



# ENGAGING VULNERABLE POPULATIONS

in Health Impact Assessment

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## **1. Introduction**

HIAs evaluate the potential consequences for the health of a community of a proposed policy, project, or plan. HIA practitioners strive to engage the target community through meetings, surveys, focus groups, and other forms of outreach so that the particular health needs of the affected community and the impact of the proposal on community health can be accurately identified.

However, because outreach relies on members of the community to affirmatively participate in outreach activities, some segments of the population are less likely to participate than others. In particular, those who lack access to information, have limited mobility, face physical or linguistic barriers, or are socially isolated may choose not to participate, fear they cannot participate, be unable to participate if they want to, or may not even be aware of the opportunity. Consequently, those who do not attend community meetings or participate in focus groups are also more likely to be members of the vulnerable populations whose interests most need protection.

In order to have an HIA process which accurately portrays the challenges and opportunities faced by the community, the engagement process must be representative of the community as a whole. If the engagement process does not include vulnerable populations, the important perspectives of these groups will not be represented. Thus, in designing the engagement process for an HIA, practitioners must identify which populations are most vulnerable and most likely to be overlooked in the target community. Once these populations are known, practitioners must work to design inclusive forms of engagement which make it possible for vulnerable populations to participate.

In this paper, I will address the challenge of community engagement with vulnerable populations in the HIA process by considering two questions:

1. Which populations may be overlooked by common methods of community engagement?

2. What novel strategies can practitioners use to increase participation from vulnerable groups, particularly given the constraints of deadlines and tight budgets?

The second section of the paper reviews existing literature on challenges in community engagement, working with vulnerable populations, and incorporating these elements into HIA. The third and fourth sections comprise two phases of original research. First, the third section reviews a selection of completed HIAs from eleven states to evaluate the current standard of community engagement with vulnerable populations. Then, in the fourth section, I report the results of interviews with selected HIA practitioners and policy experts on the role of community engagement in HIA and the challenges of working with vulnerable populations. The fifth section establishes a framework for practitioners for engaging vulnerable populations in HIA. The sixth section concludes.

## **2. Literature review**

### **Strengths of and challenges to effective community engagement**

In Sherry Arnstein's seminal paper on citizen participation in planning (1969), effective community engagement is framed as a challenge in which the planner must strive to guide the planning process while allowing its outcome to be driven by the community, climbing ever higher on the "ladder" of participation as this ideal is approached. This is a difficult balance to meet, since it is all too easy to allow citizen participation to become a token element of the planning process, in which an essentially uninvolved community takes part in an "empty ritual" that is dominated by the planner and other officials. Arnstein directs planners to engage the community more fully by moving up the ladder of citizen participation, culminating at its highest rungs with the planner ceding control to the community, taking direction and heeding the desires of the public to create a citizen-owned outcome, or even turning complete control of the project and funds over to community groups.

Quick and Feldman draw a distinction between "participation" and "inclusion" in community engagement (2011). Participation occurs when planners seek community input on the content of a particular project, plan, or program; true inclusion requires ongoing community "coproduction" of solutions to public policy issues. In this framework, a community may participate without being included; to be included, the community, as in Arnstein's ladder, will feel ownership over the outcome of the planning process. Processes which seek participation only may exacerbate existing tensions between the community and public officials, while inclusive processes will mediate these tensions. These two dimensions of community engagement do not work at cross-purposes, however; planners should seek high levels of both participation and inclusion for their constituents.

Nora Roberts (2004) identifies the twentieth century as a time of both increasing interconnectedness and decentralization, leading to an expansion of direct citizen participation. The benefits of direct participation range from strengthened group identity to a more educated citizenry and the legitimation of government actions. However, along with expanded participation comes a set of challenges. Among other dilemmas, in a

complex society, direct participation struggles to incorporate all groups seeking representation. Additionally, it remains to be seen whether groups which have been “systematically excluded” from democratic processes will find a place in direct participation.

### **Defining vulnerable populations**

Within the context of health research, certain groups are defined as vulnerable because certain conditions or factors may limit their ability to consent to treatment or to understand and accept their role in research (Ruof 2004). Guidelines for the protection of vulnerable groups arose first in the aftermath of human rights violations committed in health care and other scientific research during World War II, and have since been extended to include all kinds of scientific and social science research which involve human subjects. Vulnerable groups may include people who are unable to understand the risks and benefits of participating in research, or those who may be subject to coercion. In the context of medical research ethics, groups considered particularly vulnerable include children, pregnant women, prisoners, and those with limited English speaking abilities (Georgia Tech IRB). However, vulnerability is not necessarily limited to these groups, and for any study undertaken, the practitioner must consider whether there are populations which will be particularly vulnerable in that specific instance.

Within the context of planning, the concept of vulnerability incorporates a wider variety of attributes, including biological factors, social constructs, and exposure to adverse environments (Kochtitzky, 2011). Any population which is “at elevated risk of suffering harm as the result of one or more” factors which may include age, gender, race, ethnicity, education, or poverty, among others, can be considered vulnerable to some extent (Kochtitzky, 2011). Given the wide array of attributes which may make a person vulnerable, everyone can expect to be a member of a vulnerable population at some point in his or her life.

