Health Impact Assessment as a Tool for Engaging Stakeholders and Addressing Health Trends in Land Use and Community Planning

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> *"….effective participatory methods involve collaboration, dialogue and interaction. They are inclusive. They are not reactive, but focused on anticipating and defining future actions. They are self-organizing both in content and membership. They challenge the status quo and ask hard questions about things otherwise taken for granted."*
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> *- Judith E. Innes & David E. Booher (Innes & Booher, 2004)*

Introduction

Land use and community planning decisions have significant impacts on the health and quality of life of community residents. Many of the most urgent health challenges facing our country, including nutrition, physical activity, obesity, motor vehicle accidents, and unhealthy housing, are directly influenced by the design and maintenance of neighborhoods, transportation and other infrastructure systems, and individual buildings. As planning practitioners and organizations position themselves to address these challenges, Health Impact Assessment (HIA) may play a particularly important role. This paper discusses HIA as a tool that planning practitioners, governments, and community organizations can use as they strive for meaningful stakeholder engagement in their planning efforts. HIA also provides means for identifying and mitigating potential negative health impacts and for maximizing positive health benefits. Using an ongoing HIA of a proposed freight facility in Maryland as a case study, this paper provides lessons learned from conducting a HIA in parallel with a land use decision-making and regulatory process.

Stakeholder Engagement in Land Use and Community Planning

Land use planning is frequently viewed with distrust by residents and communities (Bockmeyer, 2000). This distrust is particularly pronounced in low-income communities and communities of color due to the legacy of planning and land use decisions with negative impacts on these populations (Bockmeyer, 2000). For example, discriminatory housing policies and the federal highway development movement in the 1950's and 1960's resulted in widespread relocation of white residents and business from urban centers to suburbs across the United States, resulting in severe disinvestment in cities. These same policy legacies have contributed to many of the current and pervasive health conditions faced by communities across the country, such as obesity and poverty-related health outcomes. For example, neighborhood disinvestment has contributed to neighborhoods of concentrated poverty (Berube & Katz, 2005). Evidence links residence in these neighborhoods with many poor health outcomes, including mortality, poor child and adult physical and mental health, and limited access to resources such as education and employment, which in turn can contribute to problems such as poverty, housing instability, and homelessness (Ellen, Mijanovich, & Dillman, 2001; Kawachi & Berkman, 2003; Diez Roux, Nieto, & Muntaner, 1997; Waitzman & Smith, 1998; Berube & Katz, 2005).

Recognizing the community frustration and distrust that arose from these land use planning and policy decisions, planners identified new models that sought to directly address the needs of community residents. One such model, "advocacy planning," specifically argued that the role of urban planning was to advocate for the needs of low-income, disenfranchised populations (Edwards & Lawson, 2005). During this same time period, federal agencies such as the U.S. Environmental Protection Agency sought to increase their stakeholder involvement and public participation methods by conducting direct public outreach, working with communities to develop consensus agreements, and using tools such as roundtables and charrettes to improve the agency's processes (U.S. Environmental Protection Agency, 2001). Federal policies, such as the National Environmental Policy Act (NEPA) of 1969, also sought to strengthen and require stakeholder engagement in land use and environmental planning (Ashford & Rest, 1999). As a result, many public engagement processes now used in the field of land use planning are mandated by law, such as: written public comment periods on proposed development projects; public hearings; and the use of public commissions, advisory committees, or task forces (Innes & Booher, 2004). However, when done inadequately, "flawed" public participation efforts can result in lawsuits that stall project development for years (Innes & Booher, 2004), and can result in stakeholders organizing in response to a perceived urgent issue or problem, rather than being engaged from the outset of a project proposal (Myerson, 2004) where dialogue, trust, and agreement can be developed.

Emerging Public Health Trends

Many of today's pressing public health issues are rooted in the environmental conditions that shape individual behavior. For example, neighborhood design can impact obesity through automobile use and physical inactivity, mental health through social integration and social capital, and chemical exposures through disproportionate waste disposal in low-income areas (Dannenberg et al., 2003). One in every three adults in the U.S. is obese, and nearly one in five children between the ages of 6 and 19 are obese (Centers for Disease Control and Prevention, 2009). Nearly 24 million people in the U.S. have diabetes, and an additional 57 million have prediabetes, putting them at high risk for developing type 2 diabetes (Centers for Disease Control and Prevention, 2009). Nearly 20% of the U.S. population, and nearly 50% of African-Americans, live in "poor neighborhoods," where at least 20% of the residents are poor (Robert Wood Johnson Foundation, 2011). Partnerships between public health and planning professionals will be critical in addressing these rising public health challenges.

