred. The report describes a number of available training programs and materials already having an impact, such as the toolkits, handbooks, fact sheets, and charettes developed by Public Health Law & Policy and the Local Government Commission.

Establishing new policy and regulatory frameworks, which allows health concerns to be empirically measured and then considered in the review of specific urban development proposals, the creation of municipal general plans and regional transportation plans, and other venues for decision making about the built environment. This intersection of health and planning or development review is happening not only city by city, but would also be augmented by state legislation currently under consideration. The report describes those bills now pending before the California legislature and highlights various efforts at the local level aimed at modifying General Plans to incorporate health considerations.

Some notable achievements have occurred to date; this report provides case studies of some of the jurisdictions that have successfully integrated features that promote health into specific development projects.

These activities are not without their challenges, and the leaders in the field provided candid and constructive assessments of the barriers to full integration of health issues into policymaking about the built environment. For example, the introduction of new issues can be seen as introducing new "requirements" in the already complex development process, whether or not that actually is the intention. Each profession still has a lot to learn about the other; the collaboration needs to include a range of additional sectors, and the language needs to be understood by and accessible to a wider audience. There are particular challenges to making the connection of health and communities salient in low-income neighborhoods, where the opportunities for health-friendly redevelopment might also result in gentrification and displacement. This theme is evident throughout the report, which captures the determination of those working in the field to identify effective strategies to

achieve equitable outcomes. Moreover, specific strategies must also be developed for rural areas, where there are critical issues of health equity and the built environment but that are very different from the dominant themes in metropolitan regions.

This report concludes with a summary of answers to questions about how more progress can be achieved in building a movement for healthier communities. Specifically, it contains recommendations from the leaders in the field, including:

- establishing a clearinghouse where practitioners could access documents and materials;
- forming a central resource center that could promote collaboration among

practitioners and facilitate participation in policy advocacy;
- designing a joint curriculum that could be utilized by both the public health and planning disciplines;
- utilizing civil rights litigation strategies to challenge disparities; and
- developing approaches that would prevent displacement.

The report identifies two areas where leaders felt that collaboration on policy advocacy is likely to have significant and immediate impact: transportation and public financing. The collective knowledge and insights of these leaders, and the record of their efforts to date, provide a solid foundation upon which to grow.

I. Introduction

A remarkable amount of new attention and activity have recently been generated about the importance of community design and development as influential factors in public health. Across the nation, public health organizations have focused their energies on local land use planning and other aspects of the built environment—as broad as the patterns of growth in metropolitan regions and as narrow as the design of homes and playgrounds. In parallel, urban planners and elected officials who shape the footprint of their cities and counties, as well as builders—both nonprofit community developers and private market-rate developers—are considering health issues as they create neighborhoods and revitalize others. Activity in the overlay between community design and public health has included basic and applied research in a variety of fields, training community activists, public education and awareness campaigns, creating model ordinances, and techniques to introduce health factors into land use planning.

California has been the site of a great deal of action and innovation in these arenas. There are several markers of such activity in the state: (1) the proliferation of exchanges among professionals in public health and planning; (2) the initiatives of several philanthropic foundations to build capacity for change; (3) the growth of resident activism to bring about health-related neighborhood improvements; (4) the incorporation of health into the land use and community development plans of several cities and counties; and (5) the emergence of a private development niche that is directly marketing communities in response to these concerns. With so much underway and a significant amount of momentum continuing to emerge, now is an excellent time to capture important lessons learned and to highlight accomplishments. Information gleaned from this process can offer valuable insight in identifying effective investments in the next stages of this critical, multifaceted effort.

This paper is intended to summarize and advance an ongoing dialogue among some of the most prominent professionals, activists, researchers, policymakers, and other stakeholders involved in land use and health. It is part of an effort by The California Endowment (TCE) to build momentum for work concerning the built environment to integrate health considerations into planning and land use to yield improved health outcomes. TCE is recognized for its leadership on a wide range of health issues, working to reduce health disparities and addressing the physical, social, and economic dimensions of community life to improve community health and to promote wellness.

From July through November 2006, PolicyLink conducted interviews with two-dozen colleagues with backgrounds in urban and regional planning, public health, policymaking, health care, and philanthropy. (See Appendix D for the list of interviewees and their affiliations.) The interviewees included not only Californians but also leaders in the field from other parts of the country. From the interviews and from the ongoing involvement of PolicyLink staff members in numerous local, state, and national efforts, the opportunities and challenges inherent in this work were identified for an initial framing paper. That paper was created for 50 leaders in the field invited to a convening held in Oakland on April 9, 2007. Working strategy

sessions were held on tools and approaches for practitioners, policy opportunities, the state of collaboration among professions, and related topics. Because the participants were already familiar with the basic issues, many of whom were among the state's most prominent trainers, spokespeople, and strategists, they were asked to use the convening to project what they saw as crucial next steps.

This report employs much of the same basic framework of the first paper, but it also combines the themes that emerged from the event with insights from the interviews and from the rapidly expanding literature on the subject. The main report includes more than a dozen brief accounts of current activities underway in California and several other locations. Appendix C features profiles of many leading professional organizations and foundations, adding further detail to the overview. The bibliography includes not only a significant number of academic and policy publications completed since 2004 (the year of a PolicyLink annotated bibliography on community factors affecting health, compiled for TCE[1]), but also a compendium of "toolkits" and "fact sheets" created for practitioners and advocates. Several recently released local documents included in the bibliography are about topics as diverse as the distribution of parks in Los Angeles and the attitudes of California's local public health leaders on issues of land use and planning. Many of the recent documents and the ideas for the case studies were provided to PolicyLink by the participants in the convening.

What Is Meant by the "Built Environment"?

The term "built environment," while perhaps initially a bit awkward or unfamiliar outside the design professions, is becoming a part of the lexicon for many working in public health, land use, and related fields. It is useful because it encompasses more than simply "land use," urban planning, architecture, or landscape architecture alone and because it covers a broad range of geographic scales. Broadly defined, the built environment is simply the sum total of what we design and construct in the places where we live, work, go to school, and play—from streets and highways to houses, businesses, schools, and parks. This ranges from the micro—such as a single apartment complex—to the macro, as in the case of a master planned community or blueprints for guiding regional development through transportation and infrastructure decisions. Since people create and experience communities in ways shaped by their cultures, understanding the built environment is as much about social processes as it is about physical ones.

The creation and modification of the built environment encompass a complex web of professions and disciplines and incorporate designs and policy decisions that affect the lives of all community members in both negative and positive ways. Traffic, noise, and air quality are among the most negative impacts of poorly planned or executed development, while parks and open space, creative architecture and convenient access to public transit are a few of the obviously positive features.

The dialogue engendered by this project showed that its participants are very conscious of the importance of language in communicating key concepts and building support, and that there are sometimes conflicting demands between being plain-spoken and being technically precise. At its most simple and direct, the underlying concept is that "where you live affects your health" in myriad ways. The "built environment" can be a useful umbrella term to convey the breadth of issues and a sense of possibility: that since people have built it, they can also improve on their past efforts and create healthier communities.

Linking the Built Environment to Health

For over ten years, research has been undertaken to understand the relationship between the built environment and health, and a growing body of evidence now confirms the existence of a link.[2] This is increasingly important as communities throughout California continue to struggle with alarming levels of asthma, and the obesity epidemic[3] continues to lead to record cases of heart disease and diabetes. These health issues are directly or indirectly associated with factors in our environment—the auto emissions from freeways located adjacent to schools and homes, lack of facilities and space for physical activity, and lack of access to healthy foods combined with a proliferation of fast food.

These issues are important at any time, but there is special salience for the state in coming years because the next wave of construction in California will be massive and will provide the critical opportunity to shape the built environment in this generation. Tens of

billions of dollars of public funds will be spent on infrastructure—highways, local streets, transit, schools, parks, and water systems— including more than $40 billion in the most recent group of state bond issues and more than $100 billion overall when local measures are added. In addition to the boom in public works, a much larger sum will be spent over the next two decades rebuilding or creating a large proportion of the state's housing and commercial and industrial buildings. The tremendous amount of building and renovation is the result not only of population movement and growth, but also of the need to replace aging and obsolete facilities. All of this building will occur at a time when a great deal of new attention will be paid to the causes and consequences of global climate change and the need for such responses as energy conservation and "green" construction. This attention to climate change issues can be a powerful force for change and can be closely linked to issues of community health.

The overarching challenge, then, is to utilize these unprecedented opportunities to shape the built environment of California in order to promote good health, not to impede it.

Smart Growth and Health

The focus on community factors affecting health has emerged in tandem with the Smart Growth movement. Smart Growth, whether that exact term is used or not, represents an approach to designing, building and redeveloping communities so that they are compact, accessible to transit, pedestrian-oriented, and supportive of mixed uses. Design that provides increased opportunity for physical activity and promotes walkability is

characteristic of Smart Growth. Accordingly, there are natural alliances between advocates for Smart Growth and those working on health issues through changes to the built environment. Smart Growth principles are being adopted throughout the country, on both the project level and on a more comprehensive regional basis. Maryland, Michigan, Pennsylvania, and Massachusetts are just a few of the states that have incorporated Smart Growth strategies to address sprawl, school construction, transportation, and the environment. The range of efforts underway across California were on display at the Sixth Annual New Partners for Smart Growth Conference in Los Angeles in February 2007, which for the second year incorporated a wide range of health-specific sessions and co-sponsors into the event.

The Centrality of Equity and the Need to Address Disparities

Historically, low-income residents of color have faced discriminatory treatment in housing, transportation, and other land use policies and have endured the health disparities that result from limited access to care and overexposure to risks. Community factors that lead to health consequences can affect everyone to some degree, and their universality is a key part of their potential for grabbing and holding public attention. At the same time, people and communities are treated very differently, and none of these trends can be understood without specific attention to issues of social and economic equity.

The built environment can either compound these inequities or provide a unique opportunity to redress structural barriers. Taking significant action to address community factors will not be easy, as the legacy of discrimination includes patterns of segregation and isolation that make equitable development more complicated. Low-income communities and communities of color typically need remedial land use efforts to overcome environmental injustices, but revitalization is usually constrained by a lack of space and capital resources. By contrast, master planned communities and new suburban development can be designed prospectively and holistically. To address the overall needs of the population as well as of those most vulnerable, it will be important to maintain a focus on the spectrum of neighborhoods and to create strategies that work for all of them as these efforts expand and diversify.

The Structure of This Report

Section II of this report reviews the diverse and rapidly growing array of activities currently aimed at making the connection between health and the built environment a practical focus for professionals, researchers, policymakers, community developers, and resident activists. The section that follows after that is devoted primarily to the need to incorporate principles of social and economic equity into this work. Once these activities have been portrayed, Section IV examines the challenges for taking this momentum and these new insights and collaborations to the next level. The interviews and the discussion at the April 9 convening conveyed both a general but an undeniable sense that the movement to connect health and the built environment is at a critical point, whereby the energy and progress achieved thus far now need to reach a broader audience and to be translated into long-term changes in the behavior of institutions and professions. The challenges in achieving this are characterized for several of the main groups of leaders in public health and urban development. A concluding section reprises the main themes that emerged from the project.

II. Practices That Address Impacts of the Built Environment on Health: The State of the Art

Opportunities for Action

It seems as if everyone in public health is at least talking about the built environment, and in many gatherings with planners, architects, and developers, newfound attention is being paid to designing and policymaking for health and wellness. Numerous conferences, workshops, and training sessions have been held or are planned. There are a burgeoning number of articles, leaflets, websites, and diagnostic tools on the subject, aimed at health departments, planning departments, policymakers, and elected officials. From a review of some of this material and from recent conferences, as well as conversations with our respondents, we have learned of many efforts that are underway and of the opportunities that these efforts represent for generating more awareness and significant change in the future.

i. Research

Research in the area of the built environment and health has enabled medical and public health leaders to make some compelling cases for the need to take on community factors (1) to address obesity and other chronic conditions and (2) to act on the recognition that air quality problems disproportionately affect residents living near pollution sources. However, more epidemiological analysis is still needed to better understand not only the *correlations* and "common sense connections" among community features, individual health-related behaviors and health outcomes, but also more fundamentally to determine the *causal relationships* of environmental factors and health and to translate those findings into meaningful standards and practical

measures of change over time. In the past 10 years, researchers have moved from a debate over whether "where you live affects your health" to a more nuanced and issue-specific exploration of just how environmental factors influence health outcomes. Identification of causal linkages can help practitioners to be more precise in efforts to prevent disease and promote health. A plethora of results from this so-called "second generation of active living research"[4] have recently become available, and while they represent great progress, the agenda for the succeeding generation is at least as ambitious. The editors of a 2007 special issue of the *American Journal of Health Promotion* characterized part of it in a way that highlights some of the concerns with social equity, race, and class:

> Additionally, there is a need to more fully explore the commingled findings and paradoxes that are emerging in this body of literature. For example, lower-income people often live in more dense areas, they tend to get more transportation and incidental forms of physical activity in their daily lives, and they are less reliant on labor-saving devices. Yet epidemiological studies regularly find that low-income is a health risk factor. More research is needed to specify the potential of active living for diverse populations and settings, so that interventions can be wisely targeted.[5]

Interdisciplinary research is becoming increasingly common and more highly regarded; more analysis is also underway concerning the processes involved in policy change. And, although there has been growth in the "scholarship of translation," whereby research results are more reflective of the realities of community health practice and

more accessible and useful to practitioners and trainers, much more still needs to be done. One promising trend has been in the dissemination of practical lessons from the various studies supported by the Active Living Research program. The February 2007 issue of *Planning*—the general-membership magazine of the American Planning Association—includes one-dozen, one-page, illustrated summaries of research case studies designed to be useful to local practitioners and planning commissioners. (Each summary had a section titled "Replicating Change.") Applied data-

management tools have also been put to direct use on these topics. For example, there has been growing use of geographic information systems to document, analyze, and present for public viewing the distribution and quality of parks, trails, and other facilities that can promote active living, including, most recently, a study of Los Angeles "green access and equity" produced by The City Project[6] and one nearly completed of the San Francisco Bay Area being produced by the Trust for Public Land.

Centers for Disease Control and Prevention—Building Momentum: From Collaborative Ideas to Collaborative Action

National government-level attention to the impacts of built environment on health began in the late 1990's with a literature review on physical activity and urban form by Georgia Tech city planning researchers Lawrence Frank and Peter Engelke[7], commissioned by the Centers for Disease Control and Prevention, followed by a series of discussions in 1999 at the CDC's National Center for Environmental Health (NCEH) on the health consequences of community design. Initiated by Dr. Richard Jackson, then director of NCEH, the discussions originally focused on the effects of Atlanta's congested superhighways and sprawling suburbs on local environmental health. It was not long before the discussions became interagency, interdisciplinary dialogues involving experts from agencies ranging from the National Aeronautics and Space Administration (NASA) and the Environmental Protection Agency (EPA) to the United States Geological Survey (USGS), among others.

In the years to follow, topics at these biweekly discussions would range from housing development to green space and community policing to heat islands and their respective relationships to health. The ideas and materials generated from these discussions would extend to papers, programs, and research and ultimately help to create a movement in health and planning extending beyond the reaches of the CDC.

One of the first publications to emerge from these talks came in 2001, when *Creating a Healthy Environment: The Impact of the Built Environment on Public Health* was published as a part of the Sprawl Watch Clearinghouse Monograph Series. The piece drew attention across the disciplines of health and planning to the health implications of land use decisions.[8]

In May 2002, the CDC invited experts to a one-day conference in Atlanta to generate a research agenda around public health and community design.[9] The findings from this conference were published in 2003, and research-based papers linking crime prevention with the built environment, land use choices with physical activity, and zoning with obesity were quick to follow.[10]

The following years marked the publication of two landmark pieces on the built environment and health, both of which were born largely from contributions and leadership of CDC officials. In September 2003, the *American Journal of Public Health* published a special issue on health and the built environment, featuring over 40 solicited and unsolicited articles on health and built environment topics. In 2004, Dr. Jackson and Dr. Howard Frumkin of the CDC collaborated with planning professor Dr. Lawrence Frank in the writing of *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities*, a comprehensive compendium of the evidence linking adverse health outcomes with elements of urban design.[11]

Subsequently, the CDC continued presentations, discussions, and collaborations with other agencies and organizations in fields including and touching upon land use and health. Collaborative research publications on health impact assessment, transit-oriented development, walkability, and healthy communities would follow.

