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Health Impact Assessment in Georgia:
Processes of Stakeholder Involvement and the Promotion of Equity

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Abstract

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Background: Growing evidence of the social determinants of health indicates that health is largely determined outside of the health sector. Health Impact Assessment (HIA) is a rapidly emerging tool in the United States to include health in all policies. HIA not only address the magnitude of positive and negative health impacts of a policy or plan, but also the distribution of the impacts. Therefore, HIA can be an important tool for reducing health disparities and promoting health equity when socially and economically disadvantaged groups are involved in the process. While a majority of HIAs recognize the importance of stakeholders in the process, the current literature on HIAs does not describe in-depth processes for the identification or recruitment of stakeholders or how their contributions are used to inform the HIA.

Objective: To gain a deeper understanding of processes for stakeholder involvement in HIA, especially the inclusion of socially and economically disadvantaged groups.

Methods: Qualitative methods were used to understand the processes for stakeholder involvement in HIA. In-depths interviews with HIA staff members and content analysis of the corresponding HIA reports identified important themes and concepts around the processes of stakeholder identification, recruitment, and the use of stakeholder input in HIA.

Results and Conclusions: Guided by grounded theory, a model of stakeholder involvement in HIA was developed. The model not only illustrates the processes of involving stakeholders during the HIA, but also prior conditions that influence stakeholder involvement and how stakeholder experiences during the HIA have serious implications for the future and the promotion of equity. Overall, the results indicate a lack of systematic processes around the identification of stakeholder. Limited resources for conducting HIAs were the most significant factor influencing the quantity and quality of stakeholder input.

Keywords: Health Impact Assessment, Health in All Policies, Health Equity, Social Determinants of Health

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CHAPTER 1: INTRODUCTION

Social Determinants of Health

Our health is deeply impacted by decisions made outside of the health sector. Every day, decisions are made which effect education, housing, employment, commerce, and transportation, and a growing body of evidence indicates that the conditions where we live, work, grow-up and play have tremendous impacts on our physical and mental health ("Closing the gap in a generation," 2008; "For the public's health," 2010; Koh, 2010). When so much of the burden of illness arises because of the conditions we live in, and because non-health decisions shape these social and physical conditions, it is not solely up to the health sector to promote health. Instead, it takes a comprehensive, multidisciplinary approach to address complex, systemic health outcomes (Rajotte, Ross, Ekechi, & Cadet, 2011).

For the past three decades, the United States Department of Health and Human Service's Healthy People initiative has encouraged collaborations across communities and sectors to promote good health. In fact, the 2020 mission statement aims to "engage multiple sectors to take actions to strengthen policies and improve practices"("About Healthy People," 2010, n. pag). More specifically, the goals for 2020 emphasize creating social and physical environments that promote good health for all, achieving health equity, and eliminating disparities. For 2020, a new topic was added to Healthy People-- social determinants of health. In discussing this topic, Healthy People stated that "the conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be" "Social Determinants of Health," 2010, n. pag). It further proposed that, to address social determinants and ensure that all Americans have the opportunity for good health, "advances are needed not only in health care but also in fields such as education, childcare, housing, business, law, media, community planning, transportation, and agriculture"("Social Determinants of

Health," 2010, n. pag). To address these complex issues and improve public health, Healthy People recommended an emerging strategy-- Health Impact Assessment (HIA).

What is a Health Impact Assessment?

HIA is a tool that can help decision-makers identify health consequences of policies, programs, and projects (commonly referred to as proposals) that are outside the traditional health sector. HIA is most commonly defined as "a combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within a population"(WHO, 1999, n. pag). The purpose of HIA is to provide a mechanism for collaboration between various sectors and disciplines that impact health outcomes and to provide a systematic health analysis before policies and programs are implemented (Krieger et al., 2003; Rajotte et al., 2011). HIAs are used to inform policy and decision making to maximize benefits and minimize negative impacts on health (Kang, Park, & Kim, 2011; Parry & Stevens, 2001). In doing so, the impacted community obtains benefits including: greater protection of human health, reduction of ill-health, enhanced cross-sectoral coordination, promotion of equity in health, and reduction of health costs in non-health policies (Harris-Roxas & Harris, 2007; Mittelmark, 2001).

Each HIA is context-specific and unique. HIAs have been conducted by federal, state, and local governments, community-based organizations, non-profit organizations, and the private sector("National Research Council," 2011). They have been applied to diverse issues including transportation, employment, housing, energy, and the built environment. Their widespread application leads to many variations in terms of scope, timing, and models used. While there are recommended guidelines and steps to conducting a HIA, because it has been used to assess a plethora of sectors, topics, and issues, there is no standard tool or methodology for conducting one (Joffe & Mindell, 2005; Mindell, Ison, & Joffe, 2003). Explaining the guidelines and variations in HIAs is beyond the scope of this paper. Instead, this proposal focuses on broad,

prospective HIA because of its particular relevance to health promotion. Prospective HIAs take a holistic approach, inform policy during the initial development stage, and emphasize community participation; all of which are beneficial to intersectoral collaboration and improving public health(Baker, Metzler, & Galea, 2005; Lasker & Weiss, 2003).

HIA and Health Inequalities

HIA helps policy makers address determinants of health such as income, education, and employment, and therefore is an inherently important tool to address health inequalities. As the definition points out, HIAs are concerned with both the magnitude of health impacts, and also with the distribution of impacts. In addressing the distribution of impacts, HIAs function as a tool to assess whether a proposal will increase or decrease health disparities in socially and economically disadvantaged communities. In 2000, the World Health Organization stated that considering inequalities should be an integral part of any HIA; many institutions include language about reducing impacts upon health inequalities when defining HIA (Davenport, Mathers, & Parry, 2006; Mindell, Boltong, & Forde, 2008). A systematic review of the HIA literature in the United States and results from HIAs abroad have shown that a majority of HIAs aim to consider explicitly health inequities as part of the assessment (Mindell et al., 2008; Parry & Scully, 2003).

The way that HIAs are conducted is important to promoting health equity[1]. Despite being context-specific and having vast applications, every HIA is guided by five underlying values: democracy, equity, sustainability, ethical use of evidence, and comprehensive approach to health (Quigley, 2006). The commitment to these values drives the need for HIAs to incorporate public involvement (Bacigalupe, Esnaola, Calderon, Zuazagoitia, & Aldasoro, 2010; Dannenberg et al., 2006; Douglas, Conway, Gorman, Gavin, & Hanlon, 2001; Tamburrini, Gilhuly, & Harris-Roxas, 2011). Healthy People names the social community context as a key determinant of health,

[1] For the purpose of this paper, health equity refers to the attainment of the highest level of health for all people. Health inequalities refer to the differences in health status between more socially advantaged and less socially advantaged groups, caused by systemic differences in social conditions and processes that effectively determine health.

including civic participation and social cohesion. Public involvement in HIA provides an opportunity to address the social and community context as well as allows the people and groups directly impacted by the proposal to become aware of the potential impacts and voice their opinions. Leaving out the input of the local community seriously impacts the ability of HIA to effectively address health impacts and promote health equity.

Stakeholder Involvement in HIA

Who participates in a HIA and their level of involvement is critical to effectively informing decision making and ensuring that the HIA core values are incorporated ("National Research Council," 2011). Stakeholders are defined as individuals or groups invested in or affected by proposal development, implementation, and outcomes. Stakeholders are drawn from public, private and voluntary sectors, and the affected communities (Haigh & Scott-Samuel, 2008; Mindell et al., 2003). Typically key stakeholders in HIAs include proposal sponsors, partner organizations, government agencies responsible for policy implementation, industry experts, and residents. The way in which stakeholder participate depends on the specific context of the HIA. Some examples of mechanisms for collecting stakeholder input are structured dialogs, public hearings, focus groups, stakeholder surveys, advisory committees, and consultations (Dannenberg, et al., 2006). For prospective HIAs specifically, guidelines suggest that stakeholders should be engaged early in the HIA process, and throughout the process (Gilhuly, 2011). This ensures not only that stakeholders are made aware of the HIA, but that they have the chance to influence the development and implementation of the HIA. Meaningful participation helps the HIA process by identifying relevant health impacts and sources of data, building support for the proposal, or developing proposed alternatives.

