



Health Resources in Action
Advancing Public Health and Medical Research



POLICY AND PRACTICE REPORT



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– Maggie Super Church
*Consultant to the
Conservation Law Foundation*

THE BUSINESS CASE FOR HEALTHY DEVELOPMENT AND HEALTH IMPACT ASSESSMENTS

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Executive Summary

It is increasingly recognized that the places where we live, work, learn, play, and pray impact the health of communities. However, does designing for health also make business sense? Recent research has demonstrated that the answer is yes: there is a strong economic case for both non-profit and private developers to explicitly consider health in development initiatives. Healthy development can

- 1) reduce health care costs;
- 2) enhance the marketability and value of developments; and,
- 3) build stakeholder and decision-maker buy-in and support for projects.

This white paper highlights research and case studies illustrating the links between healthy development in the private and nonprofit sectors and how such development can maximize economic returns. In addition, Health Impact Assessment (HIA) will be presented as one effective tool to intentionally incorporate the health lens into development and planning proposals.

Preface

Former San Francisco Mayor Gavin Newsom once stated, “The most livable cities are those guided by planning processes that integrate planning across city departments and throughout the city ... we can never lose sight of the whole when we are planning the parts” (1). This approach to development will explicitly integrate health considerations as part of the planning process. Recent research demonstrates that wellness as a development objective not only impacts personal and community health, but economic prosperity as well. This paper builds the business case for considering health and wellness in the design and execution of non-profit and private physical development projects and promotes the use of health impact assessments (HIA) as an opportunity to intentionally integrate the community development and public health sectors for maximal results.

Re-engineering Health into Community Design

“We now know that developers can be more effective in achieving public health than the doctors in white coats.”

*Richard J. Jackson, MD, MPH, FAAP
in “Ten Principles for Building Healthy Places”
Urban Land Institute*

When it comes to health, our ZIP code may be more important than our genetic code (2). The physical design of communities – including building architecture, neighborhood walkability, and community zoning – influences human behavior and opportunities to pursue healthy lifestyles. It is estimated that behavioral patterns, together with social circumstances and environmental exposures, contribute to 60% of all premature deaths in the United States, with genetics and medical care accounting for only 30% and 10%, respectively (3). Thus, even slight changes to the built environment of a community can significantly impact physical and mental health because it shapes the choices people make in their day-to-day lives. This is especially pronounced in lower income communities, whose residents are much more likely to suffer from poorer health and lower life expectancy (4). Robert Wood Johnson Foundation’s *Commission to Build a Healthier America* reported that, across numerous cities in the U.S., babies born within a few miles of each other have dramatic differences in life expectancy due in part to less healthy environments (2).

Two fields, shared roots

Public health practitioners and urban planners dating back to the mid-19th century understood the connection between health and the physical environment. Both fields evolved in response to the chaos of newly industrialized cities and the rapid rural-to-urban migration that led to overcrowding, poor construction, and hazardous environmental exposures (5–8). Together, professionals from many disciplines sought to address poor living and working conditions because of their connection to infectious disease outbreaks (e.g. tuberculosis and cholera) and

hazards such as fires that crossed all sectors of society (5,7,9). The development and adoption of building and sanitary codes, as well as early zoning laws that aimed to separate housing from the nuisances of industry, were nascent examples of planning efforts that aimed to prevent disease and injury and promote health. At this time, early public health practitioners, urban planners, and developers worked toward similar aims.

Divergence of development and public health

Yet, by the early 20th century, the fields of development and health diverged (8). The health sector primarily focused upon medical care and changing personal health behaviors to prevent disease, while private and community development focused upon shaping the physical and economic environments of communities. Through this field divergence, it has become increasingly recognized that the two fields are inextricably linked.

As time progressed, scientific knowledge brought about prevention and cures, such as immunizations and antibiotics, for common fatal diseases. These innovations dramatically increased the U.S. life expectancy and survival rates by addressing the then leading cause of death: infectious disease. As infectious disease mortality declined throughout the 20th century, chronic disease became the leading cause of preventable disability and death in the nation (10,11). Chronic diseases include heart disease, stroke, diabetes, obesity, and asthma, and as of 2012, almost half of all adults have one or more chronic health conditions (11). In 2010, one third of all adults and one in five youth were identified as obese, and health care costs associated with obesity alone were estimated to be \$190.2 billion, or 21% of the U.S.'s annual medical spending (12).

As health care grappled with rising costs and increasing chronic disease rates, zoning laws and land use trends in the 20th century led to the proliferation of large lot and single-use commercial developments and communities designed with increased accommodation of cars at the expense of other travel modes. Such regulations made it difficult to develop vibrant, mixed-use neighborhoods that promote active living (7). Additionally, policies that shaped processes within the built environment,

including urban renewal and redlining, led to residential segregation that allowed flourishing in some communities and disinvestment in others. While research has emerged in the past decades linking these trends to chronic disease outcomes, development and health remained in silos until recent years.

Reunifying development and health

The places where people live, work, learn, pray, and play impact health; increasing national attention to these connections provides opportunities for collaboration between community development practitioners, architects, urban planners, and the public health sector. For example, considering the influence that building massing, orientation, amenities, and materials selection can have on the design of urban microclimates (e.g. solar access and reflectivity, wind speeds, and urban heat island effects) can influence the pedestrian experience of the city (13). Also, maintaining bike lanes, preserving beautiful open spaces, and promoting active building design (e.g. making stairs attractive and accessible) can increase physical activity and reduce air pollution. Improving pedestrian infrastructure in areas where older adults shop and run errands prevents falls, the leading cause of unintentional fatal and nonfatal injuries in older adults (14). Using building materials and designs that promote favorable indoor air quality and that prevent pest and moisture intrusions can help those with asthma.