In 2005, the CDC's director adopted "Healthy People in Healthy Places" into its major agency goals, casting a significant spotlight on the built environment and health at the national level. The model prioritized "the places where people live, work, learn, and play" to protect and promote health and safety and prioritized the ideas of healthy communities, healthy homes, healthy schools, and healthy workplaces.[12]

Today, the CDC continues its research and program development and is expanding its collaborations with diverse agencies in health and planning. See Appendix C for additional information.
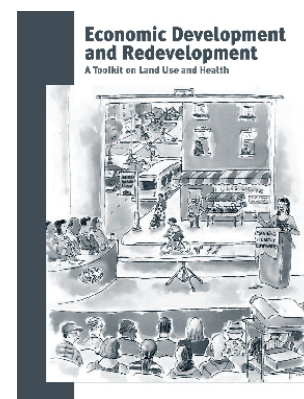
ii. Training

Some of the most prominent signs of a growing movement in the built environment and health are the educational efforts, such as the conferences and materials that are intended to inform practitioners across disciplines. For the most part, these materials and trainings have been introductory, providing participants with a basic understanding of each field. This approach is not because practitioners in each field lack awareness of the other; rather, the training helps add context and nuance to deepen the connections that already exist. A significant amount of the material and training that has been developed is intended to assist health practitioners prepare testimony to present to public agencies such as planning commissions.

Examples of the training and materials that have been produced include: a training on the *Built Environment and Transportation* held in May 2006, presented by UCLA Extension and the Los Angeles County Department of Health; a summit on *Connecting Community Design and Childhood Obesity* held in October 2006 in San Joaquin and sponsored by San Joaquin County, along with a broad collaboration of healthcare providers, civic and business stakeholders; a brochure, *A Public Health Professional's Guide to Key Land Use and Transportation Polices and Processes*, developed by a consultant for the California Department of Health Services; a booklet published by the Local Government Commission on *Building Sustainable Communities*; the Local Public Health and the Built Environment

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Public Health Law & Policy—Connecting the Disciplines through Toolkits and Trainings

Through its Land Use and Health Program, Public Health Law & Policy (PHLP, formerly known as the Public Health Law Program) trains advocates in the relationship between the built environment and public health and provides technical assistance for creating and implementing land use policies that support healthier communities.[13] Land Use and Health Program trainings have included workshops and presentations that allow planners, public health advocates, elected and appointed officials, local government staff, business owners, and citizen activists to learn how the tools of land use and economic development can reduce health disparities and create more livable, sustainable communities.[14]

Economic Development and Redevelopment
A Toolkit on Land Use and Health

PHLP has also developed a number of toolkits, which "are designed to serve as learning and reference materials to guide and inform participation."[15] Two existing comprehensive toolkits are intended to be "living documents" that grow and change as communities adopt new policies and confront new issues.[16, 17] The *Economic Development and Redevelopment* toolkit offers a historical perspective on how and why food access and healthy eating are related to economic development and provides a comprehensive set of specific strategies and guidelines for improving food access in California. The *General Plans and Zoning* toolkit offers in-depth information on land use decision making, zoning, government and planning agency structure and how public health advocates can impact land use decisions that affect health. See Appendix C.

("El Feebee") Network's Planning and Land Use 101 trainings geared for public health practitioners who have little experience with planning, land use, and transportation policies; and the manuals and curricula for health professionals and advocates on zoning, redevelopment, and economic development, created by Public Health Law & Policy. These are just a sampling of the types of resources that are becoming available specific to California; there are numerous counterparts provided by national professional associations in planning, public health, and public administration.

There has recently been an increase in education and training concerned with orienting community leaders and health activists to the possibilities for bringing about change in their local built environments. Participants in the six local sites of TCE's

Healthy Eating, Active Communities (HEAC) initiative are among those receiving technical support as they frame issues, explore options, and begin to affect decisions about parks, playgrounds, school facilities, trails, waterfronts, traffic management plans, and other dimensions of neighborhood safety, walkability, and recreational potential.

iii. Collaboration

Another area of current activity and opportunity for growth is *collaboration across departments and professions*. Planners and public health advocates are working together more and more to develop or modify policies that shape or regulate land use decisions to ensure that health concerns are considered. Public health officers and advocates are increasingly utilizing the public hearing process to weigh in on development decisions to ensure that

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Local Government Commission—Providing the Tools for Healthy Community Design

In its 25-year history, the Local Government Commission (LGC) has served as a resource for government officials by supporting and promoting strategies for healthy community design, environmental sustainability, waste prevention, transportation, energy, and economic development. The LGC staff also "provides customized technical assistance to communities through contract planning and design services" using its expertise in "planning, public participation, visioning, renewable energy resources and development of livable communities."[18]

In 1998, the Local Government Commission began working with the California State Department of Health Services Physical Activity and Health Initiative, the first program in the nation to embark on the ambitious task of creating environmental and policy changes to enable and encourage inactive people to integrate physical activity into their daily lives. With the support of this initiative and a subsequent effort—the Robert Wood Johnson Foundation's Leadership for Active Living program, the LGC has helped local elected officials, local health officials, and other community leaders identify policy options that address the critical connection between land use and health. LGC's tools have included multiple guidebooks, fact sheets, conferences, toolkits, trainings, workshops, and community design charettes. For additional information, see Appendix C.

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those concerns are, in fact, taken into account. Humboldt County is an example, as are Riverside and several communities in the San Francisco Bay Area. In these communities and others, health actors are commenting on specific land use projects, providing data and making the connection between the built environment and health hazards that can be prevented or reduced by good design (i.e., traffic, school siting, housing construction, and walkability). AB 437, a bill introduced in the state legislature in 2007, aims to solidify the position of county public health officers for commenting on land use proposals and plans.

The Healthy Places Coalition

Recognition of the profound relationship between the built environment and community health has led to the emergence of a new alliance among organizations active in this work across California. The Healthy Places Coalition has already involved more than 20 California organizations with programs, interests, or simply concerns in the overlay area between place and health and is likely to grow in participants and impact as it evolves. The Coalition began as the Healthy Places Working Group in May 2006 and was an important venue for the development of AB 1472, the bill, described elsewhere in this report, to promote the practice of health impact assessments and other forms of local action. The group also supported the development of AB 211 (formerly AB 437), a bill that would explicitly authorize county health officers to aid cities and counties in land use and transportation planning as it relates to public health.

The Healthy Places Coalition aims to advance public health involvement in land use and transportation planning by, supporting collaboration to strengthen activism and engagement; developing and advancing local and state policy; holding government agencies accountable; engaging with developers for responsible planning and promoting healthy communities; increasing public and policymaker awareness; and, promoting research and tools. The Coalition consists of practitioners from the planning, public health, parks and recreation, and other related fields, community advocates, academics, and concerned individuals committed to social and health equity from around the state.

The Coalition has established four committees to develop goals and activities that address (1) research and tools, (2) public awareness and media, (3) public policy, and (4) collaboration. The San Francisco Department of Public Health provided the initial organizational coordination for the group, and the California Pan-Ethnic Health Network hosted a recent retreat. Other organizations participate in the Coalition and volunteer staff to support different activities. In July 2007, the Prevention Institute was unanimously endorsed by the group to be its convener and sponsoring organization. The Coalition is currently working on developing a website and is seeking funding.

BARHII and its Collaboration with Urban and Regional Planners

The Bay Area Regional Health Inequities Initiative (BARHII) is a regional collaborative among health departments across the San Francisco Bay Area to "transform public health practice for the purpose of eliminating health inequities using a broad spectrum of approaches that create healthy communities."[19]

BARHII has sought to move from a categorical paradigm of public health strategies towards a more comprehensive approach to reducing health inequalities. In this spirit, BARHII has supported and spearheaded work to highlight the importance of land use, transportation, and community design in community health. While land use and transportation decisions have profound implications for nutrition and physical activity, they also have a huge influence on rates of asthma, some cancers, community violence, and related issues of concern to community residents.

In the summer of 2006, BARHII pulled together "a small delegation of public health directors and health officers from BARHII health departments [and] the steering committee of the Bay Area Planning Directors' Association (BAPDA), which represents the 100+ city and county planning directors in the nine-county San Francisco Bay region."[20] Although the original intent of the gathering was to begin a discussion simply about potential avenues for collaboration, the meeting revealed an overwhelming receptiveness among participants to collaborate on issues of health and place.

At BAPDA's invitation, on December 1, 2006, BARHII co-sponsored "a forum of 120 public health and planning officials . . . to discuss the ways in which planning and public health can join together after a century of separation."[21] The forum was described by Richard Jackson, MD, MPH, former Director of the National Center for Environmental Health, as "the most important conversation between public health officials and planners in perhaps 100 years." Since that meeting, each health department has engaged in concerted follow-up activities with planning departments in their respective jurisdictions, including work to incorporate health elements into General Plans in Contra Costa, Marin, and Solano counties. Through BARHII's participation in the Regional Visioning process convened by the Association of Bay Area Governments (ABAG), a new goal, Public Health and Safety, has been added to the vision document.

BARHII recognizes the limits of a singular focus on the built environment, since the social and cultural context in which people experience their physical environments must equally be considered, especially in light of increasingly multi-ethnic and immigrant populations living in low-income communities. BARHII's larger focus on Neighborhood Conditions as a more comprehensive term is an attempt to encompass both the physical and social environments. For more information, see Appendix C.

APA/NACCHO—National Partnership between Public Health and Planning

Recognition of the impact of planning and land use decisions on public health outcomes led the American Planning Association (APA) and the National Association of County & City Health Officials (NACCHO) to rekindle the historical collaboration between the fields of public health and planning that diverged since its earliest partnership in the 19th century. APA is a nonprofit public interest and research organization representing 39,000 practicing planners, officials, and citizens involved with urban and rural planning issues; NACCHO is the national organization representing the 3,000 local health departments in the United States.

Aiming to promote an interdisciplinary approach for creating and maintaining healthy communities, "the two organizations are exploring shared objectives, providing tools, and recommending options and strategies for integrating public health considerations into land use planning."[22] Long-term objectives include improving the performance of local planning and public health agencies by providing cross-training, tools, resources, and networks to foster improved collaboration. "An important part of that process is to help local public health agencies and local planning agencies gain a better understanding of their respective authorities and functions and how they can provide input and guidance to one another for healthier land use planning."[23]

This recent partnership was inspired by focus groups NACCHO conducted from 2002 to 2005 with local public health officials. The aim of the focus groups was to better understand the role of health officials in land use planning decisions. The focus groups revealed that health officials "characterized their contribution to the planning decision-making process as valuable, but also said their role was more reactive rather than proactive and too localized. These factors limited their effectiveness in the process overall."[24]

NACCHO and APA joined forces to provide a series of training sessions starting in December 2003. Unique trainings held at public health and planning conferences in Florida, Kentucky, Minnesota, Ohio, and Washington introduced health officials to a new framework for thinking about public health and the built environment; they provided participants the opportunity to brainstorm approaches for interagency collaboration. Since then, APA and NACCHO have sponsored similar workshops in Arizona, Colorado, Illinois, Michigan, and Rhode Island at conferences related to planning, Smart Growth, and environmental health; the trainings are ongoing.

Since the inception of their partnership, NACCHO and APA have also held multidisciplinary symposia and conducted research into the potential for integrating the public health and planning fields. In addition, the partnership has prepared several fact sheets for planners and public health professionals to become more familiar with the overlap between their fields. One fact sheet is "a two-part list that defines terms, or jargon, commonly used in the respective fields. The fact sheet is intended to bridge the language barrier between the two professions, which is considerable, and can sometimes frustrate and limit a person's willingness to collaborate or expand their view."[25] Another fact sheet, "Working with Elected Officials to Promote Healthy Land Use Planning and Community Design," is intended to assist health and planning agencies to broaden their partnerships to better create healthier communities.[26]

The partnership is working on a white paper about using health impact assessment (HIA) to "proactively address health disparities in land use planning and community design initiatives." The partnership also continues to offer a number of beginning- and intermediate-level trainings on HIAs. For additional information, see Appendix C.

iv. Policy and Regulatory Frameworks

As a result of these interactions, public heath is being formally integrated into land use policy and regulatory frameworks in a systemic manner that extends beyond a specific project. Research and planning tools are being developed that can feed new types of information into the processes by which projects are reviewed. Riverside County has developed design guidelines that are imposed county-wide. Ventura and Shasta counties have made walkability a primary factor that will be considered in development projects. In Chula Vista, comments from public health practitioners resulted in the incorporation of health policy language into the city's General Plan.

a. General Plans

General Plans are long range planning documents that each local jurisdiction in California is required by state law to prepare and update every 10 to 15 years. They are intended to guide land use decisions for future development and redevelopment projects. A California locality's General Plan contains seven mandatory "elements"— housing, land use, noise, circulation, open space, conservation, and safety. While consideration of health issues seems implied in the mandatory elements, there is no state requirement that a distinct health element be included. Some jurisdictions are incorporating language about health considerations into their General Plans. However, localities have the discretion to *add* elements focusing on local needs. Notably, the City of Richmond is developing a specific Health Policy Element to its General Plan. A collaboration of prominent urban design and public health experts are developing the Health Policy Element with the city and its residents. This process will analyze 10 categories of built and natural environment factors, and incorporate state-of-the-art technology for both mapping and community input. The impact of the Richmond's Health Policy Element venture could eventually be felt throughout the state as other communities determine how to incorporate health considerations into

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California Assembly Bill 211 (Formerly AB 437)

Proposed by Assembly Member Dave Jones and sponsored by the Health Officers Association of California, AB 437 (the "Local Health Officers" bill) would authorize local health officers to participate in local land use and transportation planning processes.

Under current law, health officials are not explicitly authorized to engage in land use or city planning processes. Although health officials in many areas of the state have participated in local land use and transportation planning decisions, some still encounter barriers in doing so.

If passed, AB 211 would be California's first specific law granting a voice to public health in community planning decisions. As of this writing, AB 211 is a two year bill that has passed through the California Assembly and is currently in the California Senate.

decision making about development and conservation. Other localities, including Chino and Los Angeles, are considering adding a health element to their General Plans in one form or another. The San Francisco Health Department has developed a detailed process for assessing development proposals for their community health impact, a methodology that is also being adapted in the Richmond planning project.

City of Chino

One of the densest and fastest-growing cities in the Inland Empire, just east of Los Angeles, Chino began as an agricultural and dairy community in 1887. By 2020, its current population of more than 77,500 is expected to increase by 45 percent, to approximately 112,800. The majority of the city's population—56 percent—is Latino. Chino is an affluent suburb; according to 2000 census data, the median family income is $81,794, and homeownership levels are extremely high, as homeowners make up two-thirds of the population.

An example of the massive development taking place in Chino is The Preserve, a development project of more than 1,000 acres that will include 7,300 homes, two K–8 schools, 33 parks, a library, gymnasium, and fire station. The project has design features that promote biking, walking, and horseback riding.

Chino is now updating its General Plan and the Healthy Chino Program is preparing goals and policies aimed at improving public health to be included in all elements of the plan. The plan is not likely to include a separate Health Element but to include health-promoting policies throughout all elements of the General Plan to ensure public health considerations in land use. The Healthy Chino Program is a 75-member collaborative of stakeholders from the medical and public health fields, service organizations, area residents, schools, businesses, and local government. The goal of the program is to increase opportunities for healthy lifestyles in Chino, utilizing strategies that include nutrition, fitness, safe and walkable neighborhoods, and public education. Technical assistance and funding were provided to the Healthy Chino Program by the California Healthy Cities and Communities Network and the Lewis Operating Corporation, the developer of The Preserve. A draft of the General Plan is projected to be released June of 2009. When completed, Chino will be one of the first cities in California to include health policies and considerations into its General Plan, demonstrating that collaboration between public health practitioners and other stakeholders can lead to an increased focus on community health.

Community Engagement in Salinas

There is no question that low-income communities of color are at greatest risk from any negative health consequences that can result from land use decisions. Particularly in areas that are experiencing rapid growth, the impact on traffic, housing, jobs and health can be dramatic. Yet those who are most impacted are often least likely to be engaged in the decision-making process. The City of Salinas in Monterey County is a case in point. As of 2005, the total population of Salinas was 156,950, of which 69.9 percent were Latino. The median family income is $51,048, with homeowners making up 47.7 percent of the population.

