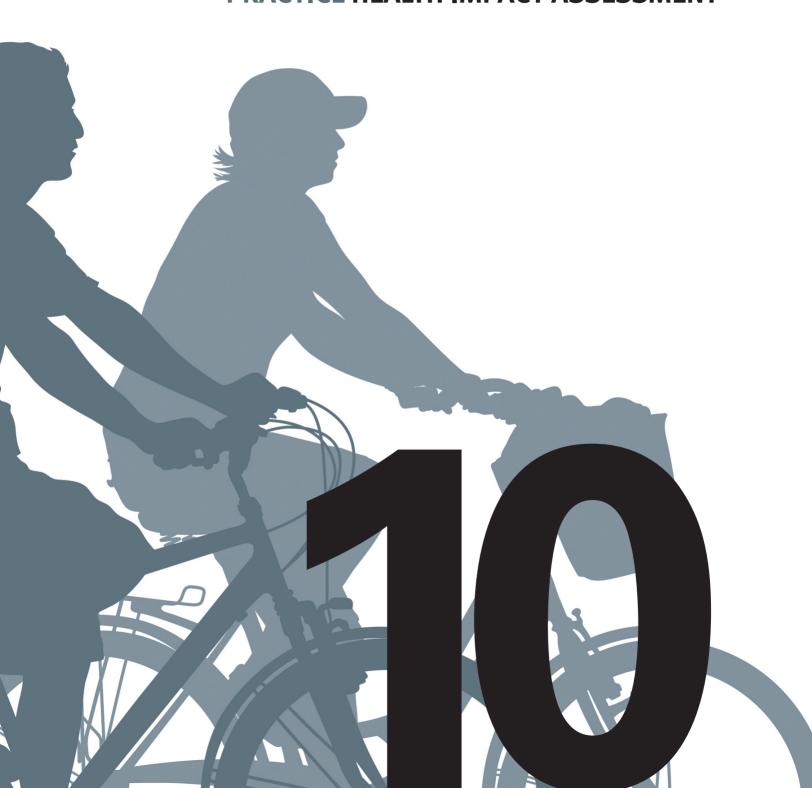
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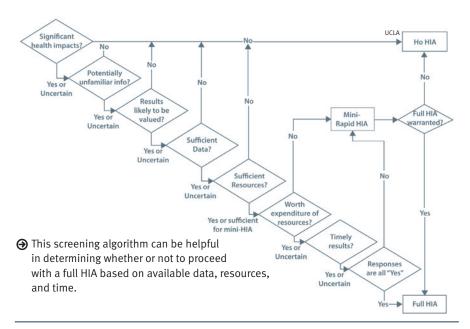
PRACTICE HEALTH IMPACT ASSESSMENT



The Effective Use of Health Impact Assessment in Land-Use Decision Making

By Patricia E. Salkin and Pamela Ko

The way land is used can impact health determinants and health outcomes, yet decisions about land-use planning and regulation are often made without specific review or discussion of the potential health consequences.



For example, public health professionals assert that development that does not enable physical activity (no sidewalks, dangerous intersections, poorly lighted areas), access to healthy food (no grocery stores, farmers markets, or other convenient opportunities to obtain fresh food), or provide for clean air and water can reduce positive health outcomes and lead to increases in obesity, heart disease, asthma, and other preventable illnesses. One tool planners can use to inform community decisions about the health implications of development policies or proposals is Health Impact Assessment (HIA). The goal of HIA is to apply available research about health impacts to specific land-use questions to develop evidence-based recommendations to inform decision making.

HIA is a process or procedure that is used to judge the potential health effects of a policy or project on a given population with the aim of maximizing the proposal's positive health effects. Specifically, HIA can convert public health data into practical information that is useful to a decision maker in planning a new program or policy. HIA systematically evaluates the potential impact of a policy, program, or project on the health of a population as well as the distribution of those effects within the population. Information obtained from HIA regarding land-use decisions can be used to predict health outcomes based on quantitative and qualitative data and scientific findings.

HIA also promotes public health objectives and improves communication between local governments and their associated

health agencies. Because HIA has its roots in assessments familiar to planners, such as environmental impact assessment (EIA), HIA tools may have a familiar look and feel for most planners and other key stakeholders involved in regional and local development. Furthermore, the participatory and evidence-based approaches and processes of an HIA framework may assist with plan making, project and proposal review, and regulatory ordinances in a manner that will inform, and is informed by, the specific health outcomes for a specific population.