Yet, in a 2011 survey by the American Planning Association, only 30.7% of respondents said their jurisdiction's comprehensive plan explicitly addressed public health issues such as recreation and public safety; furthermore, less than 10% of respondents reported that their plans explicitly addressed issues such as obesity prevention, social capital, or injury prevention (15). Another survey found that public health officials, in comparison to most other municipal officials, more often cited a lack of staff time and collaboration as barriers to addressing community design in their work (16).

Decreasing chronic disease rates, addressing health disparities, and promoting health equity can be propelled by an increased and intentional collective focus of health professionals and developers to re-engineer health back into community design.

Developers Investing in Communities

The physical design of communities, and particularly land-use development, is influenced by a wide spectrum of players, including non-profit community development corporations and private for-profit developers. While motivated by different aims, all parties have the opportunity and unique strengths to promote the health and productivity of communities through development efforts.

Community development corporations

Community development corporations (CDC) are not-for-profit organizations whose mission is to support the social, economic, and physical development of the communities they serve in order to expand opportunities for their residents and enhance their quality of life. CDCs accomplish this by engaging local residents, businesses, and leaders to work together to undertake programs and activities that help promote sustainable community growth, particularly for low-and-moderate income people. Primary activities of CDCs include

- physical development (e.g. commercial real estate and affordable housing development, transit-oriented development, and open space preservation);
- economic development (e.g. small business development and job creation);
- asset development (e.g. building individual skills that increase the independence, stability of housing, employability, and financial abilities of individuals and families); and
- community organizing, building, and empowerment (e.g. leadership and youth development and community events and meetings). (17)

In a Local Initiatives Support Corporation (LISC) report on *Joint Ventures with For-Profit Developers*, CDCs often bring the following skills and experience to development projects:

- the deal concept and predevelopment work;

- knowledge of the community and community support;
- knowledge about what the market needs are for housing, commercial space, retail services, and community spaces;
- political support, where CDC's contacts with local officials can increase buy-in for projects; and
- attractive public and private funding sources. (18)

Private developers

Private developers include, but are not limited to, commercial and retail developers, planning and site development firms, homebuilders, and architects. These developers engage in many of the same activities of CDCs, including real estate and commercial development and architectural design. While private developers are not necessarily mission-driven or focused on vulnerable communities, a growing segment recognizes the importance and profitability of sustainable and healthy development.

In the aforementioned LISC report, private developers bring the following skills, experience, and relationships to development projects:

- specialized technical experience and expertise;
- staff size to dedicate to a project;
- financial strength, having access to funds (including company funds), and established relationships with financial institutions; and
- access to conventional funding, having a relationship with banks or mortgage companies based on the for-profit's "character," or track record in completing projects successfully. (18)

Business Case for Healthy Community Design

“People should be compelled to think about health in community design, not just because it is the right thing to do, but because we are wasting so much money as a society on health care costs that could be avoided or reduced through investments in the built environment that promote better health.”

*Interview with Maggie Super Church
Consultant to the Conservation Law Foundation (19)*

Healthy community design benefits the health of communities and the individuals within them; furthermore, it is increasingly demonstrated that there is a strong business case for both non-profit and private developers to explicitly consider health in development initiatives. Healthy development can 1) reduce health care costs, thus reducing employer personnel expenses and increasing worker productivity, 2) enhance the economic value of developments, and 3) build community and decision-maker buy-in and support for projects.

Designing for health reduces health care costs

In 2010, the United States spent \$2.6 trillion on health care, accounting for nearly 18% of the national gross domestic product (GDP) (20). Approximately 75% of health care costs are related to preventable conditions, many of which can be mitigated through the design of healthy buildings and communities (21). As such, developers are key constituents to change our unsustainable health care trajectory. For example, asthma, which can be prevented through improved indoor and ambient air quality, causes nearly 40,000 people to miss work and school daily due to uncontrolled symptoms. This figure is even higher when it includes workers who stay home to care for children too sick with asthma to go to school (22). Childhood asthma alone results in \$3.2 billion in treatment costs, much

of which can be prevented through the design of healthy buildings and homes (23).

Opportunities for new investors and partners through health care cost reduction

The benefits of health care cost reduction may seem far removed from the economic bottom line of developers. However, with the Affordable Care Act’s (ACA) focus upon the “triple aim” of improving the experience of care, improving the health of populations, and reducing per capita costs of health care, new opportunities are arising for diverse sectors to get into the health improvement arena (24). Non-profit and private developers are primed to be strategic partners with hospitals and the health care sector, particularly if they can demonstrate that their activities can improve health and reduce costs for direct medical care.

Quantifying how health-promoting community and building design can reduce health care costs may attract unconventional partners such as public and private payers (insurers), providers, and purchasers of health care (e.g. businesses and municipalities) who are looking to invest in creative solutions to reduce costs. For example, Accountable Care Organizations (ACOs), created in an effort to achieve costs savings, benefit financially if the health of their designated population improves. Thus, if developers can demonstrate health care cost savings through their initiatives, they could propose sharing in the ACO’s profit or could perhaps get favorable financing terms for the projects. (25)

Also, with the ACA expanding Medicaid and health insurance coverage to millions of previously uninsured Americans, the nation’s 2,900 non-profit hospitals have the opportunity to diversify community benefit resources from subsidizing direct care to other community health improvement activities, including community building activities (26,27). Community building activities, as identified by the Internal Revenue Service (IRS) include, but are not limited to

- physical improvements and housing
- economic development
- community support

- environmental improvements
- leadership development and training for community members
- coalition building
- community health improvement advocacy
- workforce development. (28)

Many, if not all of these community-building activities can be advanced through initiatives of private and non-profit developers; thus, by making explicit links between development and health, new opportunities for investment in development endeavors may arise.