As the city grew, suburban sprawl began to replace agricultural land. LandWatch, a local nonprofit organization, worked to bring the voices of predominantly mono-lingual, Spanish-speaking residents to the table with policymakers. Most of these residents were agricultural workers whose jobs were threatened by sprawling development. In 2002, LandWatch provided training on land use policy and the General Plan process; participation at its classes gradually grew from 12 to 300. The group of residents formed an organization, "Lideres Comunitarios de Salinas." It shaped an advocacy strategy and developed policy recommendations that were presented to the city as part of the Salinas General Plan update process. Several of the Lideres' recommendations on housing density and neighborhood design were incorporated into the Salinas General Plan, which was adopted in September 2002. This case was described at the convening as one with important lessons for upcoming health-related local General Plan projects.

Health Impact Assessment in San Francisco: A Tool to Build Healthier Communities

Health Impact Assessment (HIA) is an approach to examining the effects that land use and development decisions could have on health in a particular geographic area. The methodology has been applied in England, Australia, Canada and several other countries, while in the U.S., some of the most comprehensive work has taken place in San Francisco.

For eighteen months beginning in November, 2004, the San Francisco Department of Public Health worked on the Eastern Neighborhoods Community Health Impact Assessment (ENCHIA) with stakeholders in a part of the city slated for intensive redevelopment. Out of this process came the "Healthy Development Monitoring Tool" (HDMT) — a guide to the definition of issues, the collection of data and the assessment of options. The HDMT provides the health rationales for considering each element of community conditions, and moves through the established standards, key indicators, development targets, and strategic suggestions for policy and design. The seven elements include environmental stewardship, sustainable transportation, public safety, public infrastructure, access to goods and services, adequate and healthy housing, healthy economy, and citizen participation.

The process has proven useful to community-based organizations and has informed the debate over redevelopment policies in neighborhoods and strategies to address gentrification and displacement. Several groups which participated in ENCHIA, including the South of Market Community Action Network and the Mission Economic Development Association, are continuing to use the HIA framework as a basis for leadership development and assessment of project proposals. This is an educational and voluntary process, rather than a mandated review process such as Environmental Impact Assessment, though there are some topics which overlap the two processes.

The San Francisco experience is being mirrored by a growing set of other HIA processes, many of them driven by community coalitions. In Richmond and West Oakland, local groups are using the HIA approach not only for analysis but also as an educational tool and a way to organize and increase the participation of residents of lower-income communities. In this context, the HIA becomes part of a broader effort to hold decision makers and developers accountable for the costs and benefits of development.

## City of Richmond—Health Policy Element of the General Plan

As the City of Richmond goes through an extensive overall update of its General Plan, it has added the creation of a Health Policy Element, and both the process and the results are likely to break new ground for municipalities in California.[27] The Health Policy Element, which as of this writing is roughly one-third complete, provides the opportunity to assess the health impacts of all of the major features of development and environmental conservation.

The economic, social, and environmental issues faced by the people of Richmond make it an ideal place in which to address health concerns. Richmond is a very diverse city, with a substantial industrial base, particularly in the petrochemical industry, a large shoreline, several major transportation corridors, and communities that range from semi-rural to high-value waterfront condominiums to economically struggling flatlands. It has a large African American population and is a growing immigrant gateway community, with substantial Latino and Asian populations. It includes some areas of very lively current real estate development as well as some of the most thoroughly disinvested neighborhoods in the Bay Area. Residents' concerns with, and organizing around, problems of public safety, air quality, economic opportunity, and education have been intense for many years. There are twin challenges of both attracting growth and managing that new investment so that it serves the interests of current residents.

The General Plan update has become an opportunity for Richmond to envision its future direction. An extensive outreach process is underway; in addition to the city-sponsored outreach, a number of community-based environmental justice, labor, and faith-based organizations are educating their members about health policy issues and encouraging their participation.

The framework for the health policy analysis and recommendations will cover 10 issue areas, several of which intersect with the rest of the General Plan:

> 1. Access to recreation and open space
> 2. Access to healthy foods
> 3. Access to health services
> 4. Access to daily goods and services
> 5. Access to public transit and safe, active transportation options
> 6. Environmental quality
> 7. Safe neighborhoods and public spaces
> 8. Access to affordable housing
> 9. Access to economic opportunities
> 10. Green and sustainable building practices
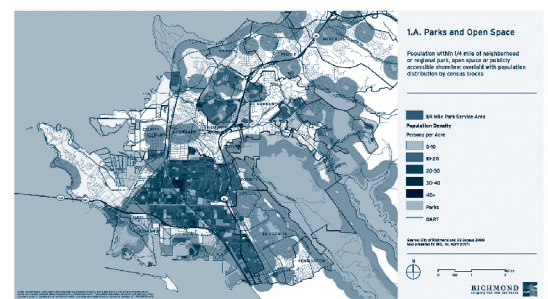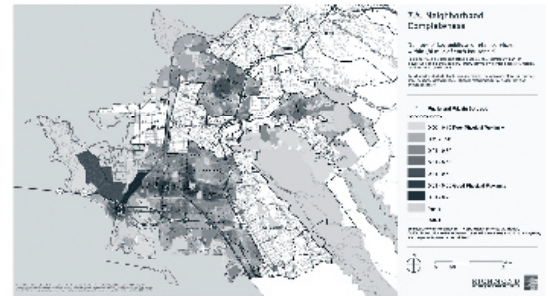
b. Health Impact Assessment

Health impact assessment (HIA) is the process of examining the effects that land use decisions will have on health in a particular geographic area. The intent is to use the HIA to assemble evidence that planning and redevelopment policymakers can consider during their analysis of land use plans and development projects. HIA is widely used in Europe, including in Ireland and Wales, where they are voluntary. Currently, efforts are underway to use HIAs in Oakland while San Francisco (as noted previously), Riverside, Seattle, Minneapolis, and Denver are all beginning to engage in some form of HIA, and a bill (AB 1472) to promote the proliferation of HIAs is being considered by the California legislature.

During our interviews, both the potential and the perceived limitations of HIA emerged as respondents considered this very new approach to policy analysis and development review. Some respondents regard the technique as a viable way to get land use decision makers to consider the health implications of projects in a formal process and at an early stage. Moreover, HIA could result in the collection of concrete data that could be utilized to hold decision makers and developers accountable to benchmarks agreed to prior to approval.

The California Healthy Places Act – Assembly Bill 1472

The California Healthy Places Act of 2008 (AB 1472) proposes to "[p]revent illness and disease, improve health, and reduce health disparities in California by promoting environmental conditions supportive of health."[28] Introduced by Assembly Member Mark Leno, co-authored by Assembly Member Mark DeSaulnier, and jointly sponsored by the California Pan-Ethnic Health Network, Human Impact Partners, and the Latino Issues Forum, the bill is in the Senate Appropriations Committee after having passed the State Assembly in early June and the Senate Committee on Health in mid-July.

The bill calls for the State Public Health Officer (SPHO) to establish an Interagency Working Group (IWG) across state agencies and organizations to "identify, evaluate, and make available to the public all available information, programs, and best practices on environmental health." In addition, the IWG would create statewide environmental health goals and objectives, monitor progress towards achieving these goals and objectives, catalog efforts by state agencies to improve environmental health, and review the potential environmental health impacts of state-supported policies, programs, projects, and plans.

AB 1472 would also require that a health impact assessment (HIA) program be established under the State Department of Public Health. As defined by the bill, health impact assessment is "a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population." A state health impact assessment program would monitor and disseminate information about HIA best practices and then evaluate HIAs performed under the program.

Under AB 1472, the SPHO and IWG would also be required to develop a set of guidelines for HIAs conducted in California by 2010. HIAs conducted under this legislation would target land use, transportation, development, and redevelopment policies and projects, among others.

In some situations, including Richmond and West Oakland, the HIA approach is being employed by community groups not only for analysis but also as an educational organizing tool, a means to increase the participation of residents of lower-income communities.

Yet there is some concern that the tool itself is not a panacea and should not be oversold as the principal solution to a set of broader issues. HIA is not mandatory, and there is no uniform methodology; wide variations in analysis are likely. For an experimental period, the variation could be beneficial, but over the long term, variability from city to city could raise issues of reliability or equity. A weak tool could require merely that policymakers accept the assessment and make related findings, without setting minimum standards or requiring mitigation measures.

As previously noted, the use of health as a screen for development project approval raises some complicated issues about how such a process would work, who would use it, and whether it could maintain its original purpose or become another weapon instead in the project-approval wars that beset so many communities. Analogies to the environmental impact assessment process cut both ways in this regard. There is strong likelihood that, in the current climate, developers and the business community would oppose HIAs, fearful that the tool would slow down the development process. Some argue that HIAs may not be necessary at all, that language contained in existing laws, such as the California Environmental Quality Act (CEQA), already requires findings that can yield similar results. Our preliminary sense from the interviews is that many cities and counties would resist efforts to make a formalized assessment

process such as HIA mandatory statewide, even when those local decision makers might look favorably on creating their own local approach to considering health factors. The introduction of legislation to expand the conditions under which HIAs can be used will no doubt surface these issues more thoroughly in the coming year.

To capture issues related to equity, HIA categories and methods would have to be framed in a way that uses scientific evidence effectively and is relevant to the urban planning process and other vehicles for policy change. As noted by one of our respondents, this would be a problem if the HIA inquiry is limited to those health impacts that predominantly affect suburban or middle-class neighborhoods, such as increasing hiking and biking trails, as opposed to ensuring that health disparities are reduced. Given that most of the current momentum to advance the practice of HIA is coming from environmental justice and central-city health equity groups, an excessively suburban focus does not appear to be an immediate problem. It was suggested that possible ways to improve HIAs would be to focus on sequencing—emphasizing social justice from the neighborhood level first. The ongoing experience of community groups in West Oakland and Richmond using the technical assistance of a new nonprofit group called Human Impact Partners may yield useful information about the practicality and effectiveness of this approach.[29] That sentiment might reflect expectations of the HIA based in a particular ideological perspective, rather than casting it as a putatively neutral and objective assessment of impacts, but such are the contrasting perceptions of the approach at this early stage.

c. Specific Development Projects

A good indicator of the progress being made in integrating land use and public health comes from examples of specific development projects. Perhaps as a result of interactions from trainings or collaborations on policy efforts, practitioners have formed relationships that allow them to learn from each other. Goals of formal partnerships in this area are usually to increase the amount of walking and cycling through the clustering of mixed uses and the proliferation of sidewalks, paths, and trails, for example. Specific projects include the City of San Fernando, where health considerations have been incorporated into land use by utilizing design that promotes walking and integrates bike paths and open space. The city is leading by example as its actions are intended to stimulate similar conduct by developers. San Fernando has also taken the lead in negotiating joint-use agreements with the Los Angeles Unified School District so that soccer fields, a pool, and recreation space will be shared with new schools.

In other instances, health considerations are being integrated into projects directly by the developers who now understand and appreciate features such as walkability and open space and incorporate them into their proposals without being required to so do. A widely recognized exemplar of this approach is Lewis Homes, operating in the Inland Empire. Other examples include Tierra del Sol, an infill development in the San Fernando Valley built by a nonprofit housing developer; and New Economics for Women, which incorporates affordable housing, a school, and recreation space on one site.

City of San Fernando

The City of San Fernando is known as the "First City of the Valley" because it dates back to 1874, when it was organized as the first community in the San Fernando Valley. Adjacent to the north of Los Angeles, San Fernando is extremely small—an area of about 2.4 square miles with just under 25,000 residents, most of whom are Latino. All of the current city council members are Latino. The position of mayor rotates among the council, meaning that the current mayor and several predecessors have all been Latino. About 54 percent of the population were homeowners as of the 2000 census (2006 estimates were not available), and the median family income is $40,138.

The health of city residents has become a growing concern, and the city has responded with a variety of creative strategies: expanding recreational opportunities and health programs such as farmers' markets, after-school programs and programs for seniors. More ambitious are the infrastructure improvements that are underway, particularly mixed-use development and a parks master plan that will guide public and private development and incorporate bicycle and pedestrian pathways. To promote walkability, traffic calming and street and sidewalk improvements are already completed, and a trolley system is planned. Community engagement has become a hallmark of the city's planning process, as is evidenced by the Youth Council—one of several community advisory committees. As a result of the Youth Council's work, the San Fernando Skate Park is now operating, and in March 2007, a Youth Center opened at Cesar Chavez Park. Also, an aquatic facility is under construction, slated to open in 2008; joint use of the facility with the Los Angeles Unified School District is being negotiated.

Yet the city remains concerned about the escalating rates of childhood obesity. Seeking to increase community-driven health programs and to build upon its commitment to Smart Growth, San Fernando joined the California Healthy Cities and Communities (CHCC) Network. A steering committee was formed and established priorities, including nutrition/ physical activity, youth development, and education. In 2006, San Fernando received a planning grant from CHCC, and a needs assessment was conducted in English and Spanish. Business leaders, city staff, residents and community groups all participated. The results reinforced the city's focus on increasing walkability and the strong interest in continued public participation in the city's parks master plan process. As noted by one city administrator, Jose Pulido, "Our goal is to develop a more invigorating built environment that is both seamless and conducive to a healthier lifestyle for our youth, seniors, and everyone in between."

Healthy Fontana

The city now known as Fontana was initially part of a Spanish land grant. Located in the Inland Empire, Fontana began as a small agricultural town in 1913. The Kaiser Steel mill opened in the area in 1942. Fontana was incorporated into a city in 1952 and became the largest steel producer in Southern California, with the mill serving as the area's primary employer. Cutbacks in the steel industry began in the late 1970s, and Kaiser Steel closed in 1984. Today, along with some steel and other industrial facilities, Kaiser Permanente Hospital operates one of the region's largest medical facilities in Fontana. Residential and commercial real estate markets in the area are thriving, and Fontana's population is just under 152,000.

While Fontana is larger than Chino, it not as affluent. The population as of 2006 was estimated to be 166,765 and the median family income $61,229. Homeownership levels are high—more than 69 percent of the population own their homes. Latinos constitute a majority of the population at more than 63 percent. However, the percentage of the population that is African American—12.61 percent—is significantly higher than the regional average. The implication is that African Americans are moving to Fontana and settling there. African Americans have played a crucial role in local politics.

In 2004, the city launched Healthy Fontana, a program designed to change the way city residents eat, exercise, and live. The program was conceptualized by city councilwoman Acquanetta Warren, who is African American. She was shocked by escalating rates of obesity, diabetes and heart disease and wanted to see the city and the community do something about them. The city's program features a walking club, Active Living projects, and cooking classes as well as an interactive website to encourage community participation. Kaiser Hospital sponsors a community education and a workshop/lecture series; several restaurants and supermarkets are participating as well.

In addition to the City of Fontana, supporters of the Healthy Fontana program include home builders such as Randall Lewis of Lewis Operating Corp. and Reggie King of Young Homes; San Antonio Community Hospital and Kaiser Permanente Hospital; and various grocery stores. The city is also committing to incorporate principles of Smart Growth into its General Plan update and land use policies and links this commitment to the Healthy Fontana program, recognizing that the city's land use decisions impact both individual conduct and the community's health.

Challenges for the Next Stage of Activity

The trends and examples previously described indicate that momentum in the area of the built environment and community health exists; progress is being made on all fronts. Nonetheless, implementation of strategies at the local level continues to be a complicated undertaking. Despite the successes noted in this report, many of our respondents indicated that there are still considerable barriers to incorporating health considerations into policies about land use and, more broadly, the built environment. As this field includes many actors, there are necessarily many competing interests. While no one publicly disputes that creating and maintaining healthy environments is important, no single entity has the ultimate responsibility for accomplishing this goal. Who should be responsible? How should it happen? Who will bear the costs? One of our respondents noted that while there is movement, the process will take a significant amount of time, as decades of poor planning cannot be reversed overnight.

Following are some concerns, observations, and recommendations expressed by our respondents. They are grouped in categories that are specific to particular disciplines involved in work on the built environment. They are reflective of a period of interaction among professions that has only recently begun in earnest. Therefore, any challenges or misunderstandings listed here are not a cause for pessimism, but are rather the indicators of issues that need to be, and can be, worked on in the years ahead.

i. Public Health Leaders

- Several respondents noted that public health practitioners have at times been timid about engaging in the land use process. They may be reluctant to submit comments or testify at public hearings without adequate knowledge of the planning field or may need training about the regulatory process or policy advocacy. They are already short-staffed or lack funding or institutional support for this work.

- Respondents suggested that the solution was for public health practitioners to be proactive and collaborative. It was suggested that they engage with the community at the front end and represent their interests and work to increase community participation in decision making.

- Some respondents cautioned that public health practitioners must realize that developers are a potent force; they should avoid provoking developers in a way that would turn them into the well-funded opposition. It was suggested that the constraints that developers (and planning agencies) face in the development process must be acknowledged. Even when there is willingness, there may be limits on developers' ability to make modifications. Specifically, these constraints include time, land cost, and financing restrictions.