An associated challenge is making sure planning and design solutions to unhealthy environments are sustainable. According to a review of community-based interventions by the Robert Wood Johnson Foundation, building the capacity and agency of affected communities is an especially important aspect of interventions targeting the built environment (Braveman, Egerter, & Barclay, 2011). Community capacity is an important social justice issue: if communities of higher socioeconomic status have disproportionate voice in planning decisions, the benefits of Smart Growth and other planning initiatives will not accrue to disadvantaged communities (Dannenberg et al., 2003). Health Impact Assessment (HIA) is one promising tool to help planning and public health professionals confront major public health concerns and strengthen stakeholder engagement.

Health Impact Assessment as a Tool for Stakeholder Engagement

HIA is a systematic process to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population (Committee on Health Impact Assessment, 2011). HIA also provides recommendations on monitoring and managing those effects. HIA proceeds through six steps: screening, scoping, assessment, recommendations, reporting, and monitoring and evaluation. Ideally, the process requires teams of professionals from multiple disciplines to pool their strengths with the community's; thus, the process offers the opportunity for multi-disciplinary and community collaboration which elevates and addresses community concerns.

The HIA process centers around five core principles: democracy, equity, ethical use of evidence, sustainable development, and a comprehensive view of health (Committee on Health Impact Assessment, 2011). Three of these – democracy, equity, and ethical use of evidence - lend strength to HIA as a community-oriented planning tool.

- Democracy: As highlighted above, the public does not always have the opportunity to be authentically engaged in decisions that will substantially affect their lives. Policy makers may not be fully informed about all the potential outcomes of their decisions, or are not held accountable to the needs of underserved and underrepresented groups. HIA can facilitate stakeholder engagement by providing space for deliberative democracy in decision-making.
- Equity: HIA also focuses on the equity impacts of decisions and can incorporate equity into a formal planning process. As an integral part of scoping, HIA practitioners identify vulnerable populations and consider impacts the proposed project may have on those groups. Some individual HIAs may even choose equity as a specific area of focus; however, HIAs generally incorporate equity as an overarching value and consider it a mediator of health outcomes.
- Ethical use of evidence: A strong HIA recognizes that community-based research practices create a necessary balance between community control and scientific rigor. Validating community perspectives and incorporating them into the final recommendations can shape planning decisions. Furthermore, it may increase community buy-in; reports from HIA practitioners suggest that controversial proposals may avoid litigation though HIA stakeholder engagement processes (Stakeholder Participation Working Group of the 2010 HIA in the Americas Workshop, 2012).

While full and meaningful stakeholder engagement is part of the ideal HIA, it can also be one of the most difficult components to achieve. As the number of HIAs grows, practitioners have accrued lessons learned and best practices for stakeholder engagement. Human Impact Partners recently published *Guidance and Best Practices for Stakeholder Participation in HIA*, which recommends strategies for creating meaningful stakeholder involvement that contributes valuable and unique information to the HIA process (Stakeholder Participation Working Group of the 2010 HIA of the Americas Workshop, 2012).

Case Study: HIA of the Proposed Baltimore-Washington Rail Intermodal Facility

Project Overview

Decision-makers at the local, state, and federal levels are in the process of evaluating plans to develop a Baltimore-Washington Rail Intermodal Facility. The purpose of the facility would be to transfer containers between trucks and double-stacked trains in order to increase the amount of long-distance freight cargo moved on rail. The facility would use at least 70 acres of land for various operations, including rail tracks for trains entering and exiting the facility; space for storage tracks and working tracks for loading and unloading freight containers; paved areas that would accommodate approximately 500 wheeled parking units and 700 stacked containers; areas for employee parking; operations and maintenance buildings; lighting and security; and areas for stormwater management (CSX Corporation). The facility would operate 24 hours a day, 7 days a week, and is expected to generate up to 900 truck trips daily, with the majority of truck traffic occurring between 8 a.m. and 7 p.m., and 95% of the truck traffic occurring Monday through Friday. The CSX Corporation, the major private sector stakeholder in this project, is considering four sites for this facility in Maryland. Residents living near the four potential site areas have conveyed their fear, uncertainty, and concern regarding the facility. Common concerns raised by residents at all of the potential sites include impacts on traffic routes that are already over-capacity; noise impacts; loss of community, neighborhood cohesion, and neighborhood assets such as recreational and open space; loss of local businesses and employment opportunities; and degradation of environmental quality, including air and water quality.