Strengthening communities through health care cost reduction

Health care cost reduction can contribute to community and economic strength and stability. Businesses often cite high health care costs as a reason for relocation (29). Health care costs are the most expensive benefit provided by employers, comprising 8.5% of the total employer costs for each worker (30). Also, the indirect costs to employers resulting from poor employee health (e.g. lower productivity, higher rates of disability and injury, and more workers' compensation claims), can be two to three times the costs of direct medical expenses (31). Employer and business turnover, in turn, could lead to real estate turnover both for commercial and residential properties, community disinvestment, and the devaluing of property value overall. Conversely, a healthier population paying less for health care contributes to the building of a productive workforce with more purchasing power, bolstering investments in real estate and business development and stimulating the economy overall.

Development that demonstrates health care cost reduction

Studies that quantify the impact of development on health care spending are underway and are essential to continue.

For example, designing community infrastructure that promotes active transportation is a viable strategy for substantial health care cost reduction. One San Francisco study found that increasing

median daily walking and bicycling from 4 to 22 minutes reduced the burden of cardiovascular disease and diabetes by 14% and reduced greenhouse gas emissions by 33.5% (32). Another study showed that a mere 5% reduction in the prevalence of diabetes and hypertension would save almost \$25 billion annually in medium-term health care costs (4).

In addition, affordable housing and rental assistance programs (e.g. vouchers), combined with supportive housing services can dramatically improve health outcomes and achieve savings in health care, corrections, and emergency shelter systems (33,34). This is especially true for vulnerable populations such as the homeless and elderly. For example, San Francisco's Department of Public Health, in partnership with Mercy Housing, a nonprofit affordable housing developer, opened Mission Creek Apartments. Residents consisted of seniors who were previously homeless, low-income seniors, and seniors with HIV/AIDS. With one dedicated case manager and an on-site adult day health center, Mission Creek is estimated to save the city nearly \$1.5 million in health care costs per year, or a reduction of \$29,000 per person. The multi-sector collaboration between health and development led to an innovative solution that promoted the health of the population of vulnerable seniors and resulted in significant cost savings to payers and the city at large. (23,35)

The development of healthy housing can also lead to cost-savings as well. For example, in Seattle, the Seattle Housing Authority (SHA) redeveloped High Point, a deteriorating public housing site with moisture, mold, and pest problems. This HOPE VI redevelopment was constructed to healthy, green building standards; additionally, in collaboration with King County Health Department and University of Washington's Department of Environmental and Occupational Health Sciences School of Public Health, SHA designed sixty units to be "Breathe Easy Homes" (BEH) that incorporated features to lower risk factors associated with respiratory ailments and reduce asthma triggers. BEH were found to have significant positive health impacts; children in BEH had 63% more symptom-free days than in their previous homes, showed dramatic improvements in lung function, and experienced an impressive 66% reduction in the need for urgent medical care.

Furthermore, the costs of BEH upgrades, ranging from \$5,000-\$7,000, were equivalent to a one-night hospital stay or approximately equivalent to a family's medical expenses. The potential asthma care cost savings, in addition to the economic implications of missed work and school days, indicate that the costs of incorporating asthma-friendly features into building design could be recouped quickly. (36,37)

Designing for health has direct economic returns

Beyond reducing health care costs, community design that promotes health can yield direct economic returns to developers, while also creating vibrant communities that enhance the health of residents. Despite conventional wisdom, benefits to profit and people do not need to be at cross-purposes.

Walkable, mixed-use communities

Walkable communities are a mechanism to increase a location's triple bottom line of profit, people, and environment (38). As previously mentioned, community walkability impacts health by reducing rates of obesity and related chronic diseases, such as asthma. Less known, however, is that walkable communities improve the economic value of a location, even amidst tough economic times. Investments in walkable communities typically increase land value by 70% to 300% and retail sales by 30% (13).

Research revealed that, with the economic downturn, the places that best maintained their value were walkable, mixed-use, transit-rich communities (38). The National Association of Realtors found that 58% of homebuyers preferred mixed-use, walkable neighborhoods. These trends are in large part due to the shifting preferences of demographic groups:

- The Millennial generation is less car-dependent, with an emerging cycling culture.
- Generation X families seek accessible amenities such as parks and trails for their children.
- Baby boomers increasingly prefer to “age in place,” and those who do move want to live in areas that have easily accessible amenities. (39)

Compact, walkable communities had higher home sale prices, enhanced marketability, and faster sales or leases than conventional development. These findings held true in suburban or rural locations that preserved land for open space, trails, and greenways; developments in these areas sold more quickly and had a higher rate of presold units than conventional suburban developments. Such communities are attractive to frequent, as they are enlivened by pedestrian activity, they do not sacrifice leasable area for on-site parking, and retail stores can be easily seen by those passing on foot without needing large signs or displays. Furthermore, neighborhood amenities that promote a sense of safety and social connectedness among residents, including clean and well-lit streets, well-designed open spaces, and community programming, can increase the vibrancy of communities – promoting health and quality of life and strengthening the community's economic value. (39)

Vignette 1: Walkable Communities in New York City

In New York City, complete street strategies that include creating protected bicycle lanes, pedestrian plazas, and simplified intersections led to increased economic value and neighborhood vitality. In *Measuring the Street*, published by New York City's Department of Transportation, the economic impact of design that promotes active living was quantified.