Vulnerability heavily influences individual and group health, defined by the World Health Organization as “a state of complete physical, mental, and social well-being” (1986). Vulnerability factors may reduce each of these elements of an individual’s health.

Vulnerability can be either exacerbated or ameliorated by the choices made in planning and policy-making. Vulnerability may prevent individuals from participating in the planning process, by presenting social, economic, or physical barriers to access.

In the context of the built environment, Kochtitzky (2011) describes universal design as the creation of built environments which reduce or eliminate the vulnerability of individuals or groups, in part by removing physical barriers to access. This concept extends to the principle of environmental justice that the participation of vulnerable people in the decision-making process recognizes their right to self-determination and status as equal partners in community design, planning, and governance (Kochtitzky, 2011). Equal participation and access, vulnerable populations improve quality of life for vulnerable populations.

### **Challenges for engaging vulnerable populations in planning**

One of the foremost challenges for engaging vulnerable populations in the planning process is finding adequate resources to conduct the outreach processes that are necessary to engage those who are unable or unwilling to participate in traditional engagement processes. Rahder (1999) details an extensive program in which hundreds of women identified as being at risk of abuse – including aboriginal women, racial minorities, immigrants, women with disabilities, and women from rural or isolated areas – were engaged in a comprehensive, multi-stage, three-year planning process for new services for women at risk of abuse. While this exemplary process succeeded in collecting and applying the input of a diverse cross-section of women, conducting such a complex and extensive engagement process may be outside of the capacity of planners in many situations. Sirianni (2007) similarly found that the city of Seattle was able to create a neighborhood planning process that encompassed the views of diverse population groups, but that significant investments of time and funding were required of the city for this to be effective. Without this commitment from public officials, planners may be unable to constructively interact with a full range of diverse populations with varied needs.

Analyzing the provision of affordable housing in Buffalo, New York, Silverman (2009) found that in addition to the inadequacy of funding for supporting community



participation, the expression of localized needs was often suppressed by planning processes which encompassed large geographic areas. In this scenario, the input of disadvantaged populations, such as residents of low-income or minority neighborhoods, could be outweighed by that of institutional or middle-class voices from the same region which tend to have a greater voice in the planning process. The voice of certain dependent populations, such as children and adolescents, may also be suppressed in the planning process in favor of other, privileged voices, such as those of adults and parents (Passon & Levi 2008). Because these populations may only be engaged in the planning process with the consent of their parent or guardian, those who participate may not be representative. Furthermore, since they have limited economic power and ability to choose their location, they are often perceived as irrelevant to the planning process, which is geared towards adults who make economic and residential location decisions.

### **Challenges for engaging vulnerable populations in HIA**

Within the realm of health impact assessment, many of the same challenges to engaging vulnerable populations exist. Small budgets and time constraints limit the ability of planners to reach out to their target populations. However, the engagement of vulnerable groups is particularly important in HIAs, which tend to be extremely localized and need to consider the impacts on the population most likely to be affected by the project being assessed. Dutta-Bergman (2004) finds that individuals who are more aware of their health and health-related issues are also more likely to become involved in planning processes. However, people who are already health-conscious are less likely to be adversely impacted by the potential negative effects of a plan or project than those who are not aware of their own health or issues that could affect their health. In this scenario, the HIA process will attract participation from less vulnerable populations, while failing to attract the individuals or groups who are most likely to need their views represented in the planning process.

Kearney also notes that citizen participation in HIA has the potential to be “tokenistic” (2004), and that engaging the community effectively can be a difficult achievement. Planners are often unable or unwilling to meet the needs of the community to

allow for effective engagement, such as holding meetings at times that are acceptable for the majority of the community; furthermore, all parties are often prepared for the worst possible outcome of community engagement efforts (Kearney 2004). In this environment, vulnerable populations who may require more accommodations than other communities to participate in planning processes are more likely to be turned off or shut out by the engagement process.

Kwiatkowski (2011), documenting an HIA process used by planners working with Canadian indigenous populations, identifies cultural barriers to effective community engagement with a Western HIA process. In cultures with beliefs about health and communication which differ from common Western practices, efforts by planners to engage the population may prove futile if these differences are not understood, acknowledged, and respected. This challenge applies not only to indigenous populations, but also to immigrant groups and religious minorities which may have differing cultural beliefs.

### **Emerging methods of community engagement**

Emerging methods of community engagement emphasize the use of new technologies to expand access to community groups. Generally increased access to the planning process provided by new, wide-ranging tools for engagement has the potential to extend to greater involvement for vulnerable populations. In addition, by reducing the cost of engagement, additional resources can be extended to engaging particularly vulnerable groups which may require extra outreach to become involved. However, barriers to engagement for vulnerable populations may remain: some vulnerable groups, such as low-income individuals, may not have home internet connections which allow them to access engagement processes. And new technologies do not specifically address the challenges faced by many vulnerable populations: they may not include accommodations for disabilities; be documented for participation in non-dominant languages; or be adapted for people who are not accustomed to using sophisticated technologies. For example, Rinner & Bird (2009) found that in a case study, participants who rated themselves as very adept computer users struggled to use advanced functions of a participatory mapping tool. By

comparison, some members of vulnerable populations, such as elderly people, who are not familiar with computer technology, are likely to struggle even more. This may limit their ability to participate in processes that rely heavily on technology.