- Finally, respondents cited the need for those working in public health to keep the pressure on policymakers to broaden the definition of "health" as well as the need to ensure that the definition of health incorporates issues related to mental

California Local Public Health Leadership Perspectives on the Built Environment

Health officers and executives and environmental health officers from all local Health and Environmental Health Departments in California were recently invited to participate in a survey of leadership perspectives on land use and transportation development for health. Invitations were extended to 179 leaders, and maximum participation was 89 percent, or 159 respondents. This leadership survey is part of a larger study of California local health department involvement in shaping the built environment for health, conducted at the University of California, Berkeley School of Public Health.

Legislative Support
- 77 percent supported state legislation permitting local health departments to engage formally in land use and transportation planning

- 85 percent supported state legislation mandating with funding

Directions
Several statements regarding land use and transportation development were presented for evaluation. Those receiving highest support included:
- Decisions on where to locate schools should consider ensuing health impacts

- All people should have walkable or bike-friendly access to appropriate parks and recreational space

- Schools, health departments, and communities should collaborate to increase access to open and recreational space

- All communities should ensure safe walking, biking, and mass transit options for community, city, and regional-level connectivity

- Every child should have a safe walking or biking route to school

- New and infill development should employ ecologically sustainable building and development practices

Awareness
- 92 percent reported having heard of health being affected by community design or the built environment

Practice
- Out of 150 responses, 42 percent reported currently working in some capacity in the area of land use and transportation planning, other than traditional environmental health activities

- If their health department had the authority, resources, tools, local political support, and evidence to effectively do so, 94 percent said they would contribute to land use and transportation planning and development for health

- A majority of respondents agreed that participating in land use and transportation planning and development as a health department strategy is effective at meeting goals and is important for addressing health disparities and protecting vulnerable populations

Needs
- 48 percent reported that their authority is currently insufficient to effectively contribute to land use and transportation planning and development for health

- 70 percent reported their resources as currently insufficient to effectively contribute to land use and transportation planning and development

- A total of 41 percent agree that their constituency is calling for local health department participation in land use and transportation planning and development

The results of the survey indicate that there is broad support among health directors for pending legislative measures that would increase engagement between public health and planning. Moreover, the survey reveals that with more authority, resources, and support, nearly all of the respondents would participate in land use and transportation planning. These findings are consistent with the sentiments expressed by those who participated in the convening as well as those interviewed prior to the event.

health. To make their communication with planners effective, health leaders and practitioners must put the focus on a comprehensive view of health, not just a focus on one issue or disease—such as obesity or asthma. Clinicians may need to think more broadly, beyond a specific disease, to the notion of "public" health, and to take the *long view*, tempering their expectation for positive health outcomes to perhaps take years rather than months.

ii. Urban and Regional Planners

Health considerations are beginning to be integrated into land use policy and planning, due in part to the innovations of urban and regional planners, including those in government positions, consulting practice, research and teaching, and advocacy. The dialogue that is developing between those working in public health and those working on planning and land use is beginning to pay off, as evidenced by the promising projects noted herein. Yet there is still much work to be done. *Built environment policies that integrate health are primarily occurring in a situational rather than a systematic fashion.* They result when determined champions— whether elected officials, developers, community coalitions, or other actors—push creatively beyond the bounds of conventional practice. Timing is critical, as policy decision making about land use is driven by schedules, need, and opportunity, and opportunity favors the prepared.

What can be done to make integration the standard practice? Given the budget constraints affecting local governments as well as the fact that every community is unique,

is it realistic to think that developing such a standard is possible—or even desirable? Who should develop the standard?

Discussions with our respondents revealed a perception, particularly among public health practitioners, that there is still some resistance within the planning arena that must be overcome. The following examples summarize in very general terms some of the barriers they had observed:

- Planners may feel that health issues are not within their jurisdiction—a belief that is reinforced when city governments claim that health is a county issue.

- Planners may feel that some health issues are already adequately addressed, or could be addressed, by existing methods—zoning (which has origins in public health) and design guidelines—and may feel that some health advocates have not yet understood those practices, either their current uses or how best to modify and strengthen them.

- Planners may have a limited detailed understanding of health considerations. While they appreciate the connection between health and land use in general terms, they may not have much practical knowledge about the consequences or multiple impacts of land use and transportation on health, and they might not understand, or have had reason to track, the links between environmental factors and healthcare costs.

- There are severe institutional constraints impacting the practice of planners in local government: they work within an administrative system that imposes time limits and is governed by numerous

procedural rules, many of which seem designed to disproportionately empower project opponents. Planners sometimes feel that considering health issues will "gum up the works" and create inordinate delays or translate seemingly laudable goals into procedural mechanisms for delay or obstruction. At least planners would seek to be reassured that this will not be the only result of the inclusion of additional considerations. The complex history of environmental impact assessment and regulation needs to be carefully understood as part of the context into which new concepts for considering health impact would be injected.

- Significant constraints are posed by limited time for long-term planning, lack of staff to assign to health issues, and limited budgets. Also, planners operate within an environment controlled by political processes that can lead to decisions rendered through everything from "ballot box zoning"—voter referenda on specific projects—to specific projects promoted by elected officials, to complex state mandates and guidelines, all of which can undermine more systematic, goal-oriented planning.

iii. Developers

A variety of decision makers design, shape, and construct the built environment; property developers are obviously crucial. Developers have the ability to incorporate voluntarily health considerations into their projects. While this will not obviate the need for regulatory measures, it may be the quickest way to get desired results. However, our review revealed that developers have not always been included in the dialogue—at least not until

after a project has been proposed. At that point, such a discussion may be adversarial. Some of the respondents we spoke with have taken steps to prevent this, reaching out to developers and building networks that reflect the perspectives of planners, developers, public health leaders, and other stakeholders. Consequently, there is a greater understanding of the constraints impacting developers, and developers gain insight into the health issues.

The following observations from our respondents include comments and questions intended to facilitate the involvement of developers:

- For developers, certainty about the regulatory process and about costs, in terms of both time and money, is valued very highly. Processing and permitting must be predictable. Putting requirements up-front and early in the process is preferred, so incorporating them into the General Plan framework would probably be best. Developers are often willing to trade off higher costs in return for more regulatory certainty, and many innovations in planning have been based on that phenomenon.

- Not surprisingly, there is a sense that developers are motivated mostly by the risks, rewards, and responses of the market. They dislike regulation and mandates. But they need to see, in terms that matter to them, that development that incorporates health considerations is *profitable*.

- Developers might become defensive when public health concerns are raised—perhaps out of fear that incorporating them will be time consuming and expensive. And there

is a suspicion that "public health" is a code word for "slow growth."

- There is no question that a market for health-friendly built environment features exists, particularly in the suburbs. Some developers are incorporating health considerations into their projects more frequently, even without mandates or incentives. But are these features being added primarily as a middle-class aesthetic to promote exclusivity rather than for health and recreation? Should that matter?

iv. Additional Actors

Practitioners from a number of related disciplines are beginning to participate in the land use/health discussions and actions. It will be necessary to understand the distinct perspective that each group brings to the table and the constraints that impact them.[30] Consider:

- *Affordable housing developers.* Because these organizations commonly work closely with low-income communities, they understand first-hand that incorporating health considerations into the development process is generally good for the community. But they may not be well-versed in the specifics of health issues and therefore need health actors at the table with them. Also, affordable housing developers must contend with very stringent financial constraints that differ from those that pertain to market-rate projects, making it difficult for them to incorporate certain features and amenities without new sources of revenue.

- *Environmental regulators.* Some of our respondents believe that environmental regulatory agencies are not yet engaged in the health-and-communities dialogue—at least not in a proactive manner that promotes land use as a way to produce healthy outcomes. Their focus is typically much narrower, concentrated on risk assessment and legal compliance. Our respondents pointed out the perception that these government regulatory agencies often overlooked issues important to communities of color, resulting in missed opportunities to remedy flaws in the built environment that compromise health. Also noted is the need to broaden the term "environment" beyond mere considerations of air and water to incorporate housing, food, and parks.

- *Environmental justice groups.* Our respondents viewed these groups as more likely to be familiar with both grass roots organizing and legislative and policy advocacy than government environmental agencies. As with affordable housing developers, environmental justice groups are already working in lower-income communities of color that are confronting economic and social justice challenges, so they see the connections and the potential for addressing health considerations through the built environment. They are beginning to take an active role in some of the municipal planning efforts previously described. Their participation in shaping what will be built next is a logical extension of their efforts to close polluting facilities and otherwise remedy past injustices.

III. Incorporating Principles of Equity

The same disadvantaged communities that experience health disparities have also had to cope with ineffective land use planning and policies. Dilapidated housing, inferior school facilities, inadequate transit, decaying infrastructure, exposure to environmental hazards and toxic waste, limited access to fresh food, and over-exposure to unhealthy food and alcohol are all products of past, if not ongoing, policies and practices of urban development. Yet equity is often absent from the emerging dialogue about health and the built environment. The challenge now is to apply the concepts of equitable development to the built environment. Following are brief observations on seven aspects of this challenge.

Building new is easier than rebuilding in place. In instances where health considerations are being incorporated into the development process, these efforts are mostly prospective, not remedial. In other words, efforts are occurring mostly in new developments, such as large, master-planned suburban communities being built on land that was not previously inhabited or infill projects being constructed in large vacant sites. It is relatively easier to incorporate health considerations into a new development project being built from the ground up than to take remedial action to rectify poor planning and haphazard development built up over generations. Yet the equity question is raised by the greater complexity of "retrofitting," since low-income communities of color are likely to be in older sections of urban areas where land is scarce.

As we consider how to move the field forward, the two approaches come into sharp contrast.

Will it be possible to work simultaneously to incorporate health considerations into new projects while upgrading infrastructure and finding creative ways to add open space and recreation areas in neighborhoods that are already built out? Can built environment strategies be utilized to identify what little vacant land is available and earmark it for grocery stores that offer healthy foods and for new, affordable housing and parks?

Health-friendly neighborhood improvements may be perceived as a cutting edge of displacement. Are there strategies that will encourage rehabilitation of existing housing and improvement of environmental conditions without displacing current residents or spurring gentrification? Some of the physical features that are most associated with healthy communities and Smart Growth may be used as buffers to exclude people of color or low-income residents or as the leading edge of increases in property values that have this effect. Increased housing density, even mixed-use and mixed-income housing, can spur gentrification and ultimately displacement.

Our respondents cautioned that "if you build it, they might *leave*," the very real likelihood that improvements to the built environment may result in gentrification and displacement of people of color and low-income residents. Measures should be put in place at the outset to prevent this outcome. It is essential that practitioners have some understanding of the history of urban renewal/urban removal, as well as segregation, civil rights, and health disparities in low-income communities. This history has led many community residents

to a well-founded mistrust of developers and government agencies—whether they are city planners, redevelopment staff, or public health practitioners. To overcome that past, health strategies must link to community roots and foster homeownership and jobs for youth and young men.

Social factors such as safety interact with physical conditions.

Low-income communities still need the whole array of health considerations, including parks. How can those needs be met in all kinds of neighborhoods? Our respondents indicated that it is more complicated than assuming that "if you build it, they will come." Simply building a park or athletic fields, or opening transit lines, does not guarantee usage. Efforts to increase walking are juxtaposed with concerns about safety. To date, practitioners have focused primarily on addressing safety hazards such as traffic or defects in sidewalks that could impede walking as a form of physical activity. For low-income residents of urban areas, however, safety issues revolve predominately around crime—particularly incidents of violent crime and gang activity—while walking might already be a common practice, not as a form of exercise, but as a means of transportation. Urban design efforts in lower-income communities have recently become more sophisticated in making the connection between social factors and physical features. Perhaps the collaboration among public health, planning practitioners, and an expanded array of stakeholders, including law enforcement, business, social services, and youth organizations, among others, is what is needed to yield new multidisciplinary approaches to resolve these long-standing problems.

Community engagement and inclusion are prerequisites of an equitable system of planning and policymaking.

There is still, as a general rule, a daunting gap in the degree of access, participation, and local autonomy in land use decision making between low-income communities of color and affluent communities. Community participation in the land use and planning process is a key component of ensuring that local provisions, local design, and local resources meet the needs of local communities. It is therefore incumbent on practitioners and activists to engage fully with community residents, to be sensitive to language and culture, so that planning is done *with* them, not *to* them. Residents must be able to articulate their needs and fears. The result is more likely to be design and development that enhances their quality of life.

Economic development is central to health-friendly neighborhood improvements.

Our respondents suggested that to attain equity, the analysis must go beyond a simplistic assessment that "green space and grocery stores are good." It is imperative to also consider the connection of health with social and economic opportunity, including job creation, small business opportunities, homeownership, economic mobility, and wealth creation—issues that are all tied to development and the built environment. Health considerations can and should be a bridge among the environment, education, and economic vitality in low-income neighborhoods and communities of color.

Special circumstances affect communities of color. The persistence of the correlation between poverty and race in California has meant that factors in the built environment that affect health disparities should be of particular concern for communities of color. There is a land use pattern that unfortunately is typical of many low-income communities of color: isolation from more affluent neighborhoods but location near noxious industrial facilities or freeways; decaying commercial corridors characterized by limited access to quality goods and services such as supermarkets and banks, juxtaposed with a saturation of liquor stores and check-cashing stores; and dilapidated public buildings and infrastructure, including schools, roads, and parks. There are versions of these conditions in urban, suburban, even rural settings throughout California, from small unincorporated districts in the Central Valley to neighborhoods in each of the state's major cities, to a growing number of older suburbs whose economic vitality peaked in earlier decades. These conditions contribute to health disparities in a number of ways, and thus the efforts to rectify them become a matter of environmental justice. That is one reason why the comprehensive efforts of organizing and planning in Richmond, a city with a substantial percentage of its families living below or near the poverty line, are so significant.

At the same time, California is home to an increasing number of middle-income people of color—Asian American, African American, and Latino—whose communities are not characterized by poverty or disinvestment. Indeed, many of these places are struggling

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Community Redevelopment or Community "Removal"—A Cautionary Tale

Planners and public health practitioners who have worked in other parts of the country can provide perspective on some of the most intractable problems that arise in this work. Consider the experience of Anthony Iton, MD, Director and Health Officer, Alameda County Public Health Department. He recounts working in a smaller community—Stamford, Connecticut—as part of an effort to revitalize a dilapidated community along the Mill River. The proposed project was the creation of a walkable green strip that would connect most parts of the city to the train station. Dr. Iton thought the project sounded good and was prepared to present health data to the community in conjunction with the project, but he was stunned by the community's negative reaction. The data he wanted to present were irrelevant to the community because they had no trust in the process. He has since come to understand that relationships with the community matter and that past practices and history matter as well. He notes that community development and urban renewal don't just change the physical infrastructure; the social environment is changed as well. "When you change, you change the churches, schools, etc., and you change the culture and rip out its heart. And you have to be aware of this." Dr. Iton cautions that no matter how beneficial walking paths or bike lanes may be, without trust, it is not going to work. The community must be involved in the process up front, not just in the product. He stresses that the social capital, the networking around the infrastructure issues, is what is most important. Without meaningful community involvement, people will become suspicious, believing that projects are a mere pretense for gentrification. Dr. Iton's observations are particularly relevant to situations involving underserved communities.

with the challenges of rapid growth, and their residents—many of them first-time homeowners—are looking to maintain a hard-won quality of neighborhood life.

Some of the cities that are pursuing innovative strategies to address health through the built environment are predominantly occupied by people of color. Fontana, Salinas, Chino, and San Fernando, all profiled in this report, have majority Latino populations. Two of the cities in the report, Richmond and Fontana, have significant African American populations—28.8 percent and 12.6 percent, respectively.[31] In some instances, the elected policymakers leading these efforts are themselves people of color. In Fontana, an African American city councilwoman—Acquanetta Warren—has been the driving force behind the Healthy Fontana program. In San Fernando, another city councilwoman, Maribel de la Torre, has pushed hard for and won development projects and city programs that will improve health outcomes for the city's residents.

These growing cities are not very far from areas of extreme poverty. Immediately adjacent to the areas undertaking the innovative strategies described in this paper are some of the poorest communities in the state. Fontana and Chino are in the Inland Empire. Yet in the adjacent City of San Bernardino, also part of the Inland Empire, 27.6 percent of the population lives below the poverty line. This region, encompassing parts of three counties, is one of the fastest-growing regions in the country, and the Latino population is experiencing the most rapid growth of any segment. On

average, Latino and African Americans living in the Inland Empire fare poorly in matters of health—high rates of cancer, heart disease, and infant mortality. Clearly, changes to the built environment can help remedy these conditions, but without deliberate intention, such changes will not be made, repeating the all too familiar pattern of disparities.