Manhattan's 8th and 9th Avenues boast the first protected bicycle lanes in the U.S. This led to a 35% and 58% decrease in injuries to all street users on 8th Avenue and 9th Avenue, respectively. Additionally, there was up to a 49% increase in retail sales amongst locally based businesses. Similarly, the expansion of Union Square North's pedestrian plaza, along with other complete street strategies, decreased speeding rates by 16% and injury crashes by 26%, while also decreasing commercial vacancies by 49% (compared to borough-wide increases of 5% on average). (59)

Vignette 2: Economic Benefits of Walkable, Mixed-use Communities in Washington, D.C.

In *Walk this Way*, an economic analysis of a sample of neighborhoods in Washington, D.C., found that with a one unit increase in walkability score from “fair” to “good” (as measured by the Irvine-Minnesota Inventory (IMI) scale):

- office rents increased by \$8.88/ square foot;
- retail rents increased by \$6.92/ square foot;
- 80% more retail sales were generated;
- residential rents increased by \$301.76/ square foot; and
- for-sale residential property values increased by \$81.54/ square foot.

Interestingly, the study found that walkable urban places benefit from being near other walkable urban places. When compared to stand-alone walkable urban neighborhoods, clustered walkable neighborhoods (or walkable districts) increased office rents by 41%, retail rents by 47%, and residential rents by 31%. (38)

Access to open space

Research demonstrates that easy access to attractive and safe open spaces such as parks and trails increases physical activity. Equally important is programming these open spaces with activities to encourage community use and support a culture of active living. Not only will this increased physical activity lower rates of obesity, but such activity promotes social and mental health and a sense of community belonging.

Like walkable communities, studies also show that parks spur economic development by attracting homebuyers and boosting residential property value. The development of Manhattan’s High Line park led to \$4 billion of private investment and development, increasing the value for properties within a five-minute walk of the High Line by 103% from 2003 (pre-construction) to 2011 (40).

Healthy building design

Americans spend 90% of their time indoors, whether at home or at work (40,41). Therefore, developers

can promote community health by ensuring that buildings are as free of toxic chemicals as possible, through strategies such as minimizing use of paints or adhesives with off-gassing from high volatile organic chemicals (VOCs). Other considerations including mitigating any safety or fire hazards, reducing moisture and pest intrusions, encouraging physical activity and social interaction, and incorporating greener design and materials for energy efficiency (e.g. insulation, natural lighting, green roofs, etc.). Designing buildings with health in mind can decrease the incidence of lead poisoning, falls, allergies, and asthma; reduce energy expenditures; and promote social cohesion, physical and mental wellness, and the health of the environment.

Again, not only does healthy building design promote positive health outcomes and reduce health care expenditures, it also can have net financial benefits.

Vignette 3: Renovation and Redevelopment in Fayetteville, Arkansas

Building for Wellness: The Business Case, tells the story of many building developments that design for health with value in mind. In one example, Specialized Real Estate Group set out to redevelop ECO Modern Flats, a concrete apartment structure, as a built environment that promotes sustainability and good health. Motivated by his own experience with severe childhood asthma and allergies, CEO Jeremy Hudson did the following to promote building health:

- **Clean indoor air quality (IAQ):** Many strategies were implemented to promote high-quality indoor air, including a non-smoking policy both indoors and outside (becoming the first and only completely nonsmoking apartment complex in the region); use of paints and materials with little or no volatile organic compounds (VOC) content, fresh air vents in baths and kitchens, and polished concrete floors and kitchen countertops.
- **Active design:** The building's rooftop deck is reached by stairs, providing an inviting place for socializing.
- **Social interaction:** By providing a community garden irrigated by rainwater, residents had ready access to gardening plots, healthy foods, and social interaction.

ECO is the first project in Arkansas certified Platinum under the Leadership in Energy and Environmental Design (LEED) program. One renter noted to Hudson that her asthma attacks had declined since moving into the building. In addition, ECO was a market success; since the building's completion in 2011, the complex has a tenant waiting list and gross rents are double what they initially were. While it cost slightly more to build with health in mind, purchasing energy efficient materials and equipment to improve IAQ was less than 1.5% of the overall development budget. Furthermore, the healthy design of the building benefited the company, as energy consumption was reduced by 35%, even with the addition of new amenities such as washers and dryers. (60,61)

Vignette 4: Falls Prevention through Massachusetts's Prevention and Wellness Trust Fund

In 2012, the Massachusetts legislature passed the Prevention and Wellness Trust (the Trust), which dedicated \$60 million in funding over four years to implement evidence-based health interventions in clinical and community settings to demonstrate cost-savings directly attributable to disease prevention and population health promotion. The Trust, which is the first of its kind in the nation, prioritizes elder falls prevention as one of the four priority conditions, and it specifies home safety assessments and modifications as a preferred intervention due to the strong evidence base for health impact and a high likelihood for a positive return on investment. Developers can be critical partners by building and physically improving housing with specific improvements geared toward preventing falls and by incorporating universal design approaches for elders and those with disabilities, resulting in reduced health care expenditures overall. While interventions and results from the Trust are still emerging, the Trust can serve as a model for the nation in demonstrating opportunities for collaboration between the health and development fields to realize the cost savings of prevention efforts.

Designing for health facilitates cross-sector and community buy-in

Building with health in mind has great potential to build community and decision-maker buy-in and support for projects. While studies have not yet documented the economic value of such buy-in, building with the broad lens of health (i.e. considering the social, political, and economic factors that influence health) provides opportunities to bring community members and diverse sectors to the table for multi-sector collaboration and partnerships. Doing so fosters opportunities for collective impact, or “the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem” (42).