To ensure HIA adheres to its values of equity and democracy and to make it an effective tool to address health inequalities, the explicit participation of local residents and community members not already in positions of power or influence is necessary. When HIA is done in an

participatory way, all who are impacted, especially groups who are traditionally marginalized and underrepresented, are allowed to express their views (Scott-Samuel, 2001; WHO, 1999b). Since participation of these lay groups of local community members is so critical for ensuring that HIA adhere to its values of equity and democracy, this paper will more closely examine their role. Therefore, for the purposes of this paper, the term stakeholder refers to these lay groups of local community members.

Study Purpose

The field of HIA in the United States is rapidly evolving and gaining movement, in part, due to the recognition of the World Health Organization and Healthy People 2020 that HIA can encourage the consideration of health in the development of all policies. An integral part of the HIA process is the engagement of stakeholders, and for good reason. But, while a majority of HIAs mention the use of stakeholders in their reports, only a handful describe who specific stakeholders are, how they were identified or recruited, or how their inputs were considered in the final decision. Without this detail, even successful HIAs are extremely limited in its ability to generate model practices and allow for replication by future HIA. This is critical because, if certain persons are left out of HIA, it becomes a much less useful tool for informing policy decisions and poses a threat by missing important health impacts and potentially harming vulnerable groups.

There is a need for more research on successful stakeholder processes if we are to develop best practices to replicate and disseminate findings to improve future HIA and ultimately reduce health disparities that result from policies outside of the healthcare sector (Kang, et al., 2011; Krieger, et al., 2003; Tamburrini, et al., 2011). Like HIA itself, stakeholder involvement depends on the context; thus, there will never be one way to identify the ‘right’ stakeholders or to define the ‘best’ participation. Still, each HIA should have a systematic method for identifying and engaging stakeholders. In moving forward in the HIA field, there is a need to better

understand which stakeholders HIA is bringing to the table, and if it is done in a way that is truly promoting health equity and informing health decisions.

Due to the limited information about stakeholder involvement in emerging HIA literature and practice in the United States, grounded theory is the most useful method for extending the knowledge base around the role of stakeholders in HIA. Therefore, grounded theory will be used in this study in order to allow for an in-depth understanding of the unique experiences and phenomena surrounding the use of stakeholders in HIA. Because the social and political climates vary so widely in the United States, this study will focus on how HIA conducted in the state of Georgia has utilized stakeholders. The overarching goal of this study is to gain a deeper understanding of processes around stakeholder involvement. The specific aims are:

1. How are stakeholders identified and recruited for Health Impact Assessment (HIA) in Georgia?

a. What steps, if any, are made to include socially and economically disadvantaged groups as stakeholders in Health Impact Assessment (HIA) in Georgia?

2. How does Health Impact Assessment (HIA) in Georgia make use of the input of stakeholders?

a. What efforts, if any, are made to make use of the input of socially and economically disadvantaged groups in Health Impact Assessment (HIA) in Georgia?

CHAPTER 2: LITERATURE REVIEW

HIA in the U.S: Lessons from Abroad

Table 1. HIA in the United States*

	Number of Completed HIA
Top 10 States with highest number of HIA	
California	47
Colorado	6
Alaska	6
Georgia	6
Massachusetts	6
Minnesota	9
Ohio	6
Oregon	12
Washington	9
Wisconsin	8
Sectors	
Built Environment	63
Transportation	31
Natural Resources and Energy	15
Housing	13
Labor and Employment	11
Agriculture and Food	11
Education	6
Climate Change	3
Physical Activity	2
Gambling	2
Criminal Justice	1
Economic Policy	1
Decision making levels	
Local	89
County	21
State	28
Regional	10
Federal	7
Undetermined	4
Organization Type	
Educational Institution	33
Government Agency	78
Non-profit Organization	44
Undetermined	4

*Adapted from Health Impact Project, April 2013

HIA has not been widely used by decision-makers in the United States, but its use has steadily increased over the past decade("Improving Health in the United States," 2011). The use of HIA has, nevertheless, been diverse; in both rural and urban settings, from local to statewide policies, and by state health departments, academic institutions, and community-based organization ("HIA in the United States," 2011; "Improving Health in the United States," 2011). HIA has been addressing health concerns in decisions across many sectors including agriculture, transportation, housing, and the built environment. To date, there have about 160 completed HIAs (Table 1) and 73 still in progress("HIA in the United States," 2011).

Despite recent growth, the use of HIA in the United States is still infrequent and relatively limited, when compared to many other countries. Examining differences in

international experiences with HIA provides lessons for advancing HIA in the United States. Unlike the U.S., HIA has generally been widely adopted for several decades in Canada, Australia, the United Kingdom, and most of Europe (Dannenberg et al., 2008; "Health Impact Assessment Gateway," 2009; "National Research Council," 2011). The social norms and political atmospheres around health may explain why Europe has had marked success in conducting HIA and involving stakeholders when compared to the United States ("The Effectiveness of Health Impact Assessment: Scope and limitations of supporting decision-making in Europe," 2007; "Health Impact Assessment,"). For example, a survey of 28 European governments found that in all but four countries, health was recognized as a theme that cuts across policy areas (Lock & McKee, 2005). These social norms may have assisted in the more rapid adoption of HIA in Europe. In the United Kingdom specifically, the government mandates HIA in all government impact assessments, labels HIA a priority for the Healthy Cities movement, and offers government support for HIA, including courses and trainings ("Health impact assessment," 2009; Kang, Park, & Kim, 2011; Parry & Stevens, 2001). In the U.S., HIA is not mandated, does not have well-define standards, and often lacks adequate funding. Currently, it is conducted on a voluntary basis, with no formal training, and few resources (Dannenberg et al., 2006; Dannenberg et al., 2008). Many European countries have named HIA a prominent tool for decision-making, dedicated more resources to HIA, emphasized prevention, and largely framed the discourse about public health on the health of the population (Glouberman & Millar, 2003; Lavis, 2002). In the United States, there tends to be less emphasis on population health, which may have created less momentum for HIA and public participation in policy. Therefore, conditions specific to the U.S. are important in framing not only HIA, but stakeholder involvement.

HIA and Stakeholder Involvement

Given that the goal of HIA is to ensure that health and health inequities are considered in decisions made outside of the traditional health sector, engaging diverse stakeholders is critical.

Stakeholder involvement is a necessary condition in order to uphold the five values of HIA: democracy, equity, sustainability, ethical use of evidence, and comprehensive approach to health (Quigly, 2006).

Experiences with stakeholders in HIA in other countries, and to some extend in the U.S., have shown that to be most effective, stakeholders must be given the opportunity to participate and to participate in each stage of the HIA process (Wright, 2005). While few argue that local communities need to be involved as stakeholders, many are skeptical that such stakeholders are adequately engaged in practice. The following sections review the support and criticisms for stakeholder involvement in HIA.

Support for Stakeholder Involvement

Knowledge: By bringing together a variety of stakeholders, HIA provide valuable knowledge to both the policy makers and the community. By eliciting information and opinions from the community, decision makers learn about locally relevant history, political realities, and untapped resources, which can assist them in targeting resources more effectively and developing realistic plans (Kickbusch, 2010; Dannenberg et al., 2006). Sometimes this evidence may be the only source of data, especially in marginalized or small communities, where similar projects have not been tested (Kosa, Molnar, McKee, & Adany, 2007). By being better informed about local conditions, policy makers can improve inefficiencies and can better anticipate challenges and opportunities, which may ultimately lead to better, more sustainable decisions ("Health Impact Assessment Factsheet," n.d). Furthermore, stakeholders and the community involved gain knowledge about political processes, the inner-workings of their communities, and the determinants that impact their health (Farhang et al., 2008). By allowing for an open, transparent decision-making process, the community is better informed, which may advance democratic decision making (Wright et al., 2005).