In addition, challenges to the use of technology may also come from planners. While technological methods are able to assist planners in reaching out to communities, this can only happen if they are adopted by planners. Slotterback (2011) found that planners preferred to adopt technologies that provided information or allowed the collection of basic feedback, rather than more complex tools that “enhanced” collaboration between planners and citizens. These basic tools may fail to improve the engagement process for vulnerable populations in any meaningful way, instead mimicking existing methods of community engagement.

However, new technologies for citizen participation also provide new opportunities for planners and communities. Peng (2001) points out that tools such as web-based GIS have the ability not only for users to comment on alternatives provided by planners, but to suggest their own alternatives. Given that vulnerable populations may be those whose needs are least likely to be recognized by planners, the opportunity to suggest new alternatives which better meet users’ needs can provide these individuals or groups with expanded access to the planning process. Mandarano et al. (2010) and Stern et al. (2009) find that digital participation technologies can increase trust, relationships, and social norms – the elements of social capital – relative to traditional participation methods. By increasing the social capital of vulnerable populations, new methods of community engagement can strengthen the community’s ability to respond to adverse health impacts and participate in future planning processes.

Prior research establishes the importance of community engagement in general and for vulnerable populations (Arnstein, 1969; Roberts, 2004), as well as the challenges which are particular to engagement with those who most need to be engaged due to their special needs (Dutta-Bergman, 2004; Kearney, 2004). While new technologies promise greater participation from all (Mandarano et al., 2010; Stern et al., 2009), it remains to be seen whether these methods will succeed in reaching new audiences (Slotterback, 2011). This

paper examines the reality of current community engagement practice in health impact assessment through an inventory of the community engagement processes used in completed HIAs as well as through the experiences of HIA practitioners and policy experts. It then poses a framework for practitioners to structure participatory processes and address pitfalls inherent to engagement and HIA.

### **3. Inventory of community engagement processes in completed HIAs**

In order to understand the current state of engagement methodology and engagement of vulnerable populations in HIA, a set of completed HIAs were evaluated. Over 200 HIAs have been completed or are in progress in 35 states and the District of Columbia since 1999 (Health Impact Project). As this number has grown, HIA practice has evolved to suit local needs and requirements and has been applied by a wide array of practitioners. In the first stage of research, a set of completed HIAs were reviewed and the community engagement processes used were evaluated. The methodology and findings of this stage are presented below. The HIA evaluations were followed by a second stage of research in which HIA practitioners were interviewed regarding their views on community engagement. That process is documented in the next chapter.

#### **Methodology**

Using the HIA database maintained by the Health Impact Project, HIAs were identified based on several criteria. First, the pool was limited to complete HIAs for which a full report was available in order to have enough information to evaluate the community engagement process used in the HIA. HIAs were also limited by subject matter to those for which the decision-maker in the assessed plan, project, or policy was a local level agency, and to those which regarded a built environment-sector issue. The first criterion was chosen because a local decision is more likely to be influenced by the input of the local community, and those engaged are more likely to have a direct relationship with the outcome of the plan, project, or policy. The second criterion was chosen because proposed plans, policies or projects which will yield specific changes in the local physical environment can be easily understood by community members and linked to issues of health.

35 HIAs completed between 2004 and 2012 met all criteria. Of these, full reports for three were not found online. The remaining 32 were downloaded. 15 HIAs were excluded due to either methodology variations, such as not following the Health Impact Project's six steps of HIA, or because the report did not contain adequate information to evaluate the

community engagement process employed. Ultimately, 17 HIAs were fully evaluated. See Table 1 for a detailed breakdown of the identification process.

*Table 1: HIA identification process.*

HIAs identified: 35			
Report not found online: 3	Obtained: 32		
	Excluded:15		Evaluated:17
	Incompatible methodology: 8	Incomplete information: 7	

Each HIA was inventoried against a set of criteria specifying the community engagement process and engagement of vulnerable populations. General community engagement criteria identified the types of engagement processes used and the extent and influence of community engagement on the HIA outcome. These criteria examined all forms of community engagement used in the HIA process, not limited to the engagement of only those populations deemed vulnerable. Engagement of vulnerable populations inventoried what populations were identified as vulnerable and measured the extent to which these populations were targeted for community engagement efforts. The inventory catalogues engagement efforts that were specifically directed towards including vulnerable populations, and how successful all efforts were in engaging with vulnerable populations. See

Table 2 for detailed descriptions of included criteria.

Table 2: HIA evaluation criteria.