ELEMENTS OF HIA

Because the field of HIA is relatively new and there is a great deal of diversity in the practices and methods used to perform HIAs in the United States, the North American HIA Practice Standards Working Group (Working Group) has attempted to establish minimum standards of good practice to guide the growth of HIA (Working Group 2010). The Working Group emphasizes that a typical HIA should involve six steps, each of which plays a specific role in gathering and evaluating all available information related to the land-use decision in question. Those steps include screening, scoping, assessment, reporting, monitoring, and evaluation of the proposed action. Screening is used to determine the value and purpose of the HIA, focusing on issues of its feasibility and the capability to add value to the discussions regarding the land-use decision. The scoping phase is designed to identify health issues and research methods and to determine how the population(s) will likely be affected by the health outcomes of the proposed action. Available evidence and existing research should also be evaluated at this point in an attempt

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to find a wide range of necessary resources. Assessment involves establishing baseline conditions, impacts, alternatives, and mitigation for the proposed action in order to report and evaluate the likely health outcomes—such as unnecessary exposure to air pollution and particulate matter—and their effects, such as increased respiratory disease and asthma, on the targeted population(s). Assessing the available information, research, and resources will allow HIA practitioners to evaluate risks and benefits in light of the specific details of the individual HIA. The assessment should also clearly identify who may be affected and how they will be affected.

During the reporting phase, the findings from the HIA should be developed in such a way so as to facilitate health-based recommendations to aid the decision-making process with respect to the proposed action. Recommendations should also include a viable plan for implementation. Involvement and input from the various stakeholders in the process is crucial. Finally, the monitoring phase allows for continuing evaluation by engaged stakeholders and others in order to track the outcomes of a decision and its implementation.

HISTORY AND GROWTH OF HIA USE

HIA in the U.S. evolved from EIAs required by the National Environmental Policy Act of 1969 (NEPA) or state-enacted "mini-NEPAs" in response to the need for a more interdisciplinary approach to health inequities. Historically, EIAs were criticized for failing to take into consideration the effects of projects on health generally, rather than evaluating only toxic exposures and sources of biophysical concerns unrelated to a "com-

prehensive and systematic approach to human health impacts" (Bhatia and Wernham 2008). However, by the late 1980s, the term "environment" grew to include social, cultural, and human health considerations, which in turn led to the growth of interest in the health outcomes of development projects and other land-use decisions. In 1999, the World Health Organization produced the *Gothenburg Consensus Paper*, which introduced and clearly outlined the concept of HIA and eventually led to the development and implementation of HIA as a method for evaluating the potential effects of changes to the built environment.

Today, HIAs may be linked to EIAs or they may be conducted as independent processes. While EIAs do occasionally include health risk assessments, and the U.S. Environmental Protection Agency does conduct formal health-effects forecasting as part of legally mandated cost-benefit analyses, HIAs are not routinely required or performed in any setting in the U.S. More-

over, as contrasted with EIA preparation by engineers and land-use or environmental consulting firms, HIA preparation is typically performed by public health professionals. The use of HIA, therefore, has relied on voluntary inclusion of such assessment into the development project or plan, rather than the required processes of EIA under NEPA.

HIA vs. EIA

Discussions surrounding the potential benefits from the increased use of HIA have raised questions about whether such assessments can, and should, be mandatory and whether the means are available for incorporating HIA into existing legislative, regulatory, or administrative procedures (Ko 2011). While some proponents agree that conducting an HIA during the course of a required EIA could save time and money, others are concerned that the inclusion of an HIA into an EIA will diminish the importance and relevance of the public health issues and could lead to legal challenges. Opponents of HIA have also argued



A health impact assessment of this stretch of the Buford Highway in Atlanta evaluated the health effects of redeveloping the roadway to reduce the number of lanes, add sidewalks, crosswalks, and on-street parking, all with the goal of making the area less dangerous for people on foot or bike.