Proposal acceptance: The goal of HIA is to inform policies to consider health impacts. Giving the community a voice in the process increases the likelihood that the health-conscious proposal will be accepted. Community support carries political weight, and when the community is invested in the proposal, the chances of approval and sustainability increase (Tamburrini, Gilhuly, & Harris-Roxas, 2011). As part of the process, residents advocate for the proposal and make it known throughout the community (Dannenberg, et al., 2006). Stakeholder input can also reduce costs. The insider knowledge and support helps policy makers anticipate and plan for impacts that could be more costly to mend down the road. Moreover, stakeholder participation helps the project overcome cultural and political challenges and can speed up the implementation process (Dannenberg et al., 2006; Harris-Roxas & Harris, 2007). When the proposal is successful and long-lasting, the community averts future social and health costs (Tamburrini, et al., 2011).

Relationship building: By including diverse stakeholders, HIA promotes awareness of and discussions about health across non-health sectors. The stakeholder experience helps to build relationships for the future, which can benefit both the community and the organizations involved. Involving stakeholders enhances relationships within the community by facilitating communication, building social networks and support, and helping create a common vision (Dannenberg et al., 2006; Haigh & Scott-Samuel, 2008). Furthermore, the collaboration among government, organizations, and locals can facilitate the development of future projects, reduce conflict, improve the efficiency of resources, and build capacity around health (Dannenberg et al., 2008; Tamburrini, et al., 2011).

Health, equity, and empowerment: In order to have a positive impact on the health of a community and reduce disparities, a proposal must be able to anticipate the impacts to the population's wellbeing (Krieger et al., 2003). Incorporating local concerns allows for a broader definition of health that considers indirect and hard-to-measure indicators such as stress, depression, peace of mind, and other psychosocial factors that have real effects on a community's

health (Milner, Bailey, & Deans, 2003). Ultimately, it allows the community to define its health and dictate what prevents or promotes its wellbeing. Doing so not only assists in developing policies that realistically improve communities, but is also crucial for advancing equity and democracy (Kosa, Molnar, McKee, & Adany, 2007). Stakeholder participation inherently empowers individuals and the community by providing a sense of inclusion in their own decision making, building self-confidence, improving knowledge, and allowing their voices to be heard (Lester & Temple, 2006). These factors alone can enhance a population's sense of wellbeing and quality of life, despite actual policy outcomes (Haigh & Scott-Samuel, 2008; Tsouros, 2002).

Concerns about Stakeholder Involvement

Social and Political Climate: Before specific concerns about stakeholder participation can be explained, it is important to examine what influences an individual's, group's, or organization's decision to be involved in a HIA. For most, being a stakeholder in a HIA is a new idea. The social and political climate around collaboration, communication, and civic engagement can facilitate or prevent stakeholders from becoming involved (Lock, 2005; Glouberman, 2003). Obviously, potential stakeholders need to believe that HIA will have a positive impact on their community and also that their involvement is important. When stakeholders do not see the value of local opinions in the decision-making process, attempts to recruit and engage them in a meaningful way will be futile. If people among different sectors already have established relationships, this may facilitate the participation of diverse stakeholders. The existence of strong communication channels and networks within a community can contribute to the success of the stakeholder process as well as encourage others to be involved in the future (Glouberman, 2003).

Feasibility: For some policies and in some situations, involving stakeholders in HIA is simply not feasible. For example, it might be impossible for a project with a strict timeline to involve stakeholders in a meaningful way. Another issue is limited funding and resources devoted

to the entire HIA process, making the time and resource-consuming involvement of stakeholders difficult (Dannenberg et al., 2006; Dannenberg et al., 2008). Finally, when stakeholders express strong conflicting views to one another, it might be impossible to incorporate this feedback (Haigh & Scott-Samuel, 2008). The inability to involve the local community poses threats to the goals of HIA, i.e., to promote democracy and equity and to best inform policy to consider health impacts.

Stakeholder identification and engagement: Despite great support for involving stakeholders in the HIA process, a consistent and concerning gap in the literature is the lack of understanding about what constitutes a stakeholder, who agrees to participate, and to what extent they are involved in the process (Dannenberg et al., 2008; Lester & Temple, 2006; Milner et al., 2003). Dannenberg et al. (2008) identified 27 completed HIAs between 1999-2007 and found that the term stakeholder is described in broad terms such as residents, community, locals, neighborhood and business associations, experts, and community organizations. In addition to not being very specific about who the stakeholders are, there is no mention of how key stakeholders are identified. This poses an ethical concern; how does the person or group conducting the HIA choose which stakeholders are necessary? In practice, this process can be biased if decision-makers only involve those who already support the proposal or with whom they have preexisting relationships (Parry & Stevens, 2001). Furthermore, the extent to which vulnerable populations are involved is unclear. This can lead to greater health disparities. It is difficulty to involve stakeholders with limited economic and political resources and there is little known about the tactics used to encourage and maintain participation in the HIA (Dannenberg et al., 2006; Kang et al., 2011).

Meaningful input: But even after stakeholders are identified, what does participation look like? Dannenberg et al. (2008) highlighted the fact that there is limited information about stakeholder participation in the literature, citing vague methods for gaining participation such as

structured dialogs, public hearings, focus groups, public input, stakeholder opinion, consultations, public testimony, and more. Quality of engagement is imperative in informing decisions, which leads to questions about whether stakeholders are provided with adequate project background, topical information, or training. Ethical concerns emerge at this point, too, as expert knowledge is a source of power over lay people. This unequal power dynamic can hinder locals from voicing their concerns or from being treated fairly and with dignity, all of which challenges the ability of HIA to address health impacts (Gismondi, 1997). When stakeholders contribute early in the HIA process, their ability to inform decisions is strongest (Dannenberg et al., 2006). Unfortunately, more complete information about how stakeholder input is used in HIA is difficult to assess, due to the fact that very few HIA analyses have appeared in peer-reviewed literature (Dannenberg et al., 2006). One specific suggestion to improve stakeholder participation is to train not only stakeholders, but also those charged with identifying stakeholders (Dannenberg et al., 2006). Leaving out people who may be affected by the proposal and not enabling them to participate in a meaningful way hinders the success of a HIA and, in turn, misses opportunities to maximize health benefits.

Quality and impact of evidence: Even if the appropriate stakeholders are involved, the most cited criticism about stakeholder participation in HIA is the quality of evidence obtained from stakeholders and skepticism about how this evidence influences the final decision and contributes to better outcomes (Tamburrini et al., 2011). In the current public health paradigm, rigorous methodologies and measurable evidence is dominant. There is belief that the qualitative methods most often used in obtaining stakeholder input are not greatly appreciated in settings that are driven by quantitative data (Kang et al., 2011) and that stakeholders cannot effectively contribute to improving decision making for HIA (McInttyre, 1999; Mindell, Ison, & Joffe, 2003). To date, evidence collected from stakeholders has been unsystematic, vague, and largely unreported (Parry & Stevens, 2001). This tension between rigorous methodology and community

significance has been a source of debate in the HIA community. Relying on more rigorous methods may make HIA a more scientifically-sound tool for informing policy, but it reduces the impact of evidence derived from stakeholders, which is an indispensible component of HIA (Krieger et al., 2003; Milner et al., 2003).