Rural areas face distinct health equity issues. Much of the research, discussion, and action concerned with health disparities and the built environment has centered on metropolitan regions, the parts of the state and nation that encompass most of the population growth, property development, and energy use. The absence of "big city" levels of traffic, pollution, and crime can offer some familiar advantages to small-town life. However, not only do many rural areas face disparities in health outcomes that are at least as wide as those in metropolitan areas, they are also subject to a different but no less daunting set of pressures that make it difficult to create healthy communities.

One type of problem occurs in rural areas targeted as tourist or vacation destinations, when uneven development pressures push the price of land and housing out of reach of long-time residents. Projects for retirees, second homes, or resorts—ironically based around leisure and recreation—can actually be so privatized that the local residents, usually with lower incomes, can end up with higher costs of living and fewer opportunities for public outdoor recreation than they had before the new development. The Healthy Eating, Active Communities (HEAC) group in Shasta County

has taken effective action to ensure that the new development in its communities will include trails and parks open to the public.

A different type of rural built environment problem can be seen in low-income, predominantly Hispanic communities where the level of basic public infrastructure is markedly inferior to the standard for the state. Inadequate water and sewer systems are still a problem in some Central Valley unincorporated communities and border-area *colonias,* and the absence of sidewalks, parks or playing fields presents challenges to safety, active living and health. A new project led by California Rural Legal Assistance will examine whether there are systematic disparities in infrastructure and service in Central Valley unincorporated communities and, if so, what remedies can be developed.

At the most basic level, lower-income rural families need the same qualities for a healthy environment as families in metropolitan areas, but California's diverse rural contexts will require distinct strategies to bring about these outcomes.

IV. Questions about the Evolution of the Field and Themes from the Convening

Prior to the April 9, 2007, event, a series of questions were posed for the participants to consider. In the course of the day's discussion, many answers and insights surfaced. Those initial questions have been synthesized into a shorter list that follows; after each question is a summary of the participants' responses.

(1) What are the best sources of information (materials, trainings, policy templates, best practices) about the built environment and health and how could this information be provided to strengthen the capacity of health and planning advocates and maximize impact for the field as a whole?

- Many practitioners envisioned a type of clearinghouse where documents and materials could be shared or accessed, including:

- Templates and sample documents, such as model ordinances, General Plan language, sample letters, and fact sheets that could be adapted to specific audiences

- An annotated list of organizations and individuals participating in the collaboration with descriptions of the projects they are working on related to built environment strategies

- A repository of best practices that can be replicated

- A list of examples where collaboration between public health and planning led to good results at the local, state, or national level

- The field can develop standardized educational tools that all can share; e.g., slide shows, or utilize those that already exist.

(2) What kinds of support do organizations working on these issues need? Is there a need for an organized, coherent voice on land use and health and, if so, which organizations are the most likely candidates to coordinate such an effort?

Also suggested was a more expansive notion of a central resource center, with expertise in public health, land use development, design, and planning.[32] As the sidebars and the profiles in Appendix C indicate, a number of organizations could be equipped to fill this function.

This center could provide capacity building, training, legal advice, technical assistance, and networking to public health professionals, keeping them abreast of new developments in the field and equipping them to participate effectively in the local land use process. Services would also be made available to city leaders, to connect them to health expertise—a particular concern as the majority of cities in California lack health departments.

Ideally, a resource center would also be able to connect public health professionals and others in health-related fields to key actors in the planning and development process, including local elected officials, affordable housing experts, planners, public works directors, funders, developers, grass-roots organizations, schools, and

public officials at the regional and state levels.

Finally, a resource center could respond to the demand for speakers who understand the land use/health connection to make presentations at workshops organized by county and city officials and/or public health departments.

Beyond the concept of a resource center lies the notion of a coordinated presence on state policy issues regarding health and communities. Many of the active organizations in the current collaborations are part of the informal Healthy Places Working Group, and a number of groups have come together to sponsor or otherwise support the two pieces of state legislation (AB 437 and AB 1472) described in Section II of this report. Out of these efforts may emerge an ongoing coalition, alliance, or other entity that can be an effective voice for policy change.

The collaborations in California between public health and urban planning professional groups have been very valuable but so far largely *ad hoc*. Some, such as the December 2006 BARHII/BAPDA convening earlier described or a roughly comparable event in Los Angeles in May 2007, have been based on conducting a particular meeting. The key to the next year or two will be translating the momentum from these first steps into ongoing coordination on specific training, research, and policy opportunities. On the national level, many of the staff members for professional groups and foundations who initiated these kinds of collaborations have moved on to other positions, so efforts within the state may need to be mainly instigated by California leaders and institutions.

(3) How effective are the tools and strategies for documenting and assessing health impacts and incorporating these factors into land use decisions? What modifications are needed to take these tools to a higher level of effectiveness and more widespread utilization?

Some tools and strategies are proving to be quite effective, including:

- Collaboration across sectors at the municipal level has led to the incorporation of health language in a number of situations and shows considerable promise for other cities.

- Health impact assessment (HIA) is expanding in its use in many jurisdictions and is increasingly viewed as a tool that can be utilized by community organizations or by governments.

- General Plans are developing a health focus in a number of cities, and the notion of adding a health element to these documents is gaining traction.

These tools would have to be adapted to the needs of specific communities. Cross-sector training between planners and public health practitioners would make doing so easier. It was strongly suggested that this type of training also be provided to elected and appointed officials who make policy decisions.

These trainings could incorporate tours, interactive learning, and written materials. Ultimately, policymakers may decide to institutionalize the application of built environment strategies and tools in a broad range of land use decision making.

All of these methods need to be coupled with effective strategies for bringing residents into the discussion and decision making. There are some basic tenets of community engagement that are common to almost any issue, and there are strong traditions in both public health and urban planning of technical support for grass-roots organizations. Many of the convening participants viewed the community as a largely untapped resource. These sentiments were voiced across the spectrum—from public health officers to community advocates and planners. Participants noted that to be effective, efforts to engage the community must occur early and be maintained throughout the process. It requires funding and tangible support, not only good intentions or volunteer efforts; methods for engagement will depend on the context. Community engagement must be authentic, involving community residents and leaders with strong ties to the neighborhood, and building residents' capacity to take on ever more significant policy objectives. The importance of engaging youth, to develop their leadership potential and to shape healthy behavior, was cited frequently. And because this is a field fraught with professional jargon and the frequent use of complex evidence, it is important, but not sufficient, to provide translation of technical terminology.

Another frequently suggested strategy that would advance the work involves enhancing undergraduate and graduate school education as graduates who enter the fields of public health or planning will already be familiar with concepts and strategies regarding health and the built environment. The development of a curriculum, textbooks, and joint-degree programs, with relevant field placements, are envisioned. Outreach should also be directed to students, particularly those from diverse and/or underserved communities, to encourage enrollment and ultimately employment in aspects of the planning or public health fields.

(4) What are the significant research issues that remain to be addressed in this arena, and how can that kind of analysis be supported, carried out, and translated effectively for practitioners, policymakers, and advocates? Is there legal, economic, and social research that would be useful to positioning and policy development?

The need for additional research to support advocacy and shape public policy was frequently noted during our interviews and at the convening. While there is a growing body of evidence in this field, there are significant gaps that could be filled with evidence-based research that validates a proposed policy change. Specific research topics include:

- Continued analysis of race/equity/ economic strategy

- Is there a link among active living, fitness, and food?

- What is the relationship between neighborhood connectivity and walkability, between connectivity and obesity?

- Are homes located near parks more valuable; does lack of park maintenance cause property values to decline?

- What are the barriers to active living in low-/moderate-income communities?

- Assessment of neighborhood choice—do people choose to live or work in an area because it is walkable or walk because of amenities available in the area where they live?

As noted in the earlier section on research, this domain includes not only formal public health, medical, and social scientific research, but also the analysis and presentation of local data sources about conditions and facilities in communities. The proliferation of computer mapping technology and local data intermediaries, has made it possible for high-quality, accessible maps and presentations about health and the built environment to be widely shared. These efforts, which are often dependent on one-time grants, need to be institutionalized so that changes over time can be tracked and documented and so that local partners can become familiar with the data and methods.

(5) What issues and approaches would keep the effort substantially focused on issues of racial and ethnic health disparities and on social and economic equity, even as it draws upon the universality of many of the basic concerns about health and communities?

The advancement of *equity* is a cornerstone of TCE's commitment to enhancing the built environment as a means of addressing health disparities, and that perspective was shared by many of the participants at the convening. Finding ways to prevent or reduce disparities through built environment strategies is both a challenge and an opportunity presented by this work. It was suggested that many of the aspects of the work should be viewed from an equity lens so that the needs of vulnerable populations are addressed from the outset.

The problems that our communities present with regard to health and physical activity have become widely recognized in part because they have nearly universal relevance. People of all incomes, social classes, and races can see themselves or their neighbors in some part of the picture being painted about obesity, lack of exercise, unhealthy eating patterns, and the way in which the built environment shapes their choices and actions. No one active in this field would minimize the importance of gaining widespread public attention to these issues. At the same time, this universal approach must be balanced with the recognition that life circumstances are radically different along lines of income and race. A sustained perspective on equity ensures that these differences are directly addressed in the efforts to improve homes, neighborhoods, cities, and regions. The five aspects of a focus on equity described in Section III were generally supported and reinforced by the discussion at the convening.

Two specific approaches related to equity that emerged were:

- Using civil rights litigation to challenge disparities in public financing, infrastructure, and access to parks, and

- Anticipating that displacement and gentrification might result from infill development or other strategies associated with improving the environment for active living and taking steps in concert with the affected communities to prevent displacement from occurring.

(6) What other groups need to be added and what are the messages that can draw them in? What are the issues and approaches that would make the effort relevant to a broader spectrum of Californians?

In addition to the professions, interests, and groups already described (planners, developers, public health officials, and environmental justice advocates), an array of other categories of organizations and professions were identified as potential collaborators in efforts to improve health outcomes through a focus on the built environment:

- Transportation planners, CalTrans and other transportation funders and policymakers (whose issues are discussed in item (7), following)

- Planners from disciplines other than land use (e.g., recreation facilities planners)

- Labor unions, as sources of investment capital through pensions and as sources of political support for innovative practices

- Architects and landscape architects

- Lenders and other financial institutions (particularly to overcome practices that currently limit their ability to fund mixed-use projects)

- Local elected officials, such as mayors, city council members, and county supervisors

- Local appointed officials, such as planning commissioners

- Regional planning organizations, such as SCAG, SANDAG, and ABAG

- League of California Cities

- Trade associations, e.g., National Association of Homebuilders

- Insurance Companies, HMOs, and others with an interest in preventive practices that can improve health outcomes

- Media of all kinds

The key to engage these groups will be to find the points of commonality as well as to understand the constraints that impact them. It was noted that a good understanding of politics and power relationships is essential. Communication is also a key element. Each discipline needs to understand the other's professional language and, in turn, make the terms understandable to the community. For instance, terms such as the *built environment*, *social determinants*, or *root causes*, while having technical precision for particular audiences, may not have much meaning or resonance for the general public or decision makers. It is

essential to frame the message and then to keep it consistent.

The importance of collaboration was also stressed. Dialogue between the sectors should continue and be broadened to include other disciplines. Full advantage should be taken of opportunities to work together strategically. Periodic meetings such as the convening on April 9, conferences, and trainings provide opportunities to network and identify potential opportunities for collaboration.

(7) What are the critical areas of California state policy that advocates can work on collaboratively in order to sustain the progress that has been made and advance the work?

Two substantive issues were identified as areas of state policy where advocacy related to the built environment could have a significant impact. The first was *public finance,* especially the upcoming multifaceted boom in capital expenditures. Participants agreed that the upcoming allocation of funds from the recent multibillion-dollar state infrastructure bonds for parks, schools, transportation, infill housing development, and water systems provided an opportunity to ensure that money flowed to underserved areas and that the projects supported by these funds should contribute to better health, rather than impede it. There are advocates focused on each of these types of infrastructure, and a stronger connection between them and the leadership in community health would be an asset to both groups. There was also discussion of public financing from the perspective of the local government; namely, that

the lack of local resources was often used to justify poor design and development decisions. The same scarce funding argument has also been used to explain the lack of capacity to overcome disparities in the built environment—such as the development of parks in affluent areas while low-income areas have poor park access. It was suggested that community health advocates learn more about the intricacies of infrastructure financing and develop an advocacy strategy. Since many local and regional planners are involved in the infrastructure planning process, this is an area for potential exchange and collaboration.

The second issue identified was *transportation,* more broad than simply a concern with the bond financing opportunities. Several participants commented on the need to involve transportation planners more fully in strategies to improve community and regional health. Clearly, transportation is an integral force in shaping the built environment: transportation policy choices support or impede the effectiveness of mass transit and the viability of walking and bicycling. Transportation shapes housing and development options and generates a substantial proportion of air quality problems. It may be necessary for public health advocates to learn more about the scope of local and metropolitan transportation funding and planning and for those bodies to incorporate input regularly from health practitioners. The increased resources being directed to transportation at the state and local levels, as well as the growing focus on transit-oriented development, make this a promising opportunity for collaboration.[33]

V. A Concluding Note on the Centrality of Power and Politics

The growing public attention to these issues is based in part on scientific and medical research and the technical aspects of urban design and planning. Research applied to public issues is a powerful tool that can be utilized to hasten a shift in public opinion and values. Former Vice President Al Gore's documentary, *An Inconvenient Truth*, was cited by participants as a prime recent example of the influence of arguments based on empirical data. Nonetheless, it was widely felt by participants that power and power relationships are essential, unavoidable elements of efforts to improve health outcomes through a focus on the built environment. Public health professionals were urged to act strategically with respect to politics, with the ultimate goal being to change the power dynamic and attain social justice.

There is no single source of power for change, but rather a constellation of several types of influence and authority. There is power in collaboration and relationship building, in the voices of residents as raised through community organizing, and in "the white coat"—the trust and legitimacy that accompanies medical expertise. To change political will in a significant way, the focus must be placed on elected officials, particularly at the local level, where most planning decisions are made. This is essential to ensure that health and equity considerations are raised early in the community development process and monitored throughout. Public health practitioners and physicians need to be trained to work in these many political environments, and community members may need such training as well. All of the avenues of influence, authority, and power will need to be understood and used to their full potential for the progress that has been made so far to be extended to all communities.

Appendix A: April 9th Convening Agenda

Note: Names and titles of presenters in this appendix are expanded in Appendix B.

Lifting Up What Works®
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The California Endowment

The Impact of the Built Environment on Community Health:
The State of Current Practice and Next Steps for a Growing Movement

NILE HALL, PRESERVATION PARK, OAKLAND, CALIFORNIA
April 9, 2007

9:30 a.m. (Nile Hall) **Continental Breakfast**

10:00 a.m. (Nile Hall) **Welcome + Introductions**
George Flores and Angela Glover Blackwell

10:20 a.m. (Nile Hall) **Context and Review of Agenda**
George Flores and Victor Rubin
- purposes of the meeting, style and format of meeting, and how information from the discussion will be utilized.