To bring the health implications of the proposed facility to the forefront, the National Center for Healthy Housing (NCHH), a nonprofit corporation based in Columbia, Maryland, is conducting a HIA that will inform the selection of the project site as well as the design, construction, and operation of the facility.[1] This project is also undergoing environmental review under NEPA. NCHH is conducting the HIA separate from, but parallel to, the NEPA process. Residents are particularly distrustful of the NEPA process, and have voiced concerns that the NEPA analysis will not examine resident concerns and will not use adequate assumptions regarding existing conditions and projected population growth in the surrounding areas.

Recognizing these concerns, NCHH hosted three community forums to gather input from residents on how the proposed facility may affect the health of the community. The community forums also provided an opportunity for residents to learn more about the process and value of HIA. Nearly 100 residents and other interested stakeholders attended the three forums. NCHH also responded to community requests for additional presentations to accommodate residents who were not present at the community forums, and presented at two additional community meetings to gain additional feedback on the proposed project scope, reaching an additional 45 individuals. Community residents also participated in a two-day HIA training for federal, state, and local agencies and community residents, conducted by Human Impact Partners. The training introduced participants to the HIA process, essential steps, tools, and methodologies. The training also provided an opportunity for diverse stakeholders and decision-makers to discuss the proposed Baltimore-Washington Rail Intermodal Facility in a constructive way.

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Lessons Learned, Challenges, and Opportunities

Extensive stakeholder engagement requires thoughtful planning and intensive time commitments to ensure a thorough and meaningful process. One of the major challenges in the Baltimore-Washington Rail Intermodal Facility HIA has been managing the expectations of all stakeholders of what the HIA will and will not accomplish. The HIA is still underway, and the impacts on the HIA on the decision-making process are yet to be determined. However, to date, much value has already been gained through the HIA process; these lessons shed light on how HIA can be used as an effective tool to improve both health and land use planning processes.

First, by placing health protection and promotion as core values in this HIA, community residents and community organizations align with HIA values and trust its intentions. Second, the HIA process has brought a diverse group of stakeholders and decision-makers together, using health as the focal point of conversation. The HIA has communicated issues of resident concern to decision-makers and provided avenues for analyzing and addressing these concerns early on in the decision-making process, rather than at the end when concerns are likely to be more contentious. Finally, the tools, methods, and core values of HIA allow for the breadth of resident concerns to be voiced, considered, and analyzed using a mixture of qualitative and quantitative methods, giving value to residents' lived experience. Residents have expressed that the community forums and presentations convened through the HIA process provided an opportunity for resident concerns to be heard in ways that the NEPA public input process has not.

Although the HIA process and the tools used to conduct a HIA can be valuable in addressing health impacts of land use planning and improving stakeholder participation in planning processes, practitioners have much to learn about the future of HIA as it relates to regulatory planning processes. There are debates among HIA practitioners over the benefits of HIA being incorporated into regulatory approaches, such as Environmental Impact Assessments under the NEPA process (Bhatia & Wernham, 2008). Regulatory approaches could strengthen the influence of HIAs on the decision-making process, provide consistent and standardized analytic methods, and place health as an integral and central element of land use regulations and processes (Dannenberg et al., 2003). However, practitioners have had mixed results integrating HIAs into regulatory processes and have concerns of diluting HIA values, such as equity, and the integrity of stakeholder engagement methods through a standardized regulatory process, possibly resulting in HIA becoming "another technocratic tool" (Human Impact Partners, 2012).

Conclusions

The connections between the built environment and health are well established. As planning and public health practitioners position themselves to address pressing public health challenges of the 21st century, HIA will be one important tool. HIA can assist planners in creating meaningful stakeholder engagement in their planning processes. Additionally, HIA can help planning and public health professionals identify and mitigate potential negative health impacts and maximize potential positive health benefits resulting from land use decisions. Although HIA may not be appropriate in all land use planning efforts, planning practitioners can learn from the core values of HIA, HIA stakeholder engagement guidance, and HIA methods as they strive to improve their planning and decision-making processes.

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