Moreover, few articles explain how evidence derived from stakeholders informs decisions, and rarely do articles report community input as a source of evidence. As a result, some are skeptical that stakeholder opinions are seriously considered (Harris, 2005). This is particularly troublesome because when stakeholder feedback is not taken into consideration or there is not sufficient follow-up with stakeholders, they can become frustrated and disappointed (Ahmad, Chappel, Pless-Mulloli, & White, 2008; Haigh & Scott-Samuel, 2008). Ultimately, this undermines the value of involving stakeholders in HIA and creates an environment that hinders meaningful community participation.

Lack of research, transparency and evaluation: To date, there have been no formal evaluations of HIA or of stakeholder involvement in project decisions and outcomes. Reasons stated for this are limited resources, lack of time, and the complexity of and lag time in measuring health outcomes (Dannenberg et al., 2008; Parry & Stevens, 2001). Therefore, there is a need for more transparency in the collection of stakeholder evidence, systematic review of its use in HIA, and evaluations of the policy impacts of this evidence (Dannenberg et al., 2006; Parry & Stevens, 2001). Without better explanation and reporting on how stakeholder input is obtained and used as evidence to inform decisions, HIA becomes a weakened tool to improve health conditions in local communities.

The overarching criticism of stakeholder involvement in HIA is the lack of transparency; we do not always know who is deemed a necessary stakeholder, if affected people are being left out, or the processes behind how participation translates into informed decisions. This is crucial because it can reduce the effectiveness of HIA by missing opportunities to maximize health

benefits and minimize adverse health outcomes in a wide range of proposals. Without adequate stakeholder involvement, especially for vulnerable and underserved communities, HIA actually create or perpetuate health inequalities.

Grounded Theory

Due to the lack of transparency, detail, and evidence in the literature, grounded theory is most valuable for exploring the involvement of stakeholder in HIA practice. Prior studies have not adequately addressed this gap and, therefore, there is an identified need for more in-depth research. Since little has been written about stakeholder processes, it is necessary to gain an in-depth understanding from the people who were directly involved with HIA. The focus of grounded theory is to get an abstract representation of experiences related to a specific situation (Creswell, 1998). When the grounded theory method of research is applied to systematically collect and analyze data, the specific and unique experiences with HIA can potentially be used to generate a theory about stakeholder involvement in HIA. Ultimately, the lessons learned and emerging constructs can serve as a basis for future research to advance the practice of HIA and enhance the scientific framework surrounding HIA.

Review of HIA in Georgia

There are vast differences in the adoption and implementation of HIA across the United States, due to the local political, economic, and social context. The scope of this study will narrow in on the seven HIAs conducted in the state of Georgia. Georgia was chosen based on feasibility and also because Georgia has sufficient experience as is one of the states in which the most HIAs have been completed. Therefore, Georgia HIA cases have enough diversity in type of proposals to make comparisons across HIA as well as illuminate differences in the type and treatment of stakeholders. Below is a brief description of the purpose and scope of each HIA in

Georgia, as well as their use of stakeholders as stated in publically available reports and information sources.

1. ***Buford Highway (2004)***

Project Overview: Buford Highway is one of the most dangerous highways in the country marked by being unfriendly to pedestrians, auto-oriented, and home to a large immigrant population. Proposed changes to this highway include reducing the speed limit and adding sidewalks, crosswalks, center medians, and bike lanes. The HIA conducted by UCLA and CDC examined the health impacts of such changes such as physical activity and injury. It was noted that despite the findings, the final changes to the highway were not as extensive as those proposed in the HIA.

Stakeholder Involvement: Very little information about stakeholder involvement was found on the HIA. HIS findings were disseminated to local groups such as the county Board of Health, the Georgia Department of Transportation, and the Atlanta Regional Commission. The affected population was defined as people in five census blocks that lived half a mile from the highway. It is unknown if or how these residents were involved.

2. Atlanta BeltLine (2007)

Overview: The Atlanta BeltLine is currently one of the largest redevelopment projects in the United States. The vision for the BeltLine is to create a 22-mile corridor along an abandoned freight rail line that touches all council districts in the City of Atlanta. The redevelopment plans to revitalize the city by creating and transforming parks, trails, transit, residential, and commercial developments. The BeltLine HIA is a HIA collaboration between Georgia Institute of Technology's Center for Quality Growth and Regional Development (CQGRD) and staff at the CDC. The HIA focused on the planning process and addressed health issues such as physical activity, social connectedness, safety, access to health goods, and environmental issues. In part

due to the positive health impacts assesses in the HIA, the timeline for constructing the BeltLine has been moved up by 10 years.

Stakeholders: The BeltLine considers involving all stakeholders as an overarching issue of the HIA. The study area includes more than 200,000 resident, 230,000 employees and many businesses that will be affected. The HIA's public involvement strategy contains the following groups: decision makers, implementers/experts, public, and academic/practitioners. The HIA report names continuous public involvement, appropriate public involvement, and convenient access to information as important to the current and future implementation for the BeltLine. The HIA methodology states an emphasis on examining health impacts on vulnerable groups in the study area population including those who are of low economic status, children, older adults, people with disabilities, renters, and the carless.

3. City of Decatur Transportation (2007)

Project Overview: The goal of the City of Decatur's Community Transportation Plan was to create an goal of creating an Active Living Community. The HIA focused on potential health impacts related to safety, social connections and physical activity that might be affected by transportation and land use. The HIA found positive effects of the plan on car use, health problems such as injuries and obesity, and social capital. The HIA recommendation included developing a campaign to promote physical activity, developing intersections to accessible to people with disabilities, emphasizing the mobility of Decatur's most vulnerable populations, and prioritizing connectivity in the city.

Stakeholder Involvement: In order to appropriately define health for the HIA, input was collected from community stakeholders, health experts, representatives of local and state government, and members of nonprofit organizations. The CQGRD and public health professionals hosted a HIA workshop for about 60 stakeholders and project partners including representatives of Decatur residents, government, CDC, Georgia Department of Transportation,

local businesses, churches and nonprofit organizations. In the HIA analysis and assessments, there was particular attention given to health impacts on Decatur's vulnerable populations including older adults, people of color, low-income families, and children.

4. Piedmont hospital expansion (2008)

Project Overview: The CQGRD conducted a HIA to examine the localized health impacts of a proposed expansion of Piedmont Hospital, one of the major anchor institutions in Atlanta. The HIA examined the impact of transportation, land use, urban design and future growth on the residents and neighborhoods located in the vicinity. The health issues explored included the effect of heavy volumes of traffic and the condition of local streets on whether people could safely walk in the area, and the effects of the hospital on physical activity levels and safety in the surrounding neighborhood. The recommendations were disseminated to local neighborhood groups, the hospital administration, and the City of Atlanta.

Stakeholder Involvement: During the formulation of the scope of the Piedmont HIA, the team reached out to residents within the study area and representatives of Piedmont Hospital to inform them about the HIA and to invite them to identify potential health impacts for assessment. To facilitate the involvement of residents and provide direction, an Advisory Committee was formed. The Committee consisted of members of the Brookwood Alliance, an alliance of six neighborhood groups including park associations, community clubs, and neighborhood associations. Outreach activities to involve resident stakeholders included: meeting and conference calls with neighborhood representatives, neighborhood surveys of those who lived, worked, and/or went to school near Piedmont Hospital, and a presentation to a neighborhood association.

5. Fort McPherson Zoning (2012)

Project Overview: Atlanta's Fort McPherson was officially closed in 2001 as a result of the Base Realignment and Closure Commission's disposal of unnecessary Department of Defense real estate. The goal of the Fort McPherson Zoning HIA was to examine the differential health effects of the zoning on the neighboring population during the period where the phase-in period while the major redevelopment was being planned. The HIA addressed zoning provisions around land use, green space, and transportation that might impact nutrition, physical activity, alcohol consumption, tobacco use and social connections. The HIA recommended allowing for community gardens in specific green spaces, expanding the use of existing buildings for community meeting and limiting fast food restaurants around areas where children congregate.