Early case studies have documented the relationship between considering a comprehensive vision for health in development, and greater stakeholder buy-in to proposed policies and proposals. These examples are described in the section focused on Health Impact Assessments.

Overall, a study of professionals in the diverse fields of health care, public health, housing, transportation, education, human services, early child care, and community development finance yielded the following findings: (43)

Community engagement can influence the success of projects.

“It all comes back to relationships, ownership, and community buy-in. You can have strong leaders, but if you don’t have community buy-in, your initiative won’t work well.”

Dominique Williams, Program Officer
Local Initiatives Support Corporation Chicago in Chicago, IL

“Our public-private partnerships have been crucial to our success. We can think we know what’s good for the community, but if the community hasn’t bought in and there is no [community] ownership, then nothing is going to change in the long term.”

Ruben Brambila, Project Manager
City of Rancho Cucamonga, CA

Cross-sector collaboration and community engagement can create new opportunities to leverage and pool funding sources, and spread financial risk.

“In order to affect health over time... that requires multi-level, generational investments. Everyone needs to have some skin in the game in a trans-disciplinary fashion.”

Dr. Doriane Miller, Director
Center for Community Health and Vitality
Urban Health Initiative
University of Chicago, Chicago, IL

“Collaboration opened up a lot of funding opportunities, not just new grants. The financial assistance program expansion and new cost recovery model were built on sources of revenue that were being underutilized. In working together with parks and recreation, we changed the system within both our organizations.”

Tatiana Dierwechter
Health Communities Program Manager
Benton County Health Services, Corvallis, OR

Further studies are recommended to more concretely document the economic benefits of cross-sector and community collaboration in facilitating buy-in for proposals and projects. However, with intentional involvement of diverse stakeholders and the consideration of health, it is reasonable to hypothesize that development proposals might be more readily accepted and adopted by decision-makers and community members, saving time, and ultimately money.

Health in All Policies: An opportunity to maximize returns

The explicit consideration of health in the design and execution of developments not only promotes community health, but it also contributes to the economic value of the endeavor. Put another way, development and community design decisions that do not assess potential health impacts may miss the opportunity to maximize the return on investment of their project. While this relationship is increasingly being recognized, few developers and health professionals are experts in each other’s fields. To effectively and systematically consider

health in development initiatives and policies, it is important to link development goals with data and best practices on the social determinants of health. This collaborative, intersectoral methodology is known as a Health in All Policies (HiAP) approach, which aims to incorporate health into decision-making across sectors and policy arenas for community health improvement (44).

One effective tool to intentionally incorporate the health lens into development and planning proposals is Health Impact Assessment (HIA).

One tool in the toolbox: Health Impact Assessment

Health Impact Assessment is a combination of procedures, methods, and tools that systematically judges the potential effects of a policy, plan, program, or project on the health of a population, and the distribution of those effects within the population, and identifies appropriate actions to manage those effects.

International Association for Impact Assessment, 2006

“Doctors routinely advise their patients on ways they can stay healthy. An HIA provides similar advice to communities, which could help local leaders make informed choices about improving public health through community design.”

*Dr. Richard Jackson in
Healthy Communities: A New Direction in Development*

Health Impact Assessment (HIA) is a tool that systematically aims to identify the health benefits and consequences of proposed plans, projects, policies, or programs that are traditionally outside the domain of health (45). In addition, HIAs make recommendations to maximize the health benefits and minimize the adverse health consequences of a

proposed project by weighing the merits and drawbacks of a proposal, compared with alternate approaches. The steps to the HIA process include the following:

- **Screening:** Determining whether an HIA is needed and likely to add value for the project/ policy under consideration.
- **Scoping:** Consulting with stakeholders such as developers, community members, city officials, and others, to determine the scope of the HIA and identify potential health risks and benefits.
- **Assessment:** Describing the baseline health of affected communities and assessing the potential impacts of the decision.
- **Recommendations:** Developing practical solutions that can be implemented within the political, economic, or technical limitations of the project/ policy being assessed.
- **Reporting:** Disseminating findings to decision-makers, affected communities, and other stakeholders.
- **Monitoring and evaluation:** Monitoring the changes in health outcomes and evaluating the efficacy of implemented measures and the HIA process overall. (46)

Because HIA rigorously and objectively evaluates the impact of physical, social, economic, and ecological policies upon health, while soliciting input from the stakeholders impacted by a proposed project or plan, it provides opportunities to bring different parties to the table, with a neutral convener that can help negotiate a way forward.

Overview of benefits of HIA

“The HIA connected the developer with other sectors in the community – this not only helped in the redevelopment, but it set the stage for collaboration in future projects. Health also became a more prominent element of other initiatives. Without the HIA, this might not have been the case.”

*Interview with Christine Hoehner
HIA Co-leader of the Page Avenue HIA in Missouri (47)*

“HIA was a perfect tool to bust silos and bring different fields together.”

*HIA Team Member, in
“Do health impact assessments make a difference?”*

Beyond ensuring that a proposed development project intentionally considers health in its design and decisions, conducting an HIA can reap numerous benefits. In a national evaluation of HIAs in the United States, the following benefits were reported by many of the surveyed HIA practitioners:

- **Increased awareness of the impact of non-health policies and programs upon health:** Decision makers and stakeholders often attribute the HIA to “connecting the dots between health and other factors.”
- **Facilitated conversations and built consensus, particularly around controversial topics:** HIAs often helped stakeholders identify shared values and focus on objective data; therefore, issues that could have been contentious instead led to collaborative and responsive decisions.
- **Community buy-in in the decision-making process:** HIAs systematically ensured the inclusion of community members affected by policies and decisions in the process. This led to decisions that best addressed the needs of a community and enhanced community buy-in to a project.