Checklist NACCHO NATIONAL ASSOCIATION OF COUNTY & CITY HEALTH OPPICIALS Water Quantity Is there a sustainable water supply for the proposed use? Has the permitting agency (e.g., State Engineer's Office) provided written confirmation that the applicant owns sufficient water rights for the proposed development? Does the landscaping plan include appropriate water conservation measures? Are there opportunities for recycling or reuse of water and wastewater generated by the project? For more information, visit: www.epa.gov/ost/stormwater/usw a.pdf www.epa.gov/ost/stormwater/usw a.pdf www.epa.gov/ost/stormwater/usw a.pdf www.epa.gov/ost/stormwater/usw a.pdf www.epa.gov/ost/stormwater/usw a.pdf www.epa.gov/livability/pdf/growthwater.pdf Air Quality From an air quality perspective, is the proposed use

compatible with adjacent uses?

require an emissions permit?

measures should be taken?

☐ Does the proposed use generate odors?

external connectivity, mixed uses

magnetic radiation?

For more information, visit:

paving recommended?

☐ Will the proposed use emit air pollutants? Does it

Are fugitive dust emissions a potential problem? During construction? Post-construction? What mitigation

☐ Will the project be served by paved roads? If not, is

If the project will emit air pollutants or odors, what

☐ As the project develops, will there be adequate transpor-

tation infrastructure in place to absorb the volume of

☐ Is the project designed to reduce vehicle emissions? E.g.

grid layout or non-circuitous street system, internal and

☐ Is the project designed to offer and encourage the use of

lines or other uses that emit potentially harmful electro-

travel choices in addition to the automobile? E.g.,

Transit-friendly design, bike/pedestrian trails, etc.

☐ Is the project in close proximity to cell towers, power

www.epa.gov/otaq/transp/trancont/r01001.pdf

www.fhwa.dot.gov/environment/air_abs.htm

traffic generated by the project without degrading air

measures should be employed to eliminate or mitigate

& Community Design

in Land Use Planning

Public Health

Opportunities for Physical Fitness

- Are open spaces and trails included to provide regular opportunity for physical activit ies such as walking and biking?
- Are communities built with mixed-use commercial and residential purposes, and with sidewalks so that people can walk to movies, restaurants, and so on?
- Are schools built within communities so that young people can walk to school?
- Are sidewalks wide enough for mulitiple uses (e.g., bikes and walkers)?
- Is lighting placed along trails and sidewalks to increase the comfort level of those using them?
- Is there park space and equipment for children to play with?

For more information, visit:

www.surgeongeneral.gov/topics/obesity/ www.sprawiwatch.org/health.pdl www.nga.org/common/issueBriefDetailPrint/ 1,1434,2473,00.html www.vtpi.org/walkability.pdf

Transportation and Injury Prevention

- ☐ If the proposed use involves significant truck traffic, does the site plan provide adequate room for truck tumarounds and safe truck access and egress, relative to neighboring developments?
- Does the proposed project include safe routes to school with a minimum of street crossings and high visibility for children walking to school?
- Does the proposed plan include pedestrian signals and mid-street islands on busy streets, and presence of bicycle lanes and trails?
- ☐ Does the project include traffic quieting road designs in both subdivisions and shopping districts?
- ☐ Does the project provide adequate neighborhood access to public transportation?
- Does the proposed project include ramps, depressed curbs or periodic breaks in curbs that act as ramps for people with disabilities?
- Does the proposed project include voice/audio or visual clues provided at crosswalks and transit stops?
- Does the project comply with ADA requirements for design of curb ramps, cross slopes and detectible warnings for new construction or retrofit projects?

The Tri-County (Colorado) Health Department developed this checklist to assist local public health agencies in their review of applications for new development and redevelopment plans in their communities. The full checklist is available at www.tchd.org.

that unlike EIAs, which are seen as largely quantitative, HIAs are largely qualitative in nature. Because they may differ substantially in both the scope of impacts analyzed and the implementation process of the assessments themselves, combining the two assessments in a single document may prove to be difficult. Further, due to the nature of the factors assessed, the qualitative modeling of some HIA outcomes may be more difficult than modeling of EIA outcomes.

However, some level of integration of HIA into a required EIA may result in important and significant benefits. As discussed below, the San Francisco Department of Public Health found that, after sustained HIA efforts to integrate analysis of health outcomes in land-use decision making, several "complementary

strategies" began to evolve. These strategies included integrating some analysis of health impacts in EIAs required by the California Environmental Quality Act, building a dialogue on the relationship between land use and public health, and promoting official health agency positions on urban policy planning questions. The Department of City Planning began to request analysis of public health concerns for specific planning questions. In fact, the efforts in San Francisco "suggest that HIA can significantly influence urban land use policy" (Bhatia 2005).