Criteria	
Engagement methods used	Types of engagement and frequency
Number of people reached	Estimate from numbers reported
Community influence in HIA outcome	When community input was sought during the process and degree to which HIA team reported incorporating input
Degree of selective to open engagement	Selective – stakeholder representatives chosen/asked to participate; open – anyone could participate
Vulnerable populations identified	Vulnerable populations identified as likely to be affected by the project being evaluated
Outreach to vulnerable populations	Whether or not members of identified populations participated
Methods for engaging vulnerable populations	Types of engagement used specifically to reach out to vulnerable populations

## Results

Fourteen of the seventeen inventoried HIAs incorporated a wide variety of community engagement methods. Forms of community engagement used included public meetings, advisory committees, surveys, focus groups, interviews, Photovoice, conference calls, rapid community HIAs, neighborhood tours, community walkability/bikeability assessments, and community mapping exercises. In particular, selective methods such as advisory committees and stakeholder interviews, as well as semi-selective methods such as focus groups, were frequently used. Among open methods of engagement, surveys and community meetings were conducted most frequently. All other methods of engagement were used by only a single HIA. Many HIAs combined more than one method of engagement, such as having an advisory committee involved throughout the process, while a survey was conducted incorporated during the assessment phase. Six HIAs combined selective and open engagement methods, while four relied on open methods only and three used only selective methods. In addition, four HIAs did not include any community engagement efforts.



The influence of community engagement processes varied between HIAs. In general, advisory committees had the greatest influence on HIA outcomes, as they often had input at least in the scoping phase of the project, allowing these committees to help determine what issues were considered at the forefront in the HIA. In several cases, advisory committees remained involved throughout the process, giving participants the opportunity to influence the HIA from beginning to end, including shaping both the scope and the recommendations. In some cases, advisory committees also shaped the public engagement process for the rest of the HIA, for example by designing surveys. However, advisory committees were in some cases composed of subject experts in public health and HIA, rather than stakeholders, and so are not representative of the community, and in some cases are not even from the community.

In contrast to advisory committees, surveys were primarily used to enrich the assessment phase of the HIA by providing baseline data about the community, although in two instances survey results were also reviewed during the scoping phase. The influence of other engagement methods varied between HIAs, but in general, more selective methods, such as interviews and focus groups, were given greater weight in determining the scope and recommendations of the HIA, while open methods of engagement were used primarily to provide background information or context.

Throughout the HIAs reviewed, engagement of vulnerable populations was scattered at best. Three HIAs, also those which did not include any community engagement process, did not identify any vulnerable populations affected by the project or policy under review. The remaining fourteen the HIAs identified one or more categories of people who were vulnerable and likely to be affected, and eleven reported some form engagement with members of these populations. Although this constitutes a majority of the HIAs reviewed, only five targeted outreach towards all vulnerable populations affected, while four sought to engaged some but not all of the populations which had been identified as vulnerable. The remaining two HIAs engaged members of vulnerable populations only incidentally, in that participation of members of these groups was allowed and reported but not targeted.

The most frequent way in which members of vulnerable populations were targeted was through the provision of surveys or other community engagement tools or processes in a minority language (most commonly Spanish). This was done by four HIAs. In addition, representatives of vulnerable populations participated on two advisory committees, and four HIAs conducted focus groups, interviews, or community meetings specifically for members of an affected vulnerable population.

*Table 3: Summary of HIA evaluations*

Criteria	Evaluation
Engagement methods used	
Number of people reached	0 - 264
Community influence in HIA outcome	From high (input incorporated early and often) to none (no engagement process)
Degree of selective to open engagement	From selective (advisory committees) to open (surveys, public meetings)
Vulnerable populations identified	Black, Asian, Hispanic, elderly, children, low income, other
Outreach to vulnerable populations	From extensive (significant successful effort made) to none (no effort made)
Methods for engaging vulnerable populations	Advisory committee representation, non-English language assistance

## **4. Interviews with HIA practitioners and experts**

While the formal HIA reports reviewed in the previous section provide an overview of community engagement in a wide variety of HIAs, they also frequently lack extensive descriptions of the processes used and outcomes achieved, and generally contain limited (if any) discussion of the challenges faced by practitioners in conducting community engagement. In addition, team members may face constraints related to their personal comfort and ability with engagement which are generally not discussed within HIA reports. In order to draw out specific insights of the constraints faced by practitioners in the community engagement process and in working with vulnerable populations, as well as to assess the perceptions of community engagement in the HIA process, practitioners and HIA policy experts were interviewed individually. This interview process added nuance to the snapshot of community engagement provided by the HIA evaluations.

### **Methodology**

Ten interviews were conducted with subjects who have extensive experience conducting HIAs, training HIA practitioners, or promoting HIA in policy. The subjects included personal and professional contacts, authors and researchers identified in literature searches, and practitioners who participated in evaluated HIAs. Subjects were initially contacted by email. Those who responded were contacted again to schedule a time to meet in person or over the phone. Four interviews were conducted by phone, while the remaining six were conducted in person. Interviews lasted between 30 and 60 minutes. All interviews were conducted anonymously, and effort has been taken to remove identifying details of practitioners or HIAs. Subjects answered a series of questions, including several questions about community engagement and the HIA process, as well as additional questions specific to engagement of vulnerable populations. See Appendix II: Draft interview questions for the complete list of prepared interview questions.