- **Facilitated buy-in for decision makers:** Due to the inclusive and data-driven nature of HIAs, decision makers, including city officials and developers, were more open to approving proposed developments knowing that community input was considered and well-represented, and that both the benefits and consequences to health were considered in the neutral HIA analysis.
- **Established or strengthened cross-sector partnerships:** HIAs were a catalyst for forging relationships between individuals, organizations, and sectors that traditionally did not work together. (48,49)

“The HIA engaged various sectors, which exposed us to resources that we wouldn’t have otherwise known about. For example, when we were talking about physical activity and vacant lots, the pastor from the community pointed to one and said, ‘Oh, we own that lot.’ If he weren’t in the room, no one would have known whom it belonged to...this led to a joint-use agreement with the City that could have never happened [otherwise]. [HIA] is a good starting point for conversation – by getting everyone to the table and sharing ideas, you can develop partnerships that can be built upon in the future. As far as I know, they are still talking to each other.”

*Interview with Yuan He
HIA Practitioner for the Madison Heights HIA in AZ (50)*

From a funding standpoint, HIA can provide useful and objective documentation of the health impacts of a proposed project and can demonstrate its social return on investment upon a community. These findings can make funding proposals stronger and more persuasive. In *The Coffelt Case: A case study of the Coffelt-Lamoreaux public housing redevelopment HIA*, Kathleen Penchman from National Bank of Arizona indicated that the HIA

process would be valuable for lending institutions to provide relevant information to a bank about potential projects. Of specific interest to these institutions, HIAs provide information on the following:

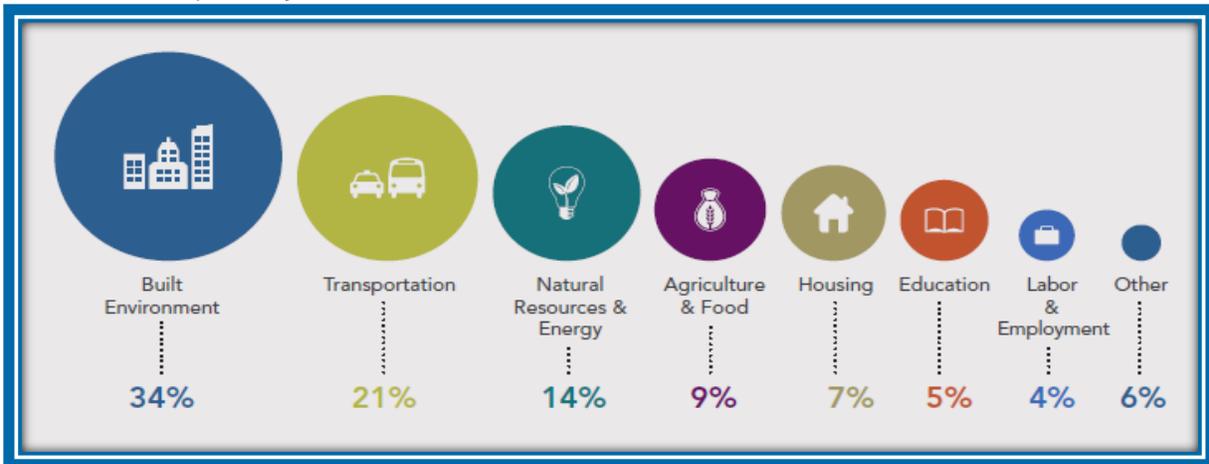
- **The potential health impacts of a project.**
- **The significance of the project in the context of the neighborhood or community.**
- **The objective documentation of the conditions that fit the criteria for a Community Reinvestment Act (CRA)¹ investment.** (51)

In the same case study, one potential funding agency representative said, “HIAs could be made a requirement for certain types of projects such as zoning requests for adaptive reuse” (51). As more funders recognize the utility of HIA, developers engaged in the process may potentially increase the competitiveness of funding proposals. From these reported benefits, the use of HIA not only promotes health and mitigates unintended health consequences, but the investment in the HIA process can potentially save time and money and increase opportunities for funding. Because many planning decisions can be complex and controversial, objective data and recommendations brought forward by an HIA can provide common ground and push through the political barriers, divergent interests, and red tape that can stall projects. Also, by including community members, influential champions, and other stakeholders into the discussion and HIA process, greater community buy-in and support can propel the initiative forward, ensure that it best meets the needs of communities, and assure decision makers and lending institutions that the decision has been assessed and vetted through a data-driven, community-engaged process.

Use of HIA in Development

According to the Health Impact Project’s² most recent data, 328 HIAs have been conducted or are in process across the nation, up from 27 HIAs conducted in 2007 (52). Approximately three-quarters of these HIAs address development initiatives, whether through the built environment, transportation planning, natural resources and energy, or housing (see Figure 1).

Figure 1: Breakdown of HIAs by sector



Source: Health Impact Project

¹ The CRA, enacted in 1977, is a law that serves to increase responsible lending, investments, and services for low- and moderate-income communities. The regulation requires the periodic evaluation of each insured depository institution’s record in helping meet the credit needs of its entire community. This record is taken into account in considering an institution’s application for deposit facilities, including mergers and acquisitions. (58)

² The Health Impact Project, a collaboration of the [Robert Wood Johnson Foundation](#) and [The Pew Charitable Trusts](#), is a national initiative designed to promote the use of health impact assessments (HIAs) as a decision-making tool for policymakers.