Stakeholder Involvement: The HIA collected input from sever community organizations and coalitions, the City of Atlanta's Planning Department, and other City Planners. Each of these group provided input during the screening, scoping and assessment phases of the HIA. Sources of input from the community included resident collaboration in a report and a list of recommendations and areas of interest by an organization representing all of the neighborhoods surrounding the base.

6. Aerotropolis Atlanta (2012)

Project Overview: The CQGRD conducted a HIA on redevelopment plans for a 122-acre site in Hapeville, GA. This site was formerly a Ford assembly plant, lies adjacent to the Hartsfield-Jackson Atlanta International Airport, and is scheduled to be developed into Aerotropolis Atlanta. The Aerotroplis Atlanta development project will result in 6.5 million square feet of office space, hotels, shops, and an airport parking facility. The developer of the project expressed support for the HIA to consider potential health benefits and impacts on surrounding communities and offer practical suggestions to maximize health benefits. The HIA addressed impacts on multimodal transportation environments, economic opportunities and services, community preservation and revitalization, and environmental exposures. Ultimately,

the HIA determined that the Aerotropolis redevelopment did have the potential to positively and negatively impact health through active living, injury, air quality, social capital, crime, access, noise and gentrification.

Stakeholder Involvement: The primary method of eliciting input from stakeholder about local concerns was by forming an Advisory Committee. Of the 30+ committee members, there was one community representative, one parochial vicar, and two members of Southside Concerned Citizens. While a number of the stakeholders were likely advocates for health of the community, the only stakeholder groups which potentially included laypeople were the six neighborhood associations. The assessment team collected input by holding three Advisory meetings and by sending out a stakeholder survey that received 26 responses. The HIA report states that as a result of stakeholder participation, greater emphasis was placed on societal and fiscal impacts.

7. Atlanta Regional Plan 2040 (in progress)

Project Overview: The Atlanta Regional Plan 2040 is the first HIA on a comprehensive growth plan for a major metropolitan region. The HIA, led by the CQGRD at the Georgia Institute of Technology's College of Architecture, will examine many planning elements including transportation, land use, water and air quality, housing and green space through the year 2040. A few of the health impact of interest are injury, asthma rates, and the risk of chronic disease such as obesity and diabetes. The five overarching objective of the plan are: Serving People, Building Community, Enhancing Mobility, Preserving the Environment and Growing the Economy.

Stakeholder Involvement: Current HIA documents state that community members will be actively involved throughout the HIA process, but because the HIA in process and no official report has been published, it is uncertain who specific stakeholder are or to what extend stakeholder are involved.

Summary of HIA in Georgia

Georgia Institute of Technology's Center for Quality Growth and Regional Development (CQGRD) has conducted 5 of the 7 HIA in Georgia. Both the CQGRD and the Georgia Stat Health Policy Center have since held trainings and provided TA for HIA. While all the 7 HIA involve stakeholders, it is at times unclear from the HIA reports and publically available information whom is considered a stakeholder. While some HIA do list specific organizations and stakeholders involved, a majority of the details is around professional stakeholders and other subject matter experts rather that local resident. Similarly, the level of involvement varies in each HIA and different strategies are employed. What is similar across all HIA in Georgia is the lack of detailed methods and processes for identifying and recruiting stakeholders. The vague description of the stakeholder processes and the terms used to describe lay stakeholders beckons several questions: do the neighborhood associations represent all lay stakeholders? When and how frequently do lay stakeholders participate? What barriers exist in involving certain stakeholder groups?

Study Justification

The examples from the state of Georgia highlight that, while HIA are increasingly becoming a tool used in the U.S. to ensure that health impacts are considered in a wide range of policies, there is still much uncertainty about the processes and role of local stakeholders. While evidence exists both for and against stakeholder involvement, the lack of transparency and details in HIA reports and the lack of HIA in academic publication is concerning. If we are effectively to promote the use of HIA in the U.S., we need to start developing HIA-specific best practices and frameworks to guide the future use of HIA. Disseminating such findings can improve future HIA and ultimately reduce health disparities that are currently being ignored in decision-making outside the traditional health sector. In order to make progress towards these goals, the objectives

of this study are to: (1) gain a deeper understanding of the stakeholder identification and recruitment processes in HIA conducted in Georgia, and (2) document lessons learned.

CHAPTER 3: METHODS

This study aims to explore the experience of HIA in engaging stakeholders in Georgia. More specifically, the research questions are:

1. How are stakeholders identified and recruited for Health Impact Assessment (HIA) in Georgia?

a. What steps, if any, are made to include underrepresented and vulnerable groups as stakeholders in Health Impact Assessment (HIA) in Georgia?

2. How does Health Impact Assessment (HIA) in Georgia make use of the input of stakeholders?

b. What efforts, if any, are made to make use of the input of underrepresented and vulnerable groups in Health Impact Assessment (HIA) in Georgia?

Due to the exploratory nature of these research questions, qualitative methods were deemed most appropriate to examine the experiences of each HIA case study in the study series. Data were collected via individual, in-depth interviews of staff members across HIAs conducted in the Metro-Atlanta area and supplemented with systematic content analysis of HIA reports. Data were triangulated to inform findings.

Sampling and Recruitment

This study utilized two stages of sampling. The sampling frame for the first stage was HIAs conducted and completed in the Metro-Atlanta area, while the target population for the

second stage was individuals who had worked on a HIA in the Metro-Atlanta area. The scope of recruitment efforts did not reach beyond Atlanta HIAs, although former staff members who had relocated outside of the Metro-Atlanta area were eligible and encouraged to participate.

HIA Sample*:* To date, there have been seven HIAs conducted in Georgia. One of these HIAs is still in progress and was, therefore, excluded from the study. The remaining 6 HIAs were eligible to become cases in the study (Table 2). These six HIAs were conducted by three different institutions.

Participant Sample: Participants were recruited from the three HIAs sampled for the study. The initial phase of sampling represented a convenience sample. HIA reports are publicly available and many of the reports include the names of persons who spearheaded the HIA for each agency. In all cases except for the Buford Highway HIA, a contact person was identified and contacted via email. These initial contacts were asked if they were personally involved in the stakeholder processes of the HIA. If they were, in fact, involved, they were eligible to be in the study and were asked to participate. For both those who were directly involved and those who were not, the next phase of sampling represented a snowball method. Initial staff contacts were asked to identify and provide contact information for other staff members who worked with stakeholders during the HIA. In cases where these contacts did not agree to participate, this process was repeated and contacts were asked to identify an additional person. This convenience sampling resulted in a final sample size of three, with one available interviewee from each of the following three HIAs:

1) Aerotropolis HIA, Center for Quality Growth and Regional Development

2) BeltLine HIA, Center for Quality Growth and Regional Development

3) Fort McPherson HIA, Georgia Health Policy Center

Since four of the six eligible HIA were conducted by the Georgia Institute of Technology's Center for Quality Growth and Regional Development (CQGRD), it is not of concern that 2 of the 3 in the sample are from CQGRD. The inclusion of an HIA from the Georgia Health Policy Center allows for interpretation of the differences between the two institutions.

Table 2. HIA Completed in Georgia

HIA Name (Year completed)	Sector	Lead Agencies
Aerotropolis Atlanta (2012)*	Built environment	CQGRD
Atlanta BeltLine (2007)*	Built environment	CQGRD, CDC, Robert Wood Johnson Foundation
City of Decatur Community Transportation Plan (2007)	Transportation	CQGRD
Piedmont Hospital: Hospitals & Community Health (2008)	Built environment	CQGRD; Robert Wood Johnson Foundation
Buford Highway & NE Plaza Redevelopment (2004)	Transportation	University of California at Los Angeles (UCLA); CDC
Fort McPherson Interim Zoning (2010)*	Built environment	Georgia State University's Georgia Health Policy Center

*Study HIA

Interview Protocol

Due to the busy schedules of interviewees, all interviews were conducted over the telephone. Before the Principal Investigator administered the interview, the participants were asked to read the consent form explaining the purpose and procedures of the study. Participants were asked whether they had any questions or concerns regarding the study or the interviews before being asked to sign the form and email it back to the Principal Investigator.