10:40 a.m. (Nile Hall/ **Concurrent Discussions**
Robinson   - two moderated breakout group sessions held simultaneously
Classrooms)

• *Tools, resources and strategies that increase the effectiveness of local advocacy efforts*
Moderator: Mildred Thompson
Panelists: Marice Ashe, Rajiv Bhatia, Maria Campbell Casey

• *The relationship between the sectors and professions: public health and urban planning and development*
Moderator: Mary Lee
Panelists: Bob Prentice, Paul Zykofsky, Jim Sallis

11:40 p.m. (Nile Hall) **Report back** from concurrent sessions
Moderator: Mildred Thompson

12:10 p.m. (Nile Hall) **LUNCHEON** – opportunity for participants to network

12:40 p.m. (Nile Hall) **The National Picture: How has the Movement to Link Health and the Built Environment Evolved?**
Moderator: Angela Glover Blackwell
Discussion: Richard Jackson

1:40 p.m. (Nile Hall) **A Review of the State and Local Policy Environments**
Moderator: Judith Bell
Discussion: Anthony Iton, Robert Garcia, Ellen Wu

2:40 p.m. (Nile Hall) **Discussion of Next Steps:** How to advance work in the field, identify areas where research is needed, barriers and gaps, and strategies to overcome challenges
Moderator: Victor Rubin

3:30 p.m. (Nile Hall) **Concluding Comments**
Marion Standish

4:00 p.m. (Robinson **RECEPTION**
Classrooms)

Appendix B: Attendees at April 9ᵗʰ Convening

Kathryn Alcantar
Program Fellow, Environment
The San Francisco Foundation

Marice Ashe
Director
The Public Health Law Program

Nancy Baer
Manager, Injury Prevention & Physical Activity
Promotion Projects
Contra Costa Health Services

Rajiv Bhatia, MD
Director, Occupational and Environmental Health
Department of Public Health, City and County of
San Francisco

Kathryn Boyle
Project Manager
Kaiser Permanente – Community Benefit Programs

Elena Briones
Program Fellow, Community Health
The San Francisco Foundation

Wendel Brunner, MD
Director of Public Health
Contra Costa Health Services

Maria Campbell Casey
Executive Director
Partnership for the Public's Health

Kate Clayton
Chief, Health Promotion
Berkeley Public Health

Judith Corbett
Executive Director
Local Government Commission

Robin Cox
Health Education Manager
Health and Social Services of Solano County

Tracey Delaney, PhD
Chief, Chronic Disease and Health Disparities
County of San Diego, Health and Human Services
Agency

Joel Ervice
Associate Director, Regional Asthma Management
and Prevention Initiative Statewide Coordinator,
Community Action to Fight Asthma

Robert Garcia
Executive Director and Counsel
The City Project

Eloisa Gonzalez, MD
Program Director, Physical Activity Program
Los Angeles County Department of Public Health

Stefan Harvey
Assistant Director
California Center for Public Health Advocacy

Jonathan Heller
Human Impact Partners

Letitia Henderson
Internal Capacity Program Manager
Bay Area Regional Health Inequities Initiative
(BARHII)

Jeff Hobson
Policy Director
Transportation and Land Use Coalition (TALC)

Daniel Iacofano, PhD
Principal
MIG, Inc.

Anthony Iton, MD
Director and Health Officer
Alameda County Public Health Department

Richard Jackson, MD
Adjunct Professor
School of Public Health, University of California,
Berkeley

R. Thomas Jones
Dean, College of Architecture and Environmental
Design, Cal Poly San Luis Obispo

Heather Kuiper
Doctoral Student
School of Public Health, University of California,
Berkeley

Hannah Burton Laurison
Policy Analyst, Land Use and Health Project
Public Health Law Program

Marlon Maus, MD
Doctoral Student
School of Public Health, University of California,
Berkeley

SaraT (ST) Mayer
Management Analyst III
Health, Policy, Planning and Promotion
San Mateo County Health Department

Tanya McCann
South Bay Partnership for the Public's Health

Richard Mitchell
Director, Planning Department
City of Richmond

Mike Moore
Director, Community Development
City of Petaluma

Poki Namkung, MD
Health Director
Santa Cruz County Health Services Agency

Michael Osur
Deputy Director, Department of Public Health
County of Riverside

Jose Padilla
Executive Director
California Rural Legal Assistance

Robert Prentice, PhD
Senior Associate
Public Health Practice and Policy
Partnership for the Public's Health

James Rojas
Project Manager, Planning
Metropolitan Transportation Authority in Los
Angeles

Tanya Rovira-Osterwalder
Project Coordinator
South Bay Partnership, HEAC Chula Vista

James F. Sallis, PhD
Professor, Department of Psychology
Director, Active Living Research, San Diego State
University

Sarah Samuels, DrPH
President
Samuels & Associates

Steve Sanders
Director, Land Use and Housing Program
Institute for Local Government

Bill Satariano, PhD
Professor of Epidemiology and Community Health
School of Public Health, University of California,
Berkeley

Sarah Stone-Francisco
Research Associate
Samuels & Associates

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Appendix C: Profiles of Organizations and Initiatives

1. American Planning Association/ National Association of County & City Health Officials

American Planning Association (APA)

"The American Planning Association is a nonprofit public interest and research organization representing 39,000 practicing planners, officials, and citizens involved with urban and rural planning issues. Sixty-five percent of APA's members work for state and local government agencies. These members are involved, on a day-to-day basis, in formulating planning policies and preparing land use regulations. APA's objective is to encourage planning that will meet the needs of people and society more effectively.

APA resulted from a consolidation of the American Institute of Planners, founded in 1917, and the American Society of Planning Officials, established in 1934. The organization has 46 regional chapters and 19 divisions devoted to specialized planning interests. The American Institute of Certified Planners (AICP) is APA's professional institute, certifying planners who have met specific educational and work criteria and passed the certification exam."[34]

National Association of County & City Health Officials (NACCHO)

The National Association of County & City Health Officials (NACCHO) is the national organization representing the 3,000 local health departments in the United States. "NACCHO works to support efforts that protect and improve the health of all people and all communities by promoting national policy, developing resources and programs, seeking health equity, and supporting effective local public health practice and systems."[35]

"The history of NACCHO dates back to the 1960s, with the formation of the National Association of County Health Officials (NACHO), an independent affiliate of the National Association of Counties. As the federal, state, and local public health systems continued to expand, NACHO combined with the U.S. Conference of Local Health Officers, an organization affiliated with the United States Conference of Mayors, to form the National Association of County & City Health Officials in 1994. This unified organization more closely represents all local governmental health departments, including counties, cities, city/counties, districts, and townships. In 2001, NACCHO expanded its scope to include tribal public health agencies serving tribal communities on reservation lands. Today, active membership in NACCHO continues to grow, with about 1,300 local health departments."[36]

Partnership:

APA and NACCHO have entered into a partnership "to restore the bridge between land use planning and public health practice...The two organizations are exploring shared objectives, providing tools, and recommending options and strategies for integrating public health considerations into land use planning."[37]

The partnership aims to promote an interdisciplinary approach to creating and maintaining healthy communities. Long-term objectives include improving the performance of local planning and public health agencies by providing cross-training, tools, resources, and networks to foster improved collaboration. "An important part of that process is to help local public health agencies (LPHAs) and local planning agencies gain a better understanding of their respective authorities and functions and how they can provide input and guidance to one another for healthier land use planning."[38]

Place and Health:

History and Timeline

Recent recognition of the impact of planning and land use decisions on public health outcomes has led APA and NACCHO to rekindle the historical collaboration between the fields of public health and planning that diverged since its earliest partnership in the 19th century.

This recent partnership was inspired by a series of focus groups NACCHO conducted from 2002 to 2005 with local public health officials. Responding to growing awareness and concern about the relationship between public health concerns and the built environment, the aim of the focus groups was to better understand the role of health officials in land use planning decisions. The focus groups revealed that health officials "characterized their contribution to the planning decision-making process as valuable, but also said their role was more reactive rather than proactive and too localized. These factors limited their effectiveness in the process overall."[39]

To respond to the apparent communication and information gaps between health and planning, NACCHO and APA joined forces to provide a series of training sessions starting in December 2003. Unique trainings held at public health and planning conferences in Florida, Kentucky, Minnesota, Ohio, and Washington introduced health officials to a new framework for thinking about public health and the built environment and provided participants the opportunity to brainstorm approaches for interagency collaboration. Since then, APA and NACCHO have sponsored similar workshops in Arizona, Colorado, Illinois, Michigan, and Rhode Island at conferences related to planning, Smart Growth, and environmental health, and the trainings are ongoing.

On February 19–20 2004, APA and NACCHO hosted a symposium in Washington, DC, to explore the connection between land use and health disparities. "Attendees represented a variety of professions, with a mix of practitioners; academics; state, regional, and local health officials; transportation engineers; planners; county administrators; and national organizations."[40] Discussions centered on expanding the planning process to include health by addressing health inequities and the social determinants of health through planning, utilizing the tool of health impact assessment, and creating a community and policy agenda for integrating health in land use.[41] Clarifications and recommendations were made at the symposium to help advance the field.

"In April 2004, APA and NACCHO convened selected representatives from local public health and planning agencies to partner at a two-day workshop to identify and address the current and future areas for collaboration. The workshop helped participants build capacity in both the health and planning agencies to address the health needs of their communities through a land use planning approach. Jurisdictions that participated included the City of Amherst, Massachusetts; Bernalillo County, New Mexico; Blount County, Tennessee; Coconino County, Arizona; City of Detroit; City of Manitowoc, Wisconsin; Okaloosa County, Florida; Oneida County, New York; City of San Francisco; and Seattle/King County, Washington."[42]

"A national, web-based survey of APA members and NACCHO members was conducted in late summer 2004. APA and NACCHO collaborated with CDC project staff on the survey content and a survey research vendor, membersurvey.com, administered the survey. The purposes of the survey were (1) to assess current practices in planning/public health collaboration; (2) to explore barriers and opportunities for increased collaboration between planners and public health professionals; and (3) to identify communities that have successfully addressed public health issues in the context of visioning/goal-setting exercises, long-range comprehensive planning, and current land use planning (development review) and implementation (e.g., zoning [and] subdivision control)."[43]

Current Activities

NACCHO and APA have prepared several fact sheets for planners and public health professionals to become more familiar with the overlap between their fields. For example, one fact sheet is "a two-part list that defines terms, or jargon, commonly used in the respective fields. The fact sheet is intended to bridge the language barrier between the two professions, which is considerable, and can sometimes frustrate and limit a person's willingness to collaborate or expand [his or her] view. The fact sheet provides a basis for initial informal discussions between planners and public health officials that would occur before any formal or more institutionalized collaboration would get under way." [44] Another fact sheet, "Working with Elected Officials to Promote Healthy Land Use Planning and Community Design," is intended to assist health and planning agencies to broaden their partnerships to better create healthier communities. [45]

APA has completed a "Planning Advisory Service (PAS) report which will draw upon the substantive findings and outcomes of the tasks completed in the first and second year of the APA/NACCHO partnership. These include the portions of the proceedings of the February 2004 expert symposium, results of the national survey, workshop curricula, case studies, and papers and presentations delivered at conference sessions and via audio conferences. The audience for the report will be urban and regional planning practitioners, city and county public health officials, and the development community, whose actions and policies often affect public health both directly and indirectly. The emphasis of the report will be on the steps planning agencies and public health departments can take to begin or expand collaborative activities on issues related to health and the built environment."

NACCHO has also completed "Public Health and Planning 101: Creating Local Partnerships for Healthier Communities," a toolkit on CD-ROM intended for both local planners and local public health practitioners to become more familiar

with the other discipline and to help facilitate strategies for building and maintaining a long-lasting partnership at the local level to improve the communities in which we live. [46] This tool provides useful background information on the links between public health and planning, resources to help build partnerships, as well as examples of communities that have already begun to do so. Throughout the CD-ROM are links to tools and resources that NACCHO, APA, and others have produced on the various connections between public health and planning.

APA and NACCHO are also working together on a white paper about using health impact assessments (HIA) "to proactively address health disparities in land use planning and community design initiatives." Broadly, HIA is a practical assessment of policies, programs, and projects that may affect the public's health. It is a tool that allows officials and communities to assess, prevent, and mitigate potential health risks associated with proposed development projects or planning policies or zoning ordinances. APA and NACCHO regularly conduct HIA workshops at various levels to "(1) provide more in-depth training to local public health professionals and planners on HIA tools and methodology and (2) assist in customizing necessary strategies to implement HIA in their respective communities."

Visit Online:

American Planning Association
http://www.planning.org/

National Association of County & City Health Officials
http://www.naccho.org/

Healthy Communities through Collaboration
http://www.planning.org/research/
healthycommunities.htm/

2. Bay Area Regional Health Inequities Initiative

The Bay Area Regional Health Inequities Initiative (BARHII) is a regional collaborative among health departments across the San Francisco Bay Area to "transform public health practice for the purpose of eliminating health inequities using a broad spectrum of approaches that create healthy communities."[47]

The organization grew from a long history of consultation and collaboration between leaders of health departments in San Francisco, Alameda, and Contra Costa counties, but later broadened to include other health departments. It began as an organization officially in March 2002.[48] Today, BARHII includes "public health directors, health officers, senior managers, and staff from Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Solano counties, and the City of Berkeley."[49] BARHII is a partner organization of the National Association of County & City Health Officials (NACCHO), the Bay Area Planning Directors Association (BAPDA), and the Public Health Institute.[50]

Place and Health:

History and Timeline
Consideration of the effects of place on health came early in the history of BARHII. In the interest of addressing national priorities around obesity and the social and physical environments contributing to the epidemic, BARHII's initial grant applications focused on nutrition and physical activity in low-income communities of color.[51] In May 2003, for example, BARHII hosted a regional forum on Food, Health, and Justice, where 60 participants from Bay Area health departments shared information and ideas on improving food security and nutrition at the community level.

In the time since, BARHII has made continual efforts to move away from a categorical paradigm of public health strategies towards a more comprehensive approach to reducing health inequalities. In this spirit, BARHII has supported and spearheaded work to include and highlight the importance of land use, transportation, and community design in community health. It was acknowledged, for example, that while land use and transportation decisions have profound implications for nutrition and physical activity, they also have a huge influence on rates of asthma, some cancers, community violence, and other concerns of community residents. BARHII's Built Environment Work Group is the result of energies focused in this area. One of the four BARHII practice committees, the Built Environment Work Group, is comprised of participants from member health departments and focuses on information-sharing and strategizing to improve effectiveness in the area of the built environment and health.[52] The Built Environment Work Group has developed a draft framework that attempts to capture the risk factors associated with specific diseases and injuries, and their correlates in elements of the built environment.

In the summer of 2006, BARHII pulled together "a small delegation of public health directors and health officers from BARHII health departments [and] the steering committee of the Bay Area Planning Directors' Association (BAPDA), which represents the 100+ city and county planning directors in the nine-county San Francisco bay area region."[53] Though the original intent of the gathering was to begin a discussion simply about potential avenues for collaboration, the meeting revealed an overwhelming receptiveness among participants to collaborate on issues of health and place.

At BAPDA's invitation, on December 1, 2006, BARHII co-sponsored "a forum of 120 public health and planning officials . . . to discuss the ways in which planning and public health can join together after a century of separation."[54] The forum was described by Richard Jackson, MD, MPH—former Director of the National Center for Environmental Health, former California State Public Health Officer, and co-author (with Howard Frumkin and Lawrence Frank) of the seminal *Urban Sprawl and Public Health: Designing, Planning and Building for Healthy Communities*—as "the most important conversation between

public health officials and planners in perhaps 100 years." Since that December meeting, each health department has engaged in concerted follow-up activities with planning departments in their respective jurisdictions, including work to incorporate health elements into General Plans in Contra Costa, Marin, and Solano counties. Through BARHII's participation in the Regional Visioning process convened by the Association of Bay Area Governments (ABAG), a new goal—Public Health and Safety—has been added to the vision document.

Current Activities

BARHII continues its efforts on the built environment and health in its Built Environment Work Group, whose four main focus areas include:

- "Targeted meetings between senior public health officials and planning directors to develop relationships and strategies for incorporating public health considerations into land use decisions;

- "Participation in regional and local planning processes to elevate the importance of health inequities in their priorities;

- "Development of Health Impact Assessments to be used strategically in the planning process; and

- "Coordination and provisions of testimony and expert consultation to key regulatory and planning bodies that influence community environments"[55]

BARHII recognizes the limits of a singular focus on the built environment, since the social and cultural context in which people experience their physical environments must equally be considered, especially in light of increasingly multi-ethnic and immigrant populations living in low-income communities. BARHII's larger focus on Neighborhood Conditions as a more comprehensive term is an attempt to encompass both the physical and social environments.

Visit Online:

BARHII
http://www.barhii.org/

BARHII Built Environment Work Group
http://www.barhii.org/programs/built_environment.html/

3. U.S. Centers for Disease Control and Prevention

Founded in Atlanta in 1946 as the Communicable Disease Center, the U.S. Centers for Disease Control and Prevention (CDC) has grown from an organization of fewer than 400 employees responsible for combating malaria through mosquito extermination to a multibillion-dollar agency comprising one of the 13 major operating components of the U.S. Department of Health and Human Services.[56, 57]

A national leader in "public health efforts to prevent and control infectious and chronic diseases, injuries, workplace hazards, disabilities, and environmental health threats,"[58] the CDC's purview extends from traditional public health research and programs to "a system of health surveillance to monitor and prevent disease outbreaks (including bioterrorism), implement disease prevention strategies, and maintain national health statistics. The CDC also guards against international disease transmission, with personnel stationed in more than 25 foreign countries."[59]

Place and Health:

History and Timeline
During the mid to late 1990's, the CDC ran a research grant program known as the Active Community Environments Initiative, within the Division of Nutrition and Physical Activity. This program resulted in some of the early empirical studies and literature reviews of the relationship between urban form, transportation modes, and health. The CDC's attention to the impacts of the built environment on health broadened in 1999 with a series of discussions at the National Center for Environmental Health (NCEH) on the health consequences of community design. Initiated by Dr. Richard Jackson, then director of NCEH, the discussions originally focused on the

effects of Atlanta's congested superhighways and sprawling suburbs on local environmental health. It was not long before the discussions became interagency, interdisciplinary dialogues involving experts from agencies ranging from the National Aeronautics and Space Administration (NASA) and the Environmental Protection Agency (EPA) to the United States Geological Survey (USGS), among others.