### **Results**

*Subjects' experiences with community engagement and HIA*

Interview subjects had a wide range of experiences related to community engagement and HIA. Several subjects have never conducted an HIA, but are primarily engaged in research, training, and promotion of HIA as a tool for evaluating policy and planning. Subjects working in this context also often had limited experience working directly with members of the community. Others have conducted a limited number of HIAs, but currently primarily provide training and technical assistance to other HIA practitioners. Finally, some subjects have extensive experiencing conducting HIAs in addition to other experience with HIA training and technical assistance.

### *The role of community engagement in the HIA process*

Interview subjects expressed a range of opinions on the role of community engagement in the HIA process. Several subjects felt that community engagement is an essential component of HIA. In this case, engagement increases the credibility of the HIA process within the community and provides legitimacy to the practitioner in the eyes of residents and community organizations. An HIA with an extensive community engagement process may find more acceptance among residents and local government officials, and community support for an HIA may lead to a greater likelihood that the recommendations of the HIA will be implemented.

Other subjects felt that community engagement is not always necessary and may not increase the quality of the HIA's final recommendations. Those with this opinion felt that HIA practitioners trained to understand the interaction between policy, planning, and public health are better equipped to identify health impacts than local community members with no specialized training in public health. One subject suggested that "the thoughtful public health person should understand the issues and have a pretty good idea what stakeholders are likely to say" making the actual community engagement process superfluous.

Furthermore, without understanding of this relationship, community members may prioritize issues that have little to do with the policy being assessed. In this case, practitioners either risk their local credibility by ignoring community input, risk their credibility with policy makers for introducing irrelevant issues, or divert resources from

the analysis of more pressing concerns. The responsibility of the practitioner is to gather “input, and then be able to balance [that] with what really makes sense,” from the findings of evidence-based public health research. NIMBY (“not in my backyard”) issues, which are extremely personal to the individual providing the input, also necessitate judgment calls on the part of the practitioner, who must “balance ... appropriate input, but [which] is not at all based on the community, it is just one individual’s thoughts” with public health data which is known to be accurate.

Subjects generally agreed that the type and subject matter of the HIA is relevant to determining appropriate levels and methods of community engagement. HIAs conducted on a local level which have a high level of impact and interest within the community are more conducive to community engagement. Subjects described issues appropriate to community engagement as “embedded” within the community, stating that “if you have a really location specific HIA it can be easier, because you have a defined ... 10,000 people who are affected; we can put up signs or hand out flyers.” On the other hand, HIAs conducted at the regional level and above (for example, a metropolitan area, several counties, or a state) are likely to gain less from community engagement. In part, this is due to the difficulty of capturing an accurate cross-section of the population affected by the project under assessment when looking at a large and diverse region. Additionally, issues examined at this level may be too abstract or long-range for community members to adequately understand how it would affect them. One subject noted these difficulties, saying,

“Big stuff like [regional plans], there is no way ... to do meaningful community engagement unless you piggy-back on stuff that regional organizations are already doing because it is expensive, it is difficult to design the meetings, the more people there are the more meetings you need to have, and it is hard to publicize things, and the time it takes to get everything together, I think that's been the stumbling block in every HIA I have worked on.

### *Challenges to effective community engagement*

Subjects identified a wide range of challenges to effective community engagement. Foremost among these was a lack of resources. HIA teams are often constrained by money, time, and personnel, all of which limits the extent to which community engagement is possible. Dealing with these constraints requires practitioners to be resourceful and flexible in their engagement practices.

HIA practitioners' training and expertise also presents challenges to community engagement. Practitioners must be comfortable conducting community engagement, able to choose and implement context-appropriate methods from a wide array of options. Furthermore, practitioners must be sensitive to their cultural, linguistic, or socioeconomic differences from the community they are engaging, and identify avenues for bridging those differences. However, some practitioners struggle with this, since formal training tends to emphasize the public meeting and not methods which actively engage the community, rather than merely informing.

“One of the first things we learn is how to do a meeting, and we sometimes struggle thinking outside the box, and really thinking about the context, who we want to engage with – what are their characteristics, what are their demographics, what is the nature of their home and work and experiences or challenges and how to respond to that as we design participation processes. I think those are skills that could be enhanced.

Subjects noted that even in the case of local projects, practitioners may find an enthusiasm deficit among residents who have not yet seen any outcomes from a project that may have been under discussion in their communities for months or even years: “It is difficult to get people interested in something before it happens. In a lot of cases people get engaged more once they see things being built or experience a specific impact on them.” Furthermore, the relationship between health and the physical environment is abstract, with impacts which are indirect and therefore difficult for community members to consider. Practitioners may struggle to engage community members with issues which will not affect them directly, or which will only have an impact after many years.

“When talking about health it can be a little bit more indirect, it can be longer term, the impact can be more distributed across the population, and there can be less of that immediate and direct impact on the individual. That can make it hard to get people interested and get them even noticing that there is a process by which they can engage.