As part of the consent process, HIA staff were informed that their participation was voluntary and that they could skip any question they did not feel comfortable answering or stop the interview at any point without having to provide an explanation. Furthermore, respondents

were informed that all information gathered during the interviews would remain confidential and that their names would not appear in the transcriptions or any manuscripts. Included in the consent form, participants received the contact information of the Principal Investigator including email and phone number in case they had any questions at a later date or wished to receive a summary of the study upon completion.

Instrument

Interview guide: The semi-structured interview guide was developed based on the literature and formative research. While general enough to allow for flexibility in learning about the various types of HIAs, the interview guide included key topics to be discussed in each interview to ensure that comparisons across HIAs could be made. All questions were open-ended and exploratory in nature to allow the respondents to explain their unique experiences and perspectives. The Principal Investigator probed based upon the general question, in order to gain deeper understandings of areas of interest. The beginning of each interview was dedicated to asking general question about the purpose of the HIA and the role of the participant. As the interviews progressed and rapport was established, questions became more specific to the perceived weaknesses, challenges, and outcomes of the HIA.

Themes of interest: Role of stakeholders in HIA, definition of stakeholders, processes relating to stakeholder engagement, political and contextual factors impacting engagement, communication, and health disparities were the major themes explored in this study based loosely on theories of community engagement. However, based on the lack of field knowledge of HIA, unanticipated and emerging themes were of particular interest.

Data Management

All interviews were audio-recorded for accuracy and the Principal Investigator took notes as needed during each session. Recordings were transcribed verbatim immediately following each

interview. The digital recording and transcriptions were saved onto the Principal Investigator's password-protected laptop for safety and confidentiality. Real names of the participants were never used; pseudonyms were given to each participant and included in all transcripts and notes. After the data analysis stage, all audio recordings were permanently deleted to eliminate all markers associated with participants and to protect their identity. The only use of the participants' names was on the consent forms, which were kept in a locked file folder.

Data Analysis

After all three transcriptions were completed, they were then coded by hand. Major themes listed above, as well as other relevant topics that emerged, were closely examined to create the code list and code tree. One reader coded all three interviews and created a codebook. Thirty percent of the data were then coded by an additional reader and all discrepancies were discussed until consensus was reached. Changes and additional codes were included in the codebook and all transcriptions were coded a final time. A total of 22 main codes were identified and defined.

Content Analysis of HIA reports

To supplement the information provided by interviewees for the three HIA cases, a systematic content analysis of the publicly available HIA reports was performed. Examining the HIA reports added an additional layer of analysis of and perspective on the stakeholder process. The full version of each of the three HIA reports was downloaded from the internet and systematically coded using the same codebook as was used for the interviews. This method was important because the HIA report is typically what the public and HIA practitioners refer to in learning about strategies for stakeholder involvement and for conducting future HIA. Analyzing these reports and comparing them to the lived experiences of HIA practitioners carries important implications for HIA practice.

Data Triangulation

The coded data from both the interview transcripts and the HIA reports were then analyzed together. Triangulation helped identify themes in common, discrepancies between the two, and themes missing from the reports. A matrix of all themes was created to compare these findings, inform the findings of this study, and build a model of stakeholder involvement in HIA.

CHAPTER 4: RESULTS

Data triangulation between the interview transcriptions and the document content analysis produced important themes and concepts around stakeholder involvement in HIA, as presented below. The results begin with the general role of the stakeholder in HIA and then are divided into sections that address the major components of the research questions: identification, recruitment, and use of input. Lastly, core concepts informed by grounded theory are discussed. The inclusion or exclusion of socially and economically marginalized groups is highlighted throughout the results.

Role of Stakeholders

"The general sense of HIA needing stakeholder involvement comes from the fact that you can't really understand health impacts without understanding the people who are affected by them"

(Aerotropolis HIA, interview, January 30, 2013).

The HIA reports all identified the need for and importance of stakeholder involvement (Table 3). Each report had at least a paragraph or section devoted to stakeholder engagement, but the majority of the language was vague. For example, reports tended to state the purpose and justification for stakeholder input in research and HIA in general or hypothetical ways, rather than how the specific HIA approached it.

Table 3. Statement about Stakeholder Involvement from Each Report

HIA	Example of Statement from Report
Aerotropolis	The HIA team believed that input from stakeholders was essential to the success of the Health Impact Assessment.
BeltLine	To reflect the uniqueness of the population and the project, three principles regarding the involvement of all stakeholders are important to the implementation of the BeltLine: continuous public involvement, appropriate public involvement, and convenient access to information.
Fort McPherson	A key role is bringing diverse stakeholders together to overcome "silos" and develop new collaborations to promote and improve health.

In contrast to the official reports, HIA staff responded in great detail about the need for stakeholder involvement in HIA. When HIA staff spoke about the general role of stakeholders in any HIA, all expressed the belief that involvement contributes to more successful HIA. In fact, the interviewee from the Fort McPherson HIA explained stakeholder engagement as a defining characteristic of HIA: "I *would say that it is almost integral. There is some discussion in the field about whether or not an HIA should still be defined as an HIA if there is no stakeholder engagement"*. The example provided of when a project might not be defined as an HIA was the very rapid HIA that typically does not engage stakeholders and is only a few pages long. The interviewee mentioned that many would argue that this type of HIA is not truly an HIA.

The main confusion that arose related to the idea of stakeholder involvement was the difficultly in defining it. Every HIA is different and needs to engage different stakeholders depending on the specific subject matter and community. There were some similarities among the stakeholder involvement processes in the three HIA cases in this study because they all addressed built environment development projects. One interviewee made a point to mention, however, that, *"How you would conduct stakeholder involvement in a project that was looking nationally at education policy or energy policies are going to be quite different than the way we're going to do for a development project"* (Aerotropolis HIA, interview, January 30, 2013).

Identifying Stakeholders

> *"This really isn't about numbers, it's about reasoning together. It's about bringing people together to discuss and reason together and, therefore, what's really the most important is to have that range of perspectives that exist in the community be represented in the discussion itself."* (Aerotropolis HIA, interview, January 30, 2013)

None of the HIA reports described processes for identifying specific stakeholders, although in one report it was stated that, "Several stakeholders were identified and engaged throughout the HIA steps" (Fort McPherson, p.6). The reports either provided extremely broad criteria for identifying stakeholders (e.g., 'there are more than 200,000 residents, 230,000 employees, and numerous businesses and institutions that will be directly affected by the BeltLine, and there will be additional people living and working in the study area as the project progresses' [p. 12]) or did not mention any criteria or process by which stakeholders were identified. The person or group responsible for identifying stakeholders also was not mentioned. Both the reports and in-depth interviews described techniques for narrowing the stakeholder scope, but neither sources of information revealed any specific processes for identifying stakeholders.

Both the reports and interviewees identified stakeholders in a variety of ways and with different levels of detail. The reports were more specific in naming and describing professional stakeholder groups, and often categorized lay stakeholders as simply community member, community, or by the name of the community organization. Table 4 includes a list of the specific lay stakeholders identified in the reports and in the interviews.