An In-Depth Look at Benefits of HIA in Two Development Initiatives

Healthy Neighborhood Equity Fund in Massachusetts

Location: Massachusetts

Investors: Conservation Law Foundation and Massachusetts Housing Investment Corporation

Organizations leading HIA: Metropolitan Area Planning Council, MA Department of Public Health

Overview

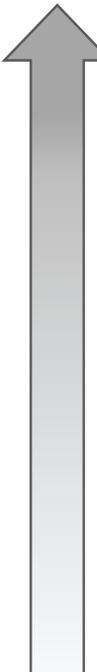
Despite the growing evidence for the impact of the built environment upon health, resources to finance healthy and sustainable neighborhoods (via infrastructure, transportation, affordable housing, commercial and retail space, and community facilities) have dwindled due to cuts in federal funding and a lagging economy (4). An innovative solution in Massachusetts through the Healthy Neighborhood Equity Fund (HNEF) provides opportunity to finance transit-oriented development projects that meet the quadruple bottom line of considering community,

environmental, and health impacts, as well as providing attractive risk-adjusted returns for investors. The HNEF is a \$30-million private equity fund through the Conservation Law Foundation (CLF) and Massachusetts Housing Investment Corporation (MHIC) that will invest patient capital in transformative mixed-income, mixed-use real estate projects. (4,53)

HNEF HIA

The Metropolitan Area Planning Council and the MA Department of Public Health worked with the Conservation Law Foundation to conduct an HIA for three transit-oriented development projects in Roxbury, MA. Through the HIA, 12 health determinants associated with transit-oriented development were identified, as well as the health outcomes associated with each. The determinants were ranked according to their breadth of impact and will be used as a basis for assessing eligibility for investment (Figure 2). In addition, the HIA recommended datasets for screening potential neighborhoods, identified metrics for health determinants that would benefit communities, and provided strategies that developers can apply to improving health determinants through the HNEF. (4,53)

Figure 2: Impact of health determinants upon health



Health Determinant	Health Outcomes
Walkability/Active Transport	Physical activity, mental health, chronic disease
Safety from Crime	Injury, physical activity, mental health, real and perceived safety
Economic Opportunity	Economic stability
Food Access	Nutrition, chronic disease
Safety from Traffic	Injury, air quality, real and perceived safety
Affordable Housing	Economic stability
Green Housing	Exposure to environmental contaminants, chronic disease
Green Space	Physical activity, mental health, air quality
Social Cohesion	Mental health
Displacement/Gentrification	Mental health, economic stability
Air Quality	Air quality
Environmental Contamination	Exposure to environmental contaminants

Source: *Neighborhood Health: A New Framework for Investing in Sustainable Communities*, 2014

Value of the HIA process and findings

“HIA gave us a framework for what we hoped would be a transparent and legible system of measuring a whole range of health impacts. I don’t think we could have assembled that kind of data or analysis on our own. And even if we could have, it was important that the findings came from a third party source and not from us in order to tell the story to potential investors.”

*Interview with Maggie Super Church
Consultant to the Conservation Law Foundation (19)*

In an interview with Maggie Super Church, a consultant to the Conservation Law Foundation, she highlighted the following benefits of conducting a HIA in their planning for the HNEF:

- **Provided a neutral, third party analysis of health impacts:** Because the HIA was conducted by a third party, the data collection and analysis were thought to be more credible and objective to attract new investors. In her words: *“This wasn’t just a way to dress up what were are doing. This was something that people who had a lot of expertise in health impacts looked at, and they were able to really characterize those impacts in very measurable ways. Both the HIA report and the fact that it was done through a third party, independent process was valuable.”*
- **Quantified impacts to bring health to the forefront of the conversation:** In development, developers and investors often want quantitative data to provide evidence of the value and impact of different projects. The HIA process provided quantitative evidence that demonstrated that development initiatives could be screened for health impacts. As Super Church pointed out, *“If you look at the world of finance and real estate investment, people are really quantitative... health can seem distant and a little squishy. We needed to move from anecdote and values to take the analysis to the next step. That pushed us to [make the HIA] as quantitative as possible so we could make relative comparisons of the value or impact between different projects. Having [the HIA report] provided the evidence that this type of measurement is both possible and useful.”*

- **Demonstrated to be a promising tool in the Health in All Policies movement:** Super Church pointed out that many cities are taking stronger stances on considering Health in All Policies (HiAP) and HIA findings for project evaluation and permitting. In Boston, the City asked CLF to present the HNEF HIA results to its HiAP Task Force, which *“made it clear that the investment/screening that HNEF is doing is relevant to what the Boston Redevelopment Authority and other city agencies are doing as well. We are all asking questions like, ‘How do you operationalize health in all policies and create a shared set of standards and measures?’”* HIA is one tool that begins to answer these questions.

Coffelt-Lamoreaux public housing redevelopment

Location: Maricopa County, Arizona

Developer: Gorman & Company

Property owner: Housing Authority of Maricopa County

Organizations leading HIA: Catalyze Research and Consulting, LLC; Local Initiatives Support Corporation (LISC) Phoenix; Phoenix Revitalization Corporation (PRC)

Overview

The Coffelt-Lamoreaux Public Housing Project (Coffelt), located outside of Phoenix in a largely agricultural area, is the oldest operational project in the Housing Authority of Maricopa County’s (HAMC) portfolio (51). Since 2006, contentious debate took place over the future of Coffelt, with opinions ranging from complete demolition and resident relocation, to demolition with new construction adding density on site, to the current plan of redevelopment (51,54). The Coffelt HIA was proposed after the decision was made to redevelop the site.