The Red Line Transit Project HIA in Baltimore was designed to evaluate the significant impacts to the geography, health, and social environment of the communities that would be affected by a proposed new light-rail line. A Draft Environmental

Impact Statement (DEIS) for the project was released and detailed how construction and implementation of the project might affect the environment, including air, water, noise, and traffic volume. However, it did not identify how these factors would impact community health through changes to the built environment. Also, although the DEIS enabled informed choices to be made about the best location for the Red Line and did illustrate some of the health outcomes for each of the transit options, it did not "emphasize human-centric design options." Accordingly, the City Department of Transportation, with assistance from the City Health Department, initiated efforts to complete the HIA to "more fully explore how the Red Line will impact health and examine the potential to improve the quality of life in Baltimore." The authors of the Red Line HIA reiterated that the HIA would serve "as a comment to and supplemental analysis of the DEIS and identif[y] where the DEIS could have gone further to assess health impacts."

HOW HIAs ARE USED

Tri-County (CO) Health Depa

While the type of policy, plan, or project evaluated under an HIA can vary, a number of the HIAs recently conducted in the U.S. have analyzed either changes to zoning ordinances or comprehensive plans, such as the TransForm Baltimore HIA, or have evaluated the specific health outcomes of redevelopment projects, such as the Jack London Gateway HIA.

Recently, an HIA was conducted to evaluate a proposed plan for development in El Cerrito and Richmond, California, to analyze the possible inclusion of affordable housing sites with other land uses. Prior to the completion of the HIA, land-use planning agencies had not determined specific sites for affordable housing nor the percentage and type of affordable housing at any site. Urban Habitat, an organization that advocates for social, economic, and environmental justice in the Bay Area, asked Human Impact Partners to assess health benefits and liabilities associated with three sites they proposed to include in their campaign for affordable housing. Following the release of the HIA, a letter from the participants to the city council and city staff discussed the health-based recommendations, and inclusion of affordable housing sites is now being considered.

In San Francisco, the Department of Public Health undertook the Eastern Neighborhoods Community Health Impact Assessment (ENCHIA) project to explicitly understand and articulate how San Francisco land-use development could promote and protect health. The goals of the ENCHIA were to identify and analyze the likely impacts of land-use plans and zoning controls on community concerns—including housing, jobs, and public infrastructure—and to provide recommendations for land-use policies and zoning controls that promoted community priorities through consensus in land-use policy making (San Francisco Department of Public Health 2007).

The Eastern Neighborhoods community planning process began in 2001 with the goal of developing new zoning controls for the industrial portions of these neighborhoods. Starting in 2005, the planning department began working with the neighborhood stakeholders to create area plans for each neighborhood to articulate a vision for the future. The resulting Eastern Neighborhoods Development Plan required that a Draft Environmental Impact Review (DEIR) be completed. The DEIR specifically referenced the 18-month-long HIA and acknowledged that the ENCHIA explicitly called attention to the "growing scientific understanding that optimal health could not be achieved by health services and individual behaviors alone." The DEIR also indicated that the planning department, in conjunction with the public health department, was committed to monitoring the progress in community health indicators (Ko 2011).

Overall, participants felt that the EN-CHIA was successful in a number of significant ways. It broadened participant understanding of how development affects health, built new relationships among participants, and created a practical tool for evaluating land-use plans and projects. It also showed that a government-led public process could sustain diverse participation, employ consensus techniques, and shift participant focus from problems to solutions. The Eastern Neighborhoods area plans and rezoning were adopted by the board of supervisors, signed by the mayor, and became effective on January 19, 2009.

THE ROLE OF PLANNERS IN USING HIAS

The information obtained from an HIA can provide guidance on land-use decision making in a way that can promote or improve the health of a given population and mitigate the negative effects of changes to the built environment. Planners who understand and utilize the methods or tools provided by an HIA can make important contributions to the

health and sustainability of the communities they serve. Specifically, planners can

- educate public officials about the health implications of their decisions regarding growth, development, and transportation;
- analyze local land-use decisions related to transportation, safety, environment, and health in a manner that considers the diverse needs of the population while evaluating the benefits, as appropriate, of mitigating factors such as planned unit development (PUD), mixed use development, changes to zoning laws and comprehensive plans, and crime prevention through environmental design (CPTED);
- guide or influence development and other land-use decisions in a positive manner while preserving and strengthening the communities through the creation of affordable housing opportunities, transportation options, pedestrian-safe roadways, and access to healthy foods; and
- utilize the different HIA tools available for planning and land-use decision making to determine when, and if, HIA is appropriate.