### *Engagement of vulnerable populations*

Subjects felt that vulnerable populations present particular challenges in community engagement. These challenges can begin at the earliest stages of the HIA, when the practitioner is identifying stakeholder groups likely to be affected by proposal. Practitioners often rely on official data sources such as the Census or the American Community Survey to identify significant population sub-groups within the study area. However, some subjects acknowledged that this data can be flawed, noting that “there are data that are easily accessible, like Census data, that can be insufficient, [because] it is not updated frequently or it may miss details of the population” such as undocumented immigrants who refuse to speak to Census workers. In this situation, the practitioner needs to “think of what you can think of, gather the data you can gather, and then talk to the people that you know are affected and ask who else may be affected.” One subject referred to this principle as “snowballing.”

Practitioners may be culturally or socioeconomically very different from members of vulnerable communities, which may make it difficult for practitioners and community members to relate to and trust one another. In many marginalized communities, representatives of government or other official institutions may be distrusted due to historic patterns of neglect or harm. Vulnerable groups which remain marginalized may not feel welcome to participate in engagement efforts which involve the wider community. In addition, there may exist practical barriers to the participation of vulnerable groups, such as linguistic or physical limitations or scheduling challenges which prevent community members from participating in activities. Practitioners may be tempted to focus “on the typical public meeting, open house meeting, but those can be not very appealing, not very fun, not very accessible for people who are working or have children, who have

complex lives,” which ends up preventing members of more vulnerable populations from attending. One subject recommended that practitioners “look for ways to make [participation] accessible, to incorporate participation into things that people are already doing, [such as] community events where people might be attending, or reaching out to organizations that people might already be involved in, rather than requiring a new opportunity.” This may draw in community members who may otherwise think they do not have the time, energy, or resources to participate in public processes.

In order to engage vulnerable populations, subjects felt that practitioners must be sensitive to cultural or socioeconomic differences and make efforts to bridge the gap between the HIA team and the community. In the best case scenario, one subject described the practitioner as “being in the community and really understanding the place where [he or she is] doing the work [because] it gives legitimacy on top of being able to learn important information.” However, in the absence of an existing connection with the community, as either a full-fledged member or an established partner, many subjects recommended creating partnerships with community groups such as churches or non-profit services as a way to bridge that gap.

Strong partnerships allow practitioners to gain access to local communities. From the start, community-based organizations can help practitioners learn about the population they are dealing with, including “who is there, what is the extent of that population, what are some issues or concerns that that populations might have.” These community partners may be better able to communicate with a vulnerable group and can assist the practitioners in engaging residents. In addition, community partners can lend credibility to practitioners who are distrusted by the community and create legitimacy for the issue being addressed in the HIA. And partners may be able to provide resources such as language assistance which remove some of the practical barriers to participation. Over time, subjects pointed out that there is no substitute for establishing an ongoing relationship between the practitioner and the local community, because “building those relationships and getting people thinking about the policies and places that impact their health saves time when you actually start the HIA, it builds trust, and it can also really be an economy of scale and then you can use that repeatedly as you are looking at health impacts.”



## **5. Building a framework for engaging vulnerable populations**

Although not universal, the majority of HIAs identified in this study attempted to incorporate community engagement into the process through a wide array of methods. Engagement was also considered an important element of HIA by the majority of interview subjects. However, effective engagement did not always extend to vulnerable populations, even though these people may have been the most exposed to adverse health effects from a project, plan or policy. Successful engagement of vulnerable populations should not be separate from general community engagement, but rather an integral part of the process in which practitioners consciously incorporate targeted engagement in their HIA process. To help practitioners begin to think about involving vulnerable populations in their HIA process, a framework for engaging vulnerable populations is proposed below.

### *1. Look at prior HIAs for insights to your project*

There exists a growing body of HIAs conducted in the United States, as well as others conducted throughout the world. The Health Impact Project and the University of California Los Angeles HIA Clearinghouse, Learning & Information Center (HIA-CLIC) provide databases of completed HIAs which practitioners new to HIA can review. These completed HIAs are a valuable resource for new and experienced practitioners which provide blueprints for how to conduct a community engagement process – or how not to do so – by helping to identify affected populations and the means and value of reaching out to those groups.

#### *a. Identify stakeholder groups and vulnerable populations*

In order to conduct an effective community engagement process, let alone ensure the involvement of vulnerable populations, practitioners must first identify the different stakeholder groups which could be affected by the proposal under review. This should be done at the beginning of the scoping phase of the HIA in order to maximize the potential for involving these groups in the HIA process. Past HIAs of similar projects can provide insights into groups which may be affected by the proposal under review.

#### *b. Evaluate available engagement methods*

HIAs which affect similar populations will reveal methods of engagement that may be effective in reaching out to those groups. While selective engagement methods can

ensure the representation of vulnerable populations, vulnerable groups are not necessarily homogenous. Input from a small number of group members may not capture a representative view of the population as a whole. On the other hand, open methods of engagement have the potential to include a wide array of viewpoints, but are not always successful in garnering responses. In the Derby Redevelopment HIA (2007), only 13 individuals participated in the Photovoice project, of whom only 7 were area residents (six other individuals were staff from the agency conducting the HIA). In the Aerotropolis HIA (2012), a Spanish-language survey was made available, but no responses were gathered.