Table 4. Naming of Lay Stakeholders

HIA	Report	Interview
Aerotropolis	• Representatives from 6 neighborhood associations of Hapeville • 1 community representative on the Advisory Committee • Other community members • Neighbors from the airport and the City of Atlanta • Southside Concerned Citizens	• People who are affected by the health impacts • Civic leaders • Residents (of Hapeville) • Hispanic community • Neighborhood associations • Neighborhoods
BeltLine	• More than 200,000 residents • 230,000 employees • Additional people living and working in the study area as the project progresses • Neighborhoods • Special-interest organizations (e.g. Park Pride) • Public	• General public • People who currently lived around the BeltLine • Chairs of Neighborhood Planning Units • Community members
Fort McPherson	• McPherson Action Community Coalition (MACC), organization representing all of the neighborhoods surrounding the base • Georgia Stand Up	• McPherson Action Community Coalition • people who were not in MACC • community members who lived in those neighborhoods • Leader and representatives from Georgia Stand Up

Among the interviewees, it became clear that there are different ways to define even these lay stakeholders. As one interviewee noted:

> *My idea of what a stakeholder is has evolved over time [...] as I become more and more engaged as a trainer and training others on HIA it's been important for me to be able to clarify the different types of stakeholders*. (Fort McPherson HIA, interview, January 16, 2013)

When the interviewees initially spoke about stakeholders, the term was broad and encompassed decision makers, subject matter experts, and other agencies and key people who would influence the direction and implementation of the projects. Early in each interview, the interviewee and interviewer defined the people of interest as lay stakeholders or community members and those without formal power in the decision making. The following pertains to these types of stakeholders unless otherwise stated.

Techniques for Identification

Interviewees discussed some general approaches to identifying stakeholders as well as strategies for narrowing the scope of who should and could be brought to the table. The Aerotropolis HIA approach to identifying stakeholders was described:

> *You identify different types of stakeholders and you make sure that there is an articulate spokesperson for each of those perspectives. And um, and the rationale being that, that this really isn't about numbers, it's about reasoning together. It's about bringing people together to discuss and reason together and therefore what's really the most important is to have that range of perspectives that exist in the community be represented in the discussion itself.* (Aerotropolis HIA, interview, January 30, 2013)

From this process, they put together a stakeholder group of about 18 individuals, including civic leaders and residents, within the community. Since the City of Hapeville is small, they also included some people from nearby cities that may be affected.

Both the Fort McPherson and BeltLine HIA identified stakeholders by geographic boundary. For example, the BeltLine HIA *"developed a 1-mile buffer around the BeltLine tax allocation district and looked at the population, the geography that was covered by that 1 mile buffer area."* There were some advantages of using geographic boundaries to identify and define a local stakeholder group because it helped narrow the scope and was a feasible way to have a

sampling frame defined by a concrete area. The interviewees who used geographic boundaries also mentioned a drawback, i.e., that some people who will be impacted by the project may be excluded. It is possible to have someone who lives outside the buffer but who spends much of their time in that area and, thus, will experience the benefits or negative impacts of the project.

The main way that all HIA interviewees identified individual stakeholders was through existing structures and organizations such as Neighborhood Associations and Neighborhood Planning Units within the defined geographic boundaries. For the Fort McPherson HIA, the first step to learning a about whom stakeholders might be was:

> …*to start attending the local redevelopment authority meeting and to see who stood up and commented during the public comment period, if there were any groups that were, that said they were there representing, um, you know, different community members and trying to understand what some of the comments, the content of the comments that they were talking about during the meeting, to understand what some of their concerns might be.* (Fort McPherson HIA, interview, January 16, 2013)

For this HIA, staff did not have existing relationships within the community, so it was important to begin to understand the community and its needs before formally approaching individuals and organizations to participate. Their initial goal was "*to attend some of the MACC* [McPherson Action Community Coalition] *meetings, as observers, to try to better understand the process before we asked people to, kind of, engage with us"*. Observing the meetings of MACC, the team was able to better understand the dynamics and processes which helped frame their approach to the HIA. It also helped them identify leaders and influential people within the community.

A major advantage of using existing structures as a way to identify stakeholders was that these groups provided an entry into the community and had existing structures and networks to reach local residents. For example, the BeltLine HIA was able to use the neighborhood planning

unit listserves to disseminate surveys to reach a large portion of residents. But as one interviewee pointed out:

> *There's always a potential problem that is that the neighborhood association may or may not be fully representative of the voices that are in the neighborhood. But, they are ones that are active and have engaged the process on some level and, also, they have some level of both of responsibility and trust in the community or they wouldn't be in the positions they are. (Aerotropolis HIA, interview, January 30, 2013)*

There was careful balance between feasibly being able to identify stakeholders with the given resources, and making sure that diverse voices had the opportunity to participate.

Challenges in Identification

Looking at long term impacts made identifying stakeholders that would be affected down the line problematic. In some cases, important stakeholders were identified, but the HIA team was unable to feasibly define and reach them. The Atlanta BeltLine is a 25-year project and stakeholders will undoubtedly change over time. They realized the limitation of reaching all stakeholder groups:

> *There was another whole population who was going to move into this area as a result of BeltLine. And there was no way to really identify who they might be or how they might define health or how they might, what kinds of things might help them have a healthier lifestyle.* (BeltLine HIA, interview, February 11, 2013)

Recruiting Stakeholders

"Some were extremely interested and very quickly engaged and kind of rallied their neighbors to participate in these discussions" (BeltLine HIA, interview, February 11, 2013).

Once stakeholders are identified, they must be approached to participate. This transition was not clearly described in the reports, although it came up often in the interviews. All in all, HIA reports did not describe individual efforts or strategies for recruiting stakeholders. Instead, this information was gleaned from lists of stakeholders, descriptions of meetings, and other activities that gathered data from the community. In the reports, the most detail provided about recruitment efforts and related challenges were related to survey data collection. Both the Aerotropolis and BeltLine HIAs used surveys as the main form of data collection from community members, and the reports went into great detail about the number and basic demographic data of respondents.

The interviews elucidated that recruitment is much more complex and challenging than the reports illustrated. Moreover, the interviews described sequential processes in recruiting, and what means of troubleshooting the teams used when recruitment methods produced less than ideal results. As during identification, all the HIAs used structured organizations as the main strategy for recruiting stakeholders. Apart from relying heavily on existing structures, the HIAs varied widely in their other approaches to recruitment based on what information they hoped to collect, the timeframe for the HIA, and the size of the community impacted by the project. The following section highlights strategies each HIA used based on its specific circumstances.

When discussing who and how they recruited for the Aerotropolis HIA, it was noted that "*not all the time do you find somebody that direct way, but they may suggest somebody else and, but then, there's a little bit of snowballing.*" Building relationships and gaining entry into the community was an effective way to move forward in identifying other influential people and differing opinions within the community. The Aerotropolis HIA faced relatively minimal challenges in recruiting community members to be part of their lay stakeholder committee. With the exception of a particularly isolated group, the interviewee said the team did not face any major challenges or setbacks and attributed it to community size, *"I think, partially, because it's*

a small community I don't, I mean in general it was work but it didn't seem particularly hard to recruit participants".

The Fort McPherson HIA team initially engaged with potential stakeholder by inviting them to HIA training. This day-long training exposed potential stakeholders to key concepts of HIA and the role of stakeholders. This technique was unique in a few ways. First, it was a way to educate people about the importance of the role of community in the HIA before they were formally asked to participate. Second, the training brought all potential stakeholders together, including community members, organization representatives, subject matter experts, and professionals. A main advantage of this technique was that:

> *The community members felt like, it was, it was really cool to be able to come to a training that a lot of other paid professionals were also there for. And that they were considered on equal par with them and no one was asking differing opinions, it was that everyone's opinions was valued.* (Fort McPherson HIA, interview, January 16, 2013)

The initial framing of the project and allowing lay stakeholders to be engaged on the same level as professionals was a way to let the community know their opinion and concerns were as important as those of experts. For this HIA, the engagement strategy with community members resulted in quality input and left the community with very positive feelings about the HIA, in general.

The BeltLine HIA needed to take a less individualized approach, based on the enormous size and scope of the project. The proposed BeltLine is 22 miles long, runs through many neighborhoods, and will expand and evolve over the next several decades. The HIA decided the most feasible way to reach many people with the given resources was to send out surveys through the existing Neighborhood Planning Units. When the BeltLine received very low response rates in some areas, they then adopted a more active approach and utilized the neighborhood planning meetings as a way to promote the survey. When they attended the meetings in person, *"Some*

were extremely interested and very quickly engaged and kind of rallied their neighbors to participate in these discussions".