INCORPORATING HIA INTO LAND-USE DECISION MAKING

To date, most of the HIAs completed in the U.S. that deal with land use focus on one of five main objectives: pedestrian and transit-related improvements; zoning changes; neighborhood density/use restrictions; housing development projects; and various redevelopment projects for residential, commercial, or industrial sites. Notably, the majority of land-use-related HIAs were designed to evaluate factors that might impact health determinants or health outcomes that may be caused by rezoning, redevelopment, or other significant changes to the built environment, with transportation projects and redevelopment accounting for at least half of the HIAs completed. The following discussion of three specific initiatives highlights how HIAs may be used to inform landuse decisions.

TransForm Baltimore HIA

The TransForm Baltimore HIA was one of the first to evaluate comprehensive changes to a municipal zoning code. When the decision to rewrite Baltimore's zoning code was made, the Center for Child & Community Health Research at Johns Hopkins University was enlisted by the Baltimore City Health Department to conduct an analysis of the impact the changes would have on the community. The goal of the HIA was to contribute information and resources that would be used to revise

the code and inform the mapping phase of the process. The Baltimore City Health Department determined that collaboration on an HIA targeted to identify areas of potential health impacts, both negative and positive, could influence policy decisions and could also help to promote the growth and development of a healthier city.

The aim of the TransForm Baltimore HIA was to research and evaluate how zoning can be used to improve overall health of the citizens in an urban environment and how to optimize the utility of the HIA in informing and influencing policy decisions. The recommendations made in the completed HIA included retaining several elements of the proposed new code that the HIA team demonstrated were "likely to contribute positively to creating healthy communities," including improving access to healthy foods, creating walkable environments, and expanding mixed use areas. Further recommendations by the HIA team included revisions that should be made to the proposed new code, including the prevention of off-premise alcohol sales outlets in transitoriented development and industrial mixed use zones, and the use of CPTED principles in landscaping and design standards.

The Department of Planning released a draft of the new code in June 2010. Since then, the department has held several major public presentations and discussions around the city to broaden the opportunity for public input. The department also extended the comment period on the draft code and, due to strong interest and the number of comments, ideas, and suggestions to date, has decided to prepare a second draft prior to presenting legislation to the city council. This second version is expected to reflect, among other things, the input of the HIA.

HIA ON TRANSPORTATION POLICIES IN THE EUGENE CLIMATE AND ENERGY ACTION PLAN

In Oregon, the Health Impact Assessment on Transportation Policies in the Eugene Climate and Energy Action Plan was completed in August 2010 through a collaborative effort of Upstream Public Health, the City of Eugene Office of Sustainability, the Community Health Partnership (Oregon's Public Health Institute), and Lane County Public Health. The HIA was designed to evaluate the proposed action plan because it had the potential to impact not only the environment but also public health. As a result, the HIA focused on a section of the Climate and Energy Action Plan (CEAP) called "Land Use and Transportation" to assess po-

HIA RESOURCES FOR PLANNERS

The following resources are available for planners interested in obtaining more information on HIAs.

■ General Information on HIA Use in the United States

- Bhatia, Rajiv. 2005. "Towards Equity in Land Use Development Using Health Impact Assessment." *NACCHO Exchange*, Winter. Available at www.sfphes.org/publications/CP_NEExcerpto5.pdf.
- Bhatia, Rajiv and Aaron Wernham. 2008. "Integrating Human Health into Environmental Impact Assessment: An Unrealized Opportunity for Environmental Health and Justice." *Environmental Health Perspectives*, 116(8): 991–1000. Available at http://ehpo3.niehs.nih.gov/article/fetchArticle.action?articleURI=info:doi/10.1289/ehp.11132.
- Centers for Disease Control and Prevention—Health Impact Assessment: www.cdc.gov/healthyplaces/hia.htm.
- Dannenberg, Andrew, et al. 2006. "Growing the Field of Health Impact Assessment in the United States: An Agenda for Research and Practice." *American Journal of Public Health*, 96(2): 19–27. Available at www.rwjf.org/pr/product.jsp?id=15158.
- Dannenberg, Andrew, et al. 2008. "Use of Health Impact Assessment in the United States: 27 Case Studies, 1999–2007." *American Journal* of Preventive Medicine, 34(3): 243. Available at www.cdc.gov/ healthyplaces/publications/AJPM_HIAcasestudies_March2008.pdf.
- Forsyth, Ann, Carissa Schively Slotterback, and Kevin J. Krizek. 2010.