*c. Assess potential benefits of engagement processes*

Practitioners can also study HIAs of similar proposals and geographies to understand when extensive engagement will add significant value to the outcome. For example, interview subjects generally agreed that HIAs which are conducted at very fine scales, such as a neighborhood or town, stand to benefit the most from community engagement, since residents are most invested in and have the most local knowledge about issues which are close to home. Reviewing completed HIAs of a similar nature would reveal whether community engagement was successful and valuable, and give an idea of the role that engagement can play in the HIA in process.

*2. Identify partners to act as bridges to the community and select modes of outreach that will connect with the community*

Once vulnerable populations affected by the proposal under consideration have been identified, and an engagement process chosen, practitioners must find a way to draw individuals and communities into the engagement process. However, as several interview subjects noted, members of many vulnerable populations have been historically marginalized through oppression, violence or the violation of their civil rights. As a result, members of these populations may distrust the government and members of mainstream groups. This distrust often extends to HIA practitioners, who may be government representatives or members of the majority socioeconomic class. This creates a barrier between community members and the HIA practitioners, which prevents an effective engagement process from occurring. When practitioners do not already have a strong relationship with the community, partners in local organizations can provide a bridge which allows the HIA team to connect with the community. Once groups to target for

outreach are known, organizations which may include faith-based organizations, social service providers, or advocacy groups, can help evaluate possible methods for barriers to engagement and strategies for overcoming those barriers.

### *3. Document and quantify outreach – methods & results*

A common problem noted in the HIA inventory is that community engagement was not always discussed. Of the HIAs evaluated here, six had to be excluded from the inventory because they did not include any discussion of community engagement activities. Other HIAs included only minimal descriptions of engagement efforts, making it difficult to determine the true extent of the engagement process. Although engagement may have occurred, without documentation the quality of the engagement process and its contribution to the HIA cannot be assessed. Lack of documentation also limits the value of the HIA as a learning tool for other practitioners. During and after the HIA process, practitioners should record engagement efforts which were used and the resulting level of participation. These details should be included in an outline of the public engagement process in the final HIA report, making the completed HIA a valuable resource for future HIAs. This should not be considered an optional addition to an HIA report, but rather a minimum standard for future HIAs. An outline should document each individual activity along with essential information about the activity, including:

- The purpose of the activity
- When and where the activity took place
- Who the activity targeted
- The number of participants
- Information collected through the activity

### *4. Evaluate outreach – methods & results*

Practitioners should also take time to evaluate the entire process. By doing so, and documenting this evaluation, practitioners will inform their own future work and provide further resources for future HIAs. Because HIA is a multi-step process, with multiple phases at which community engagement can be employed, it is possible for an engagement process to have a different impact on the outcome of the HIA depending on the point or points when engagement occurs. Therefore, it is essential to evaluate the entire process. However, HIA is also designed to influence decisions about a proposal in order to change the health

outcomes. Therefore, participation can only be considered successful if it shapes the recommendations of the HIA. Because of these multiple demands, it is important to evaluate both the outcomes of the engagement process, as well as the engagement process itself.

This can be done by employing an evaluation which is part formative and part summative. Formative evaluations can be used to evaluate individual participation activities. When evaluating an engagement activity, practitioners should consider both whether the activity was successful, and if it was not, what factors may have contributed. Below, several hallmarks of successful engagement activities are listed, along with possible pitfalls of activities which fall short.

*Table 4: Framework for formative evaluations*

<b>Pillars of a successful activity</b>	<b>If the answer is NO</b>
The intended audience participated	<b>Did the time or place of the activity prevent the intended population from attending?</b>
The participation level justified the resources expended	<b>Did the activity receive sufficient and appropriate marketing?</b>
The intended information was collected	<b>Was the correct audience being engaged?</b>
Participants felt that their input was accepted and useful	<b>Was the input acknowledged and incorporated in the HIA process and final output?</b>
The activity enhanced the overall HIA process	<b>Were the correct questions asked?</b>

Summative evaluations employed following the process can be used to evaluate the process as a whole. The Social Goals model of evaluating engagement processes fits well with the goals of HIA itself. The Social Goals model is primarily a summative form of evaluation which looks at the outcomes of the participation process being evaluated. Below, each of the Social Goals is listed and applied to HIA. When evaluating the

engagement process, practitioners should ensure that each question is answered in the affirmative.

Table 5: Framework for summative evaluations

<b>Social Goal</b>	<b>Applied to HIA</b>
Incorporating public values in decisions.	<b>Do the HIA's recommendations reflect and address the concerns of the community?</b>
Improving the substantive quality of decisions.	<b>Does the HIA alter the course of the plan, policy or project to improve health?</b>
Resolving conflict among competing interests.	<b>Does the HIA alter the course of the plan, policy or project to improve health <i>without sacrificing the original goals of the project?</i></b>
Building trust in institutions.	<b>Did the HIA improve the relationship between the community and practitioners and officials?</b>
Educating and informing public.	<b>Do community members have a better understanding of the proposal and its potential consequences for their health?</b>

##### 5. Reinforce new relationships to build on and use in the future

Following the completion of an HIA, practitioners should reinforce the new relationships formed with partner organizations and within the community. Doing so will help practitioners gain support within the community for their recommendations; encourage community members to remain engaged in issues which can affect their health; and encourage partners and community members to contribute to practitioners' future projects. Practitioners can do this by sharing results of the HIA with the community and keeping the community involved in ongoing monitoring and evaluation efforts.