Challenges

The HIA reports and interviews both identified challenges and setbacks in recruiting and gaining a representative sample of community stakeholders. The official reports of the HIAs that used surveys discussed limitations of this method. The BeltLine report stated that,

> While the survey respondents were not fully representative of the population mix of the BeltLine Study Area, additional avenues through which public perception of the potential health effects of the BeltLine could be measured and integrated into the overall health impact assessment."(Atlanta BeltLine Report, p. 50)

The Fort McPherson report also explained some of the limitations of their stakeholder recruitment strategy, and their implications for the HIA:

> While the HIA incorporated input from many diverse stakeholders, only one primary contact represented the point of view of the Local Redevelopment Authority, and members of a community action coalition were likely those most involved in their neighborhoods and may not fully represent the views of residents who are not as active. (Fort McPherson Report, p. 21)

The interviews enabled the HIA staff to go into greater detail about challenges. A reoccurring theme in each interview was that limited resources and time were major influences on stakeholder involvement. For example, even with targeted recruitment strategies, the BeltLine HIA "*did not have an entirely representative response rate*" and the team noted that it was a convenience poll that "*really wasn't as structured as one might like, but we had limited resources to do it."*

While structured organizations were described as useful, they also posed limitations. The Fort McPherson HIA, which was completed in only 3-4 months, recognized the time frame as a significant limitation of the HIA: *"we knew going in that there would be some groups that were either not participating in these structured group processes or had differing opinions that we were not going to have time to engage."* This statement acknowledged the possibility that people within disadvantaged social and economic groups would be left out and unable to share how the project would impact their health, which may vary widely from group to group.

The BeltLine faced issues with some neighborhoods having more important priorities than engaging in an HIA. The interviewee stated that:

> *There are some places in Atlanta that were struggling with just basic necessities and very, very very tangible issues in their community about problem infrastructure that they couldn't get resolved, or high levels of crime that they were working really hard with the police department to deal with. So, I would say that in those places, sometimes they were appreciative of the work on the HIA but didn't see immediate pay off."* (BeltLine interview, February 11, 2013)

Moreover, HIA happened quickly, and often the stakeholder involvement activities evolved in unpredictable ways. Some interviewees discussed not only what they did, but what they would do differently in regard to engaging stakeholders, in retrospect. The BeltLine HIA took place in 2005 and the interviewee noted that:

> *The use of social media and of things like crowd sourcing has so dramatically changed in the time period, that I think you could be much more innovative and engage a lot more people, more constructively now than I think we were doing at that time.* (BeltLine interview, February 11, 2013)

Some groups did not participate in the HIA process due to difficulty with the HIA team gaining entrance and building relationships with the community. In the Aerotropolis HIA, there was an area of town that had a small, but concentrated, Hispanic population. While some attempts were made, the team was unsuccessful in gaining representation from this group because the community is "*quite isolated and language and other kinds of things tend to reinforce that."* This community was clearly going to be impacted by the development of Aerotropolis, but did not engage in the HIA process. Given the small staff and tight timeline, it was not always feasible to use extensive and creative ways to engage all groups.

Use of Stakeholder Input

> *"It wasn't anything that we could have seen with the available data at the time or could have documented any other way."* (Fort McPherson HIA, interview, January 16, 2013)

HIA Impact

Stakeholder input that was collected was used to inform the HIA. The main ways that input impacted the HIA for all three cases were during the scoping and assessment phases. At these points in the overall HIA process, stakeholder input such as comments, concerns, and perceptions were applied to inform the approach, move along in the process, and develop recommendations.

The HIA reports and interviews explained how the data and input from stakeholders were incorporated into the HIA. For example, the Aerotropolis HIA report states that, "As a result of stakeholder participation, greater emphasis was placed on societal and fiscal impacts" (Aerotropolis Report, p. 57). The BeltLine HIA report affirms that their, "Recommendations are intended to give community members strategies that can be utilized to support positive health outcomes for all of the populations affected by the BeltLine" (Atlanta BeltLine Report, p. 9). Processes for including and analyzing this feedback were also explained in the reports,. For

example, the Fort McPherson report notes that, “After reviewing data from all of these sources, we used an iterative process incorporating stakeholder input with in-house knowledge and HIA scoping criteria.”

The aim of the scoping phase is to establish the study area boundaries, identify potential consequences, and design an overall approach for conducting the HIA. The involvement of stakeholders during the scoping stage was explained as a way to narrow the focus of the HIA and prioritize health issues. As expected, the interviews provided much more in-depth information about the thinking and process behind these decisions. When speaking about how stakeholder comments changes the HIA, the interviewee from the BeltLine explained:

> *I don’t think we would have looked as specifically at things like safety issues or social capital issues in as depth as we did had it not been from hearing from the stakeholders about the fact that they thought they were some of the most important things, that they thought would influence their health.* (Atlanta BeltLine, interview, February 11, 2013)

The use of input during the scoping stage was essential because it defined the focus moving forward. While all the HIA teams did collect other sorts of secondary health data, the qualitative data from community members provided information that could not have been found elsewhere. In some circumstances, it was the only feasible source of data. During the scoping phase of the Fort McPherson HIA, a community member gave the HIA team a windshield survey around the entire fort and surrounding neighborhoods. The community member provided insider knowledge, such as which corner stores had fresh produce, and explained many other nuances of living in the community that are not apparent to outsiders. From the information provided by that one stakeholder, the HIA documented the area as a food dessert. In explaining this finding, the interviewee affirmed that “*it wasn’t anything that we could have seen with the available data at the time or could have documented any another way”* (Fort McPherson HIA, interview, January 16, 2013). Similarly, in working with the small and unstudied City of Hapeville, the interviewee

from the Aerotropolis HIA explained how interactions with the stakeholder group exposed "*issues of local knowledge that would not be readily available in the absence of working with stakeholder groups"*.

In addition to helping HIA staff narrow the scope of health issues of interest and to collect locally relevant data, stakeholder input was a key component of the assessment phase of the HIA, in which recommendations were developed. Input from stakeholders went beyond the HIA to projected visions for the future. For example, one of the recommendations in the BeltLine HIA report states that

> "Public participation should be a critical component throughout the project, which could mean up to 25 years of participation of varying degrees and forms, to correspond to the timeframe of the TAD [Tax Allocation District]. The plan should identify appropriate strategies to involve all stakeholders" (Atlanta BeltLine Report, p. 60).

Clearly, to provide recommendations that will inform policy in a way that promotes health and well-being, *"You have to know enough about the site and the community and to know what the values are that you're trying to optimize."* (Aerotropolis interview) There were many ways in which input influenced and shaped recommendations. For example, the BeltLine HIA interviewee stated that they actually "*very intentionally*" grouped all of their recommendations into four categories, *"Access to social equity, physical activity, safety, and social capital"* because these four areas were the most common concerns identified in the stakeholder survey.

Future Benefits

Furthermore, stakeholder input was used beyond the formal HIA to build and sustain relationships, address more widespread community issues, and set a precedent for future community engagement with decision makers as the projects develop.

The BeltLine HIA only assessed the current plans for the development, but the plans will inevitably change as the project is implemented and developed over coming decades. Therefore, a key purpose of the HIA was to help both community members and decision makers continue to, *"Think about how health outcomes would play a role in the execution of BeltLine."* The interviewee confirmed that this hope was quickly put into practice; after the completion of the HIA, the advisory council on the BeltLine added a health component to the council, as well as public health voices.

In several cases, the work completed during the HIA was not used in the actual assessment, but contributed to future work and promoted healthy communities in other ways. The HIAs were narrow in the fact that each addresses a very specific policy or project