 "Health Impact Assessment in Planning: Development of the Design for Health HIA Tools." *Environmental Impact Assessment Review*, 30: 42–50. Available at http://carbon.ucdenver.edu/~kkrizek/pdfs/EIARinpress.pdf.
- Forsyth, Ann, Carissa Schively Slotterback, and Kevin Krizek. 2010.

 "Health Impact Assessment (HIA) for Planners: What Tools Are Useful?" Journal of Planning Literature, 24(3): 231–245. Available at http://carbon.ucdenver.edu/~kkrizek/pdfs/hiajpl.pdf.
- Health Impact Assessment Blog, the latest news and information on HIA: http://healthimpactassessment.blogspot.com/2011/03/usa-hia-update-from-human-impact.html.
- Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts: www.healthimpactproject .org/hia/us.
- Ko, Pamela. 2011. "Incorporating Health Impact Assessment into Land Use Decision Making in the United States." *Zoning and Planning Law Report*, June 2001, Vol. 34, No. 6.
- North American HIA Practice Standards Working Group, "Minimum Elements and Practice Standards for Health Impact Assessment," Version 2, November 2010. Available at www.healthimpactproject. org/resources/document/NA-HIA-Practice-Stds-Wrkng-Grp-2010_ Minimum-Elements-and-Practice-Standards-v2.pdf.
- Steinemann, Anne. 2000. "Rethinking Human Health Impact Assessment." Environmental Impact Assessment Review, 20: 627–645.

 Available at http://water.washington.edu/Research/Articles/2000. rethinking.pdf.

UCLA Health Impact Assessment Clearinghouse—Learning and Information Center: www.hiaguide.org; with a complete list of HIA completed in the U.S., www.hiaguide.org/hias.

■ Examples of HIAs

- Guenin, Heidi, et al. 2010. Health Impact Assessment on Transportation Policies in the Eugene Climate and Energy Action Plan. Portland, Oregon: Upstream Public Health. Available at www.upstreampublichealth.org/sites/default/files/HIAEugene.pdf.
- Heller, Jonathan C., Margaret Gordon, and Rajiv Bhatia. 2007. "Jack London Gateway Rapid Health Impact Assessment." Oakland, California: Human Impact Partners. Available at www.hiaguide.org/ sites/default/files/JackLondonG_RHIA_casestudy.pdf.
- Human Impact Partners. 2009. Pathways to Community Health: Evaluating the Healthfulness of Affordable Housing Opportunity Sites
 Along the San Pablo Avenue Corridor Using Health Impact Assessment. Oakland, California: Human Impact Partners. Available at www.hiaguide.org/sites/default/files/SanPabloAve.pdf.
- Ricklin, Anna. 2008. "The Red Line Transit Project Health Impact Assessment." Baltimore, Maryland: Baltimore City Department of Transportation. Available at www.hiaguide.org/sites/default/files/Red_Line_HIA_final.pdf.
- RLJ Thornton, et al. 2010. Zoning for a Healthy Baltimore: A Health Impact Assessment of the TransForm Baltimore Comprehensive Zoning Code Rewrite. Baltimore, Maryland: Johns Hopkins University Center for Child and Community Health Research. Available at www.hopkinsbayview.org/pediatrics/zoning/index.html.
- San Francisco Department of Public Health. 2007. San Francisco
 Eastern Neighborhood Rezoning and Area Plans Environmental
 Impact Report and Eastern Neighborhoods Community Health
 Impact Assessment. Available at www.sf-planning.org/index.
 aspx?page=1678#bos_pres and www.sfphes.org/ENCHIA.htm.