## **6. Conclusion**

### **Limitations**

#### *HIA Evaluations*

The HIA evaluations should be considered carefully. Because they are restricted to HIAs in the built environment sector, and projects decided at the local level, the findings may not apply to every HIA. The limited sample size (of 35 HIAs initially identified, only 17 were able to be fully evaluated) further restricts the generalizability of the evaluations. Furthermore, few HIAs thoroughly documented their community involvement processes. HIAs with active and successful engagement processes may have been omitted if the document did not make mention of it, and HIAs which were evaluated may still have failed to capture all elements of the engagement process employed and the extent to which they reached members of the public. Where HIAs did not explicitly discuss the definition of vulnerable populations which was used, I inferred that the challenges of vulnerable people were relatively unexamined within the HIA process. There was little attempt to self-evaluate the overall success of engagement processes, and so judgments of the influence of involvement in the outcomes of HIAs are my own.

#### *Practitioner and Expert Interviews*

Findings from the interviews reflect the views of the interview subjects. Although many subjects agreed on certain points, agreement may not be universal among all practitioners and researchers in the field of HIA.

### **Takeaways**

If the goals of an HIA include educating the public about a proposal and its potential health impacts; gathering all relevant information about the circumstances and health concerns of community residents; and generating support for the HIAs recommendations to shape the health outcomes of the proposal, an active and thorough community engagement process is vital to achieving them.

**Future Work: Applying the Framework**The framework proposed in the previous section aims to aid practitioners in developing sturdy engagement processes which will connect with all elements of the affected community, produce outputs which add value to the HIA process, and create a model for future practitioners to learn from as HIA practice in the United States continues to evolve. Future work includes applying this framework to an active HIA as a case study of its effectiveness, evaluated by feedback from practitioners and community participants. Further refinement and expansion of the framework will lead to a valuable tool for current and future practitioners.

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## Appendix I: Complete list of HIAs reviewed

Title	State	Year	Not found	Method	Too little information	Evaluated
6th Avenue East Duluth HIA	MN	2011				X
Aerotropolis Atlanta	GA	2012				X
Alcohol Outlet Density-Marathon County, WI	WI	2011				X
Apple Valley	MN	2009	X			
Atlanta Beltline	GA	2007				X
Bernal Heights Preschool	CA	2008		X		
City of Ramsey Threshold	MN	2008			X	
Concord Naval Weapons Station Reuse Project	CA	2009				X
Daniel Morgan Avenue "Road Diet"	SC				X	
Derby Redevelopment	CO	2007				X
Eastern Neighborhoods Community	CA	2007		X		
Executive Park Sub Area Plan	CA	2007		X		
Farmers Field Rapid HIA	CA	2012				X
Fort McPherson Interim Zoning	GA	2010			X	
Houston Transit Oriented Development	TX	2012				X
Ice Age Trail Expansion-Marquette County	WI	2011			X	
Interstate 75 Focus Area Study	OH					X
Lower South District	PA	2012	X			
Lowry Corridor, Phase 2	MN	2007				X
MacArthur BART	CA	2007		X		
Oak to Ninth Avenue	CA	2006		X		
Page Avenue Revitalization	MO	2010				X
Piedmont Hospital: Hospitals and Community Health	GA	2008				X
Pittsburg Railroad Avenue TOD	CA	2008		X		
Rincon Hill Area Plan	CA	2004		X		
Santa Monica Airport	CA	2010			X	
South Hill Redevelopment HIA	WA	2009			X	
South of Market, Mission, and Potrero/Showplace Square Area Plans	CA	2008		X		
South Thornton Revitalization Subarea Plan	CO	2010				X
St. Louis Park Comprehensive Plan	MN	2011				X
St. Paul Light Rail	MN	2012				X
The Crossings at 29th and San Pedro St. - South Central Redevelopment	CA	2009				X
University District Pedestrian/Bicycle Bridge	WA	2011				X
Vancouver Comprehensive Plan Revision	WA					X
Western SOMA Community Plan	CA	2009	X			

## **Appendix II: Draft interview questions**

- How much community engagement experience do you have, in general or in the context of HIA? Can you briefly describe your community engagement experience?
- What are challenges to community engagement within the HIA context?
- How should practitioners identify all affected and specific vulnerable populations for an HIA? What are challenges in identifying these populations?
- What factors influence the effectiveness of community engagement in reaching vulnerable populations?
- What skills do practitioners need to reach out to vulnerable populations effectively?
- What resources are available to support community engagement in HIAs? What resources could be available?
- What do you see as community engagement methods best-suited for HIA? How does that vary by an HIA's position in the range from rapid to comprehensive?
- What factors determine the appropriate level of engagement for HIAs?
- How much can community engagement influence the outcome of an HIA, ideally? What can prevent community engagement from having influence in the outcome of an HIA?
- What aspects of community engagement do you see practitioners needing further support with? In what ways can community engagement practice be improved?
- Is there anyone else you would recommend I contact for an interview?