In the years to follow, topics at these biweekly discussions would range from housing development and green space and community policing to heat islands and their respective relationships with health. The ideas and materials generated from these discussions would extend to papers, programs, and research and ultimately help to create a movement in health and planning extending beyond the reaches of the CDC.

One of the first publications to emerge from these talks came in 2001, when *Creating a Healthy Environment: The Impact of the Built Environment on Public Health* was published as a part of the Sprawl Watch Clearinghouse Monograph Series. It drew attention across the disciplines of health and planning to the health implications of land use decisions.[60]

In May 2002, the CDC invited experts to a one-day conference in Atlanta to generate a research agenda around public health and community design.[61] The findings from this conference were published in 2003, and research-based papers linking crime prevention with the built environment, land use choices with physical activity, and zoning with obesity were quick to follow.[62]

The ensuing years marked the publication of two landmark pieces on the built environment and health, both of which were born largely from contributions and the leadership of CDC officials. In September 2003, *The American Journal of Public Health* published a special issue on health and the built environment, featuring over 40 solicited

and unsolicited articles on health and built environment topics. In 2004, Dr. Jackson and Dr. Howard Frumkin of the CDC collaborated with planning expert Dr. Lawrence Frank in the writing of *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities*, a comprehensive compendium of the evidence linking adverse health outcomes with elements of urban design.[63]

The CDC continued presentations, discussions, and collaborations with other agencies and organizations in fields including and touching upon land use and health. Collaborative research publications on health impact assessment, transit-oriented development, walkability, and healthy communities would follow.

In 2005, the CDC's director adopted "Healthy People in Healthy Places" into its major agency goals, casting a significant spotlight on the built environment and health at the national level. The model prioritized "the places where people live, work, learn and play" to protect and promote health and safety and prioritized the ideas of healthy communities, healthy homes, healthy schools, and healthy workplaces.[64] Research following this new mandate would include a national study on transit and walking, focusing on the Surgeon General's recommendations for physical activity.[65] More recent publications in this vein include a December 2006 paper delineating the historic relationship between health and planning and the potential impact of integrating the two fields, furthering the impetus for discourse between the two professions.[66]

Along with ongoing research and program development, the agency's work in this area has also included collaborations with diverse agencies in health and planning. The CDC has worked with the American Planning Association (APA) on model zoning codes to promote walkable communities, supported APA and National Association of County & City Health Officials

(NACCHO) training workshops for health impact assessment (HIA), worked with the National Association of Local Boards of Health (NALBOH) to develop guides for land use planning for public health, and partnered with the National Environmental Health Association (NEHA) to develop case studies highlighting exceptional solutions that integrate environmental health considerations into land use planning and design.[67, 68, 69, 70]

Current Activities

Today, communications, scientific research, health marketing, and education remain at the heart of the CDC's contribution to the field of the built environment and health.

The CDC's "Healthy Places" website, first published in 2003, provides the American public an introduction to the built environment and health field, educational materials about the various relationships between community design and health, and links and referrals to agencies actively engaged in built environment and health activities.[71]

The CDC also supports research on place and health. It currently helps to fund 14 major National Institutes of Health studies on obesity and the built environment and, along with the EPA and a number of other organizations, is co-sponsoring the U.S. Green Building Council's efforts to develop a LEED-ND certification process to promote healthy, walkable community design.[72] The CDC is also funding a number of smaller health and built environment research projects.[73]

Through presentations at national, state, and local public health conferences, planning associations, and academic institutions, and before groups in environmental health, transportation, architecture, and landscape architecture, the CDC is actively working towards raising awareness about healthy community design. It collaborates with

organizations such as NACCHO and APA to offer trainings and materials to professionals in land use and health.[74] It is also engaged in work on health impact assessments—a method that can be used by local health officials to convey information to planners and other decision makers about the health impacts of proposed projects and policies.[75]

The CDC plans to add university-level instruction to its vast repertoire. Following in the footsteps of Dr. Jackson at the University of California, Berkeley, experts at the CDC are collaborating with professors at the Emory School of Public Health and the Georgia Tech College of Architecture to develop a course on health and the built environment. The course will target public health and planning students and will be offered in the

fall of 2007. The agency is also working with Dr. Nisha Botchwey at the University of Virginia to develop a model curriculum so that such a course could be taught to students at other schools of public health and schools of planning throughout the country.[76]

Visit Online:

Centers for Disease Control and Prevention
http://www.cdc.gov/

Designing and Building Healthy Places
http://www.cdc.gov/healthyplaces/

4. Kaiser Permanente

Under its mission "to provide quality care for our members and their families and to contribute to the well-being of our communities," Kaiser Permanente is the nation's largest integrated healthcare organization, comprised of Kaiser Foundation Health Plans (a nonprofit, public-benefit corporation), Kaiser Foundation Hospitals (a nonprofit, public-benefit corporation), and the Permanente Medical Groups (a for-profit professional organization).[77] Founded in 1945 and headquartered in Oakland, California, Kaiser Permanente serves "the healthcare needs of more than 8.3 million members in nine states and the District of Columbia."[78]

"Kaiser Permanente began in the early 1930s as an innovative, prepaid medical and hospital services plan for construction workers, established by surgeon Sidney Garfield, MD. In 1938, industrialist Henry J. Kaiser asked Dr. Garfield to create a similar program for workers and their families at the Grand Coulee Dam construction site in Washington State. Later, the program was expanded to include Kaiser Steel shipyard and steel mill workers in California. In 1945, Henry J. Kaiser opened the healthcare program to the wider community for enrollment."[79]

Place and Health:

History and Timeline
Kaiser Permanente's work in built environment issues rests in its organization-wide community health initiatives (CHI). Through the CHI framework, Kaiser Permanente (KP) aims to link "an evidence-based and prevention-oriented approach to medicine with community activism and proven public health interventions" via "a place-based focus, with a target geography no larger than a county and no smaller than a few blocks."[80] The motivation for this strategy was KP's mission to improve the health of the communities KP serves and KP's understanding that members could not be healthy if they lived and worked in communities that were unhealthy.[81] The CHI framework emerged in 2003–2004 from the shared vision of over 200 Kaiser Permanente physicians, staff, and community partners.[82]

"The common thematic focus for KP CHIs is 'Healthy Eating, Active Living' [HEAL] with the goal of reducing overweight and related disease (e.g., diabetes, cardiovascular disease) through population-level community changes."[83] HEAL attempts to address "the myriad health issues that can be a byproduct of poor nutrition and inactivity" through a socio-ecological, participatory approach emphasizing change at multiple levels, multisectoral collaboration, and a focus on racial and ethnic health disparities.[84] Efforts focusing on changes in the built environment to improve healthy eating and active living are a key component of the HEAL social-ecological framework.

Current Activities
Community Initiatives: Kaiser Permanente is investing in HEAL initiatives in communities across the country. For example, CHI is a multiyear, place-based initiative to transform neighborhoods, schools, workplaces, and healthcare settings in local communities. Grantee efforts are focused on long-term, sustainable policy and organizational practice changes within these sectors (1) to increase access to healthful foods and (2) to improve environments to encourage physical activity as a part of everyday life to help curb overweight and obesity. Some of the strategies related to the built environment include: incorporating a health element in local comprehensive plans, implementing Safe Routes to Schools programs, and supporting "rails to trails" conversion projects. In addition to CHI, KP provides grants to community-based organizations to support policy, environmental, and organizational practice changes with specific

target groups (e.g., a specific school or workplace). Kaiser Permanente also provides evaluation and technical support to foster shared learning and sustainability of efforts that can be replicated in other communities.[85]

Organizational Practice Change: Within its own organization, KP is increasing access to opportunities for physical activity and offering low-calorie, high-nutrient foods and beverages within its medical facilities by sponsoring farmers' markets held at hospitals and medical office buildings; significantly changing the contents of vending machines to ensure food and beverages that contribute to a healthful diet; and improving the nutritional quality in hospital and medical center cafeterias. Walking paths and "green miles" have been built on KP campuses to encourage staff and visitors to be more physically active.

Public Policy: KP has endorsed legislation related to HEAL, including the Portland Metro Natural Areas, Parks, and Streams Bond Measure that

was approved in November 2006 to direct $227.4 million to protect water quality, improve parks, preserve natural areas, and provide access to nature. KP also endorsed the California Healthy Food Access bill of 2006 to establish a grant program to support retail food markets that offer high-quality fruit and vegetables in underserved communities. Furthermore, KP educates physicians and other clinicians on the connections between health and the built environment so that they are prepared to participate in policy activities.

Visit Online:
Kaiser Permanente Community Health Initiatives
http://xnet.kp.org/communitybenefit/chi/index.html/

5. Local Government Commission

"The Local Government Commission (LGC) is a nonprofit, nonpartisan, membership organization that provides inspiration, technical assistance, and networking to local elected officials and other dedicated community leaders who are working to create healthy, walkable, and resource-efficient communities."[86] "The LGC's membership is composed of local elected officials, city and county staff, planners, architects, and community leaders who are committed to making their communities more livable, prosperous, and resource-efficient."[87]

Place and Health:

History and Timeline

The Local Government Commission was founded in 1982 by Executive Director Judith Corbett. In its 25-year history, the LGC has served as a resource for government officials by supporting and promoting strategies for healthy community design, environmental sustainability, waste prevention, transportation, energy, and economic development. The LGC staff also "provides customized technical assistance to communities through contract planning and design services" using its expertise in "planning, public participation, visioning, renewable energy resources, and development of livable communities."[88]

"In 1991, working with some of the country's leading architects and planners, the LGC developed the Ahwahnee Principles for resource-efficient local and regional land use planning."[89] From these principles emerged the LGC's Center for Livable Communities, which initially supported local officials implementing the Ahwahnee Principles. Recognizing that "economic vitality and livability are inextricably linked, the LGC followed up in 1997 by developing the Ahwahnee Principles for Economic Development."[90] In

2005, the LGC developed the Ahwahnee Water Principles for Resource Efficient Land Use to bridge the gap between land use and water resource decisions.

In 1998, the LGC began working with the California State Department of Health Services Physical Activity and Health Initiative, the first program in the nation to embark on the ambitious task of creating environmental and policy changes to enable and encourage inactive people to integrate physical activity into their daily lives. With the support of this initiative, and a subsequent effort—the Robert Wood Johnson Foundation's Leadership for Active Living program, the LGC has helped local elected officials, local health officials, and other community leaders identify policy options that address the critical connection between land use and health. The LGC's tools have included multiple guidebooks, fact sheets, conferences, toolkits, trainings, workshops, and community design charettes.

Current Activities

Today, the Local Government Commission continues to support local government and community leaders in achieving healthier land use and transportation planning for livable communities. Specifically, "the LGC assists local governments in developing and implementing policies and programs that help establish these key elements by facilitating conferences, regional workshops, and other partnering opportunities; producing guidebooks, fact sheets, videos, Power Point presentations, and several monthly newsletters that share policy and project ideas; providing an extensive resource library run by qualified staff; and providing an e-mail alert service that shares time-sensitive information."[91] The Local Government Commission's web page offers an extensive library of resources, most of which can be downloaded.

The Local Government Commission also assists communities in becoming more walkable, livable, and healthy through its continuing participation in the Active Living Leadership and Healthy Communities initiatives sponsored by the Robert Wood Johnson Foundation.[92] The LGC also partners with local public health departments, other local health-related organizations, and local elected officials to produce regional events in California that encourage the participation of public health in the land use process. As a result, health-related organizations are now beginning to participate in General Plan updates in counties and cities throughout the state.

The LGC's annual "New Partners for Smart Growth Conference" has been attracting an increasingly greater participation from the health community. For the past two years, as part of the conference, the LGC has worked with Kaiser Permanente to produce a daylong, very popular CME course for physicians on the link between land use and public health. This partnership will continue at the 2008 conference. Also in 2007, the LGC organized a day-long seminar to develop a working document, still in progress, regarding how public health and land use professionals might better coordinate their efforts.[93]

The Local Government Commission is a member of the Department of Health Services Healthy Transportation Network that, in partnership with bike and pedestrian advocates, assists communities in creating more bike-friendly, walkable communities. It is also continuing its in-house technical assistance to cities in low-income communities, offering design and planning charettes that engage community members in identifying land use problems and recommending changes. Current projects are located in the cities of Salinas, Laytonville, Kingsburg, Fowler, and Marysville.

Visit Online:

The Local Government Commission
http://www.lgc.org/

Center for Livable Communities
http://www.lgc.org/center/index.html/

6. Public Health Law & Policy

Founded in 1997 as the Public Health Law Program, Public Health Law & Policy (PHLP) transcends existing legal and policy frameworks to provide multidisciplinary solutions toward healthy, productive, and sustainable communities. It advances public health goals by providing analysis, training, and technical assistance on law and policy. It creates bridges between professional disciplines to innovate new public health strategies; partners with academic experts, community organizers, and practitioners; and offers effective and reliable legal, policy, and strategic technical assistance services and analysis in dynamic policy environments.

PHLP works with community-based organizations, local public agencies, including public health and planning departments, schools, elected officials, government attorneys, and private counsel, creating groundbreaking policy solutions to critical public health challenges. PHLP staff attorneys provide comprehensive training, technical assistance, and legal tools to advance public health policy.[94] Current PHLP projects focus on a broad range of topics—nutrition, tobacco control, school policies, communicable disease, access to care, land use, economic development, and litigation settlement and management."[95] PHLP is a project of the Public Health Institute.

Place and Health:

History and Timeline

PHLP's Land Use and Health program was initiated in 2003; it is one of the core technical assistance and resource centers within PHLP. The primary goals of this program are to train advocates in the relationship between the built environment and public health and to provide technical assistance for creating and implementing land use policies that support healthier communities.[96] Trainings have included workshops and presentations that allow planners,

public health advocates, elected and appointed officials, local government staff, business owners, and citizen activists to learn how the tools of land use and economic development can reduce health disparities and create more livable, sustainable communities.[97]

PHLP has also developed a number of toolkits, which "are designed to serve as learning and reference materials to guide and inform participation."[98] Two existing comprehensive toolkits are intended to be "living documents" that grow and change as communities adopt new policies and confront new issues.[99, 100] The *Economic Development and Redevelopment* toolkit offers a historical perspective on how and why food access and healthy eating are related to economic development and provides a comprehensive set of specific strategies and guidelines for improving food access in California. The *General Plans and Zoning* toolkit offers in-depth information on land use decision making, zoning, government and planning agency structure, and how public health advocates can impact land use decisions that affect health.

Current Activities

PHLP continues to engage in training, technical assistance, and the development of tools for advocates in the area of health and place. Training session topics include elements of land use, introduction to economic development tools, developing grocery stores and other healthy food retail in underserved areas, land use and public health for planners, using land use strategies to create healthy communities, navigating the politics of land use and economic development planning, and participatory data collection.[101]

Visit Online:

Public Health Law & Policy
http://www.phlaw.org/

Land Use and Health Program
http://www.healthyplanning.org/

7. Robert Wood Johnson Foundation

The nation's largest philanthropic organization devoted to improving health and health care, the Robert Wood Johnson Foundation (RWJF) supports training, education, research, and programs that demonstrate effective ways to deliver health services, particularly to the most vulnerable groups in the United States.[102]

"RWJF prioritizes its program work into four goal areas: to assure that all Americans have access to quality health care at reasonable cost; to improve the quality of care and support for people with chronic health conditions; to promote healthy communities and lifestyles; and to reduce the personal, social and economic harm caused by substance abuse—tobacco, alcohol, and illicit drugs."[103]

Place and Health:

History and Timeline
The Robert Wood Johnson Foundation has a rich history of support and leadership in the area of place and health, funding an extensive number of research initiatives, programs, and conferences among leaders in the fields of health and the built environment. By no means comprehensive, the following history highlights RWJF's role in some of the breakthrough and landmark activities in the arena of the built environment and health and offers a sense of the vast range of initiatives supported by the foundation.