Coffelt HIA

The Coffelt HIA was proposed to generate recommendations for the redevelopment, which included 296 residential units and their surrounding complex. This HIA was a first for HAMC and the developer Gorman & Company. The HAMC Director viewed HIA as a “good fit with her philosophy of

using the redevelopment of a housing project as an opportunity to improve the whole neighborhood” (51). Additionally, because the physical conditions of Coffelt were so extreme and the redevelopment had potential to significantly impact residents, Gorman & Company was interested in a process that would engage residents throughout and would result in concrete, implementable recommendations that would help them make decisions in the design process (54).

The HIA engaged the Coffelt community in data collection, synthesis, and recommendation development and as facilitators at large group meetings. Evidence-based recommendations were made around the following health determinant areas: access to healthy food, access to physical activity, access to safe streets and transportation, healthy and safe housing, and social cohesion and community well-being (54,55).

Value of the HIA process and findings

“Considering health in a redevelopment is a game changer.”

Brian Swanton
Arizona Market President, Gorman & Company in
“The Coffelt Case”

In *The Coffelt Case: A case study of the Coffelt-Lamoreaux public housing redevelopment HIA*, interviews with Gorman & Company, HAMC, residents, the City of Phoenix, and potential funders revealed numerous benefits for conducting HIA. The following outlines some of its findings:

HIA as a facilitator of community engagement

“There is a misconception that people will be unreasonable and they will ask for the moon. But, through the [Coffelt] HIA process, it was demonstrated that residents managed their expectations on their own. They understood that things cost money and had realistic expectations.”

Interview with Debarati “Mimi” Majumdar Narayan
HIA Consultant and Director of Research and Strategies
Catalyze Research and Consulting, LLC (54)

Community engagement facilitated by the HIA process led to benefits across stakeholder groups. These benefits included:

- **For the developer:** Community engagement directly informed the architectural programming process, facilitated buy-in for recommendations, and also managed expectations. Brian Swanton of Gorman & Company referred to the HIA process as a “game changer.”

Debarati “Mimi” Majumdar Narayan, HIA Consultant, explained further: “Developers don’t typically think of health as something that would feed the design process. However, in [the Coffelt HIA] experience, [the developer] thought it made the design process better, as a lot of the health considerations fed directly into the physical design of the redevelopment... [These findings] would not have been discovered in a typical economic market analysis” (54).

In addition, community engagement built trust between the developer and the community. Majumdar Narayan said, “If you can build trust with the community, there is more buy-in. If there is more buy-in, you will get to do the work and ultimately for the developer that translates to meaningful outcomes socially and financially.”

- **For HAMC:** The HIA developed relationships needed with the community to move the redevelopment work forward and sustained community engagement to solidify a prioritization plan for the department’s resources. Engagement also raised awareness about the intensity with which issues were impacting the lives of residents.
- **For the city:** Resident engagement raised awareness to the city about issues impacting residents outside of the Coffelt premises. This led to a study of pedestrian traffic safety in a hazardous intersection, and their hope is to engage residents further in this process.

“Without the HIA, issues surrounding ownership of streets within the Coffelt site may never have come to the city’s attention.”

Kerry Wilcoxon, City of Phoenix Streets and Transportation Department
in “The Coffelt Case”

- **For potential funders:** Community engagement was identified as the most valuable part of the HIA because it ensured that funding was targeted to resources that would most directly impact people’s lives.
- **For residents:** Residents expressed that it was empowering to participate in the HIA and have their concerns heard and translated into recommendations. Also, the HIA brought the community together to raise awareness about each other’s concerns and foster a sense of community cohesion.

HIA as a tool for collaborative planning

The Coffelt HIA brought together multi-sector partners from sectors including planning, public health, environmental assessment, and community outreach. As the HIA progressed, additional partners were brought on to address identified issues, such as street engineers and landscape architects. The collaboration between city and county departments was unprecedented in this area, and the HIA catalyzed these partnerships.

HIA as a catalyst for community development and investment

If the redevelopment of Coffelt, based on the HIA recommendations, were to improve conditions on the site and surrounding streets, the likelihood is that a larger grocery store would want to come into this neighborhood, further enhancing the health of the community.

*Brian Swanton
Arizona Market President, Gorman & Company in
“The Coffelt Case”*

The HIA not only revealed the impact of the redevelopment plan on the community, but it also exposed other community conditions impacting the overall health of residents. As a result, a phased plan was developed to improve the community comprehensively, addressing the food environment, transportation, and the other aforementioned recommendations. Community improvements could improve community health and livability, which could attract new businesses and investments to stimulate more development and overall economic vitality.

Next steps

Gorman & Company found the HIA process and findings, and particularly the community engagement component, to be so impressive that they have incorporated HIA into the redevelopment of Madison Heights, Norton Circle, and HM Watson Homes affordable housing projects in Avondale and Buckeye, Arizona (50).

Conclusion

“It is now the responsibility of clinicians and health care delivery organizations to help maintain the health of the community—and the responsibility of the community to help maintain the health of the individual.” (56)

*Stephen Shortell
Dean, School of Public Health
University of California, Berkeley*

Doctors and developers alike have critical roles to play in building a healthy nation. Hospitals, health care providers, and health care systems have new pressures on them to keep costs down and promote better population health. Developers must show that their projects are financially viable in order to obtain financing. By shaping the environments in which people live, developers, city planners, architects and health practitioners can not only promote individual and population health – an important goal unto itself; but they can also curb ballooning health care costs, and boost the local and national economy overall. Moreover, healthy community design can reap financial savings and generate good will with policy makers and community residents for both sectors. By promoting a Health in All Policies approach, and by utilizing tools such as HIA in planning and decision-making, development and health practitioners can build together toward a “culture of health” (57). Now is the time to devise innovative solutions that favor healthy community design to promote healthy, vibrant, and sustainable communities. It makes business sense!

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