■ Information on HIA Tools for Planners

- Several tools can assist with incorporating health determinants and health outcomes into planning assessments. Three tools in particular can assist planners and other land-use decision makers: the Healthy Development Measurement Tool, the Leadership in Energy and Environment Design–Neighborhood Development, and the Design for Health suite of tools. Links to information on each are listed below.
- Slide presentation on various HIA Tools: www.designforhealth.net/pdfs/hia_presentations/MNHIA_8_OtherHIA_bw.pdf.
- Design for Health Tool: www.designforhealth.net/resources/hiatools. html and www.designforhealth.net/resources/planningtools.html.
- $\label{thm:period} He althy \, Development \, Measurement \, Tool: \, www.thehdmt.org \, and \, www. \, sfphes.org/enchia/enchia_HDMT.htm.$
- Leadership in Energy and Environment Design—Neighborhood Development Tool: www.usgbc.org/DisplayPage. aspx?CMSPageID=148#randt; www.usgbc.org/DisplayPage. aspx?CMSPageID=2451; www.nrdc.org/cities/smartgrowth/leed. asp; www.cnu.org/leednd.

tential health impacts and recommend ways to improve those impacts while still reducing greenhouse gas emissions and fossil fuel use. The HIA included eight objectives and associated priority actions, and explored how each had the potential to impact health. For example, the first two objectives addressed the need for higher density areas and the

creation of "20-minute neighborhoods," defined by the CEAP as "those in which a significant number of regular trips can be made in 20 minutes without using an automobile." According to the CEAP, 20-minute neighborhoods could increase physical activity, decrease collision fatalities, and lower air pollution by encouraging travel by walking or biking.

To create effective 20-minute neighborhoods, the CEAP cites the need for necessary retail destinations such as a grocery store, park, bank, and library so that residents can easily access goods and services by foot or bicycle. High street connectivity, safe pedestrian conditions, and access to public transit are also important factors in the success of a 20-minute neighborhood. However, the HIA noted that higher density areas may increase the urban heat island effect, which could have negative health outcomes on vulnerable populations like the elderly. Overall, it was determined that most of the objectives in CEAP have positive effects on both the environment and public health; however, the HIA did recommend that the few negative health impacts of CEAP (like increased urban density) be mitigated with improved urban design features and land-use planning.

with recommendations for potential mitigation of negative health consequences. These four health determinants focused on air quality, noise, safety, and retail planning. For example, the community concern surrounding air quality at the JLG site—given the close proximity to the major highways and the Port of Oakland—focused on the relatively high levels of ambient particulate matter and other vehicle-related pollutants, which could cause individuals living in the senior housing to experience "relatively higher rates of chronic and acute respiratory illnesses and higher rates of morbidity due to asthma compared to people living further from these pollution centers."

This was significant since the HIA revealed that no central ventilation system was originally planned for the individual residences in the housing unit. Accordingly,

the working group was able to engage with the developer to discuss how the proposal might affect heath determinants and outcomes and to work together to identify possible solutions.

CONCLUSION

The growing use of HIA to inform landuse decisions in the U.S. highlights the potential this tool has to promote positive health outcomes. The growing experience with HIA, through collaboration with the public health community, is yielding results that produce healthier and more sustainable communities. Today, there are many resources and opportunities for planners to incorporate some aspects of HIA into research on specific land-use issues. Planners should familiarize themselves with the HIA tools available and evaluate the potential benefits of the use of HIA in land-use decision making.

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Jack London Gateway HIA

The Jack London Gateway (JLG) project was a proposal by the East Bay Asian Local Development Corporation (EBALDC) to build a 55-unit low-income housing development for seniors with additional retail space to be completed in the underutilized parking lot of the existing Jack London Gateway Shopping Plaza located in West Oakland, California. The location for the proposed project was less than 400 feet from Interstate 980 and within 1,100 feet of both Interstate 880 and the Port of Oakland.

Health Impact Partners (HIP) expressed interest in providing technical assistance to several local organizations to perform an analysis of the development project. During the assessment phase, HIP, in conjunction with other key stakeholders, isolated and prioritized four specific health determinants

the HIA participants recommended measuring and modeling wind and air patterns in order to define the extent of the potential problem objectively and to aid in planning appropriate solutions, such as the inclusion of mechanical ventilation systems with modest filtration to reduce pollution indoors. Although EBALDC would not commit to including a ventilation system with air filters for the private residences, it did undertake several steps as a result of the HIA process, including changing proposed balconies facing the freeway into bay windows, designing the ventilation system for the common spaces with air filters, modifying the plans to include a main rear entrance through the garden area for increased safety and connection with the existing community, and further engaging the community around security issues. This HIA is notable because



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