The Robert Wood Johnson Foundation's entrance into the world of the built environment and health occurred with an initiative to explore the feasibility for a national program to address health through community design. In 2000, RWJF commissioned a white paper, "Active Living through Community Design," to "identify and document successful program models that incorporate activity-friendly community design as a means for improving health outcomes."[104] The white paper was used as a discussion point later that year, when RWJF hosted a two-day meeting of 26 experts representing professional institutes, government agencies, NGOs, and other entities. One of the first interdisciplinary meetings of its kind, experts convened to share information on organizational initiatives, discuss barriers and ideas to improve physical activity through community design, and recommend strategies for collaboration, infrastructure change, and next steps. Smart Growth, healthy communities, sustainable development, livable communities, and New Urbanism were among the recommended healthy approaches to community design and were captured in the "Healthy Places, Healthy People" report published soon after.

The findings from these initial steps and RWJF's specific interests in the areas of public health, childhood obesity, health disparities, and vulnerable populations led RWJF to create a suite of "active living" programs to "address the problems of physical inactivity in the United States and the resulting health outcomes."[105] Active Living by Design (ALbD), launched on September 30, 2002, and headquartered at the University of North Carolina at Chapel Hill, was one of the first programs introduced, following earlier programs such as Active Living Research. A multiyear, $16.5-million initiative to "establish innovative approaches to increase physical activity through community design, public policies, and communications strategies that can become models for success nationwide,"[106] ALbD aimed to "award grants of up to $200,000 over five years to qualifying community-oriented partnerships to . . . increase opportunities for and remove barriers to routine physical activity, especially among low-income Americans." [107] Other Active Living programs would follow.

Shortly after the launch of ALbD, on November 17–18, 2002, RWJF co-sponsored the National Summit on Equitable Development, Social Justice, and Smart Growth. Led by PolicyLink and

co-sponsored by the Funders' Network for Smart Growth and Livable Communities with support from other foundations, the summit focused on promoting regional equity and featured a panel discussion among experts and local practitioners of how regional equity impacts access to physical activity. RWJF also commissioned PolicyLink to create a report, *Regional Development and Physical Activity: Issues and Strategies for Promoting Health Equity*, which highlighted the relationship between health issues and social equity and how the built environment and community design are overlaid with these issues. This report and conference marked the introduction of equity issues into the discussion on the built environment and health.

The Robert Wood Johnson Foundation supported a number of important initiatives on the built environment and health in 2003. In February of that year, with grant funding from the foundation, the Seaside Institute hosted "Architecture and the Nation's Health: Design Matters" in Seaside, Florida. The conference, attended by more than 30 educators, practitioners, and staff in the field of architecture, aimed to increase awareness of the relationship between architecture and health; it resulted in discussions and recommendations for changes in architectural practice.[108]

In August 2003, the first study to link directly obesity with the built environment was published in *The American Journal of Health Promotion (AJHP)*. The foundation sponsored the study, as well as the joint release of two journals (*AJHP* and *The American Journal of Public Health*) devoted exclusively to issues of community design and health, which followed the next month.[109] Another pioneering study it sponsored—this one examining the urban school environment on youth safety—was published in late 2003.

With assistance from RWJF, key research and reports connecting the built environment and health proliferated. Reports characterizing healthy designs for buildings and healthy designs for

communities were published in 2004 and 2005. Research into transit-oriented development, walkability, lessons that the built environment and health movement could draw from public health efforts against tobacco, and measures of the built environment for health also emerged through the sponsorship of RWJF at this time.

In September 2006, two major publications supported by RWJF came to the fore. A large study on sprawl, produced by SmartGrowth America, the Centers for Disease Control, Rutgers, and the Surface Transportation Policy Project, revealed that "urban form could be significantly associated with some forms of physical activity and some health outcomes," including obesity, body mass index, and hypertension.[110] At RWJF's solicitation, the Urban Land Institute published a book outlining the benefits of "walkable communities," "places where people of all ages and abilities have access to an infrastructure supporting physical activity, including sidewalks, on-street bicycle facilities, multi-use paths and trails, parks and open space, and recreational facilities."[111]

Current Activities

RWJF continues to support its Active Living programs to encourage research, leadership, and program strategies to address the connections between health and the built environment in a comprehensive and holistic manner. The Active Living suite is comprised of the following programs:

- **Active Living by Design**, which promotes partnerships across the United States to influence healthier lifestyles through community design

- **Active Living Leadership**, designed to support government leaders in improving the health, well-being, and vitality of communities through increased active living.[112]

- **Active Living Network**, a means for promoting active, healthy environments

through the creation of a national coalition of professionals, advocates of health and physical activity, and anyone interested in promoting safe, active, and healthy people and places.[113]

- **Active Living Research**, the research arm of the Active Living suite, responsible for investigating and identifying policies and environments to support active communities.[114]

- **Active Living Resource Center**, which serves as the technical assistance clearinghouse for communities, assisting residents in creating more walkable and bike- friendly communities.[115]

- **Active Living Blueprint**, a coalition of organizations that "develops strategies to increase physical activity among adults ages 50 and older."[116]

- **Active Living for Life**, a program that "seeks to increase the number of American adults ages 50 and older who engage in regular physical activity" through the creation of specific physical education programs.[117]

On April 4, 2007, the Robert Wood Johnson Foundation committed $500 million toward reversing the childhood obesity epidemic.[118] The funding will build on RWJF's work in improving health from a built environment perspective, focusing on "improving access to affordable healthy foods and opportunities for safe physical activity in schools and communities."[119] Special attention will be given to children in low-income communities. The funding will also go towards the foundation's past investments in research on changing school and community environments to improve physical activity and nutrition in children.

RWJF is also a founding member of the Healthy Eating, Active Living (HEAL) Convergence Project.

Visit Online:

The Robert Wood Johnson Foundation
http://www.rwjf.org/

Active Living Programs
http://activeliving.org/partners/programs/

Active Living by Design Programs
http://activelivingbydesign.org/

The Healthy Eating/Active Living Convergence Project
http://www.hphp.us/convergence/

8. The California Endowment

"The California Endowment is a private, statewide health foundation that was created in 1996 as a result of Blue Cross of California's creation of its for-profit subsidiary, WellPoint Health Networks."[120]

Under its mission "to expand access to affordable, quality health care for underserved individuals and communities and to promote fundamental improvements in the health status of all Californians," the Endowment focuses its efforts on community health and the social and physical environments that shape health behaviors and outcomes.[121] By funding proposals that seek to "change the social and physical environments that contribute to unhealthy behaviors," The California Endowment (TCE) targets policy and systems change to support health-promoting environments and reduce health disparities.[122]

Place and Health:

History and Timeline

The California Endowment's work in the field of community health and the built environment grew from the combination of its experience in addressing the social determinants of health, its attention to building communities, and its past successes in creating coalitions, addressing policies, and increasing community capacity to fight and prevent asthma.

"In February 2001, The California Endowment initiated a series of programs focused on improving the quality of life for school-aged children with asthma. One initiative, begun in 2002, is Community Action to Fight Asthma (CAFA),"[123] a network of California asthma coalitions that "bring together diverse constituents, including healthcare providers, schools, public health organizations, environmental health and justice groups, and community residents to collectively address the problem of asthma in their communities."[124] With aims "to reduce environmental triggers of asthma among school-aged children where they live, learn, and play through policy change at the local, regional, and state level,"[125] CAFA achieved a number of wins in its first three years of operation, allowing it to continue its work into 2008. CAFA's many achievements included shifting the focus of asthma from clinical care and self-management to environmental triggers, raising public and policy-maker awareness about environmental causes of asthma, identifying, developing, and implementing new and creative programs and policies to reduce environmental triggers for asthma, and increasing leadership and local coalition capacity and confidence to effect policy change.[126]

The success of CAFA allowed TCE to become more deeply involved in how communities address another severe national public health issue: overweight and obesity. Today, the Healthy Eating, Active Communities (HEAC) program is The California Endowment's major initiative addressing issues of place and health. HEAC is a four-year, $26-million initiative aimed at "improving the food and physical activity environments for school-aged children and [creating] momentum for widespread changes in the policies and practices that contribute to the rising rates of childhood obesity" and diabetes.[127]

HEAC grew out of the Endowment's initial interests in obesity research and prevention. In the early 2000s, the Endowment commissioned a number of reports on obesity, investigating causes and potential solutions for a growing national epidemic. Reports by a range of organizations, including the Berkeley Media Studies Group and the Partnership for the Public's Health, offered approaches for reducing obesity by promoting healthy eating and physical activity in schools, through health departments, and via advocacy and policy.[128, 129, 130, 131] In 2003, through the support of The California Endowment, the Prevention Institute published an executive summary of environmental approaches to promoting healthy

eating and physical activity, pointing also to neighborhood design approaches for promoting walkability and bike-ability.[132]

Together, these reports and growing evidence for the impacts of place on health led the Endowment Board to approve the $26.2-million HEAC initiative in mid-2004. HEAC would integrate multiple approaches for addressing obesity through a "community demonstration component that provides grants to highly motivated schools, community organizations, and local public health departments in six communities across the state."[133] Designed to "leverage prior TCE grant making and experience in access to care, cultural competency, and health disparities," the community demonstration component aimed to improve environments for healthy eating and physical activity.[134]

In November 2004, six coalitions across the state were selected to participate in the HEAC initiative: Oakland's San Antonio Neighbors for Active Living, the 57th Assembly District Grassroots Nutrition and Physical Activity Team of Baldwin Park (Los Angeles), The Childhood Obesity Brain Trust of Los Angeles, Orange County's Latino Health Access, the South Bay Partnership of San Diego, and the South Shasta Healthy Eating Active Communities Collaborative.

HEAC was officially launched in March 2005.

Current Activities
The California Endowment's four-year HEAC initiative reached its midpoint in March 2007. Six collaboratives located in predominantly low-income, urban and rural communities in California continue to participate in this initiative to prevent childhood obesity.[135] Technical assistance from the Partnership for the Public's Health includes the work of agencies also involved in the area of place and health, including PolicyLink and the Land Use and Health Program. Kaiser Permanente is also a contributing member.

The California Endowment's support of land use and health activities, however, extends well beyond the CAFA and HEAC programs. For instance, TCE recently provided $2.6 million to the Central California Regional Obesity Prevention Program (CCROPP). Similar to HEAC, CCROPP aims to create healthier communities by preventing and addressing obesity through place-based, policy-oriented, community-driven processes.[136] CCROPP involves six counties in the San Joaquin Valley.

The California Endowment has also provided a mini-grant to 11 public health departments interested in addressing the environmental causes of obesity in their communities. The public health departments will use the funding to focus on understanding and tackling built environment influences on obesity.[137]

The California Endowment also focuses on a number of efforts through its regional offices.

In the past year alone, the Bay Area regional office has funded numerous projects related to land use and health, including a major initiative in Richmond to include health in the city's General Plan.[138] The $255,000 grant is administered by PolicyLink and led by MIG, Inc., the land use planning firm for the City of Richmond's General Plan Update, in consultation with Contra Costa Health Services.[139] "The grant will fund a health impact assessment of existing land use policies, proposed new goals and policies related to public health, and community outreach."[140] The Endowment is also funding the Healthy Richmond project by Urban Habitat, which will address the health needs of low-income communities in the City of Richmond "by building the capacity of community leaders and decision makers to advance health-promoting land use policies."[141]

Land use and health work supported by The California Endowment's Bay Area regional office also includes efforts to promote physical activity

through improved transportation options. With TCE support, Urban Ecology is working on the development of the East Bay Greenway, a multi-use pathway from East Oakland to Hayward in Alameda County. The Endowment also funds Transportation and Land Use Coalition's work on "engaging residents, community-based organizations, and other stakeholders in a comprehensive approach to building healthy communities that promotes physical activity, safety, and access to services through the development of tools and a collaborative infrastructure for land use planning throughout the Bay Area."[142]

Among others—not all are listed here—are the Endowment's community health programs in the greater San Diego region, community land use planning programs in the greater Los Angeles region, and participation in statewide efforts such as the Public Health Institute's Land Use and Health Program, the Trust for Public Land's Healthy Parks and Healthy Communities program, and the Funders' Network for Smart Growth and Livable Communities' "Building a Healthy People

and Healthy Places Learning Network" project.[143] TCE is also involved in the Healthy Eating, Active Living (HEAL) Convergence Project.

For a comprehensive listing of its contributions to the field of the built environment and public health, please contact The California Endowment directly.

Visit Online:

The California Endowment
http://www.calendow.org/

Community Action to Fight Asthma
http://www.calasthma.org/

Healthy Eating, Active Communities
http://healthyeatingactivecommunities.org/

The Healthy Eating/Active Living Convergence Project
http://www.hphp.us/convergence/

Appendix D: List of Interviewees

Marice Ashe, JD, MPH
Director
The Public Health Law Program

Rajiv Bhatia, MD, MPH
Director, Occupational and Environmental Health
San Francisco Department of Public Health

Robert D. Bullard, PhD
Professor of Sociology and Director of
Environmental Justice Resource Center
Clark Atlanta University

Ray Colmenar
Senior Program Officer
Greater Bay Area Regional Office
The California Endowment

Maribel de la Torre
Council Member
San Fernando City Council

Lucy Dunn
President and CEO
Orange County Business Council

George Flores, MD
Senior Program Officer, Disparities in Health
Greater Bay Area Regional Office
The California Endowment

Howard Frumkin, MD, PhD
Director of the National Center for Environmental
Health/Agency for Toxic Substances
  and Disease Registry
U.S. Centers for Disease Control and Prevention

Robert Garcia, JD
Executive Director and Counsel
The City Project

Eloisa Gonzalez, MD, MPH
Program Director, Physical Activity Program
Los Angeles Department of Public Health

Jonathan Heller
Director
Human Impact Partners

Dior Hildebrand
Community Liaison
Los Angeles County Department of Health

John Hildebrand
Department of City Planning
City of Ontario

Anthony Iton, MD, JD, MPH
Director and Health Officer
Alameda County Public Health Department

Richard Jackson, MD, MPH
Adjunct Professor, School of Public Health
University of California, Berkeley

Richard Killingsworth, MPH
Program Director, Health Promotion, Ruth Mott
Foundation
Former Director, Active Living by Design,
University of North Carolina, Chapel Hill

Katherine Kraft, PhD
Active Living Research, San Diego State University
Former Staff, Robert Wood Johnson Foundation

Nancy Krieger, PhD
Professor, Department of Society, Human
Development, and Health
Harvard School of Public Health

Marya Morris
Senior Associate, Duncan Associates
Former Staff, American Planning Association

Robert Prentice, PhD
Senior Associate, Public Health Practice and Policy
Partnership for the Public's Health

James F. Sallis, PhD
Professor, Department of Psychology, Active Living
Research
San Diego State University

Steve Sanders
Director, Land Use and Housing Program
Institute for Local Government

Julie Snyder
Policy Director
Housing California

Marion Standish
Director, Disparities in Health
Greater Bay Area Regional Office
The California Endowment

Diane Takvorian
Founder and Executive Director
Environmental Health Coalition

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[27]The website for the overall General Plan project, of which the Health Policy Element is a component, is http://www.cityofrichmondgeneralplan.org/. The process is being managed by the planning firm MIG, Inc., with a number of partners, subcontractors, and technical advisors. PolicyLink is a grantee of The California Endowment to coordinate nonprofit support for the Health Policy Element. An alliance of community-based organizations known as the Richmond Equitable Development Initiative, coordinated by Urban Habitat, is organizing residents for engagement in the General Plan update and other policy-making activities.

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[30]In addition to the groups described in this section, our respondents generated a list of other relevant sectors and California institutions to include in this discussion, noted in a later section.

[31]While 12.6 percent may not seem to be a significant percentage at first glance, this number is very close to the percentage of African Americans in the nation as a whole and markedly higher than the regional average. As of 2005, Los Angeles County was 8.9 percent African American, Riverside County was 5.7 percent African American, and San Bernardino County was 9.1 percent African American.

[32]This description is based in large part on a suggestion offered by Judith Corbett of the Local Government Commission in the weeks after the convening.

[33]The Transportation and Land Use Coalition (TALC), with more than 90 member groups in the San Francisco Bay Area, was represented at the April 9 convening and has been active on issues of the intersection of health and transportation, including transit access to healthcare services, the design of transit-oriented infill development, and the prioritization of transportation funds for "Safe Routes to School," bicycle lanes, and other dimensions of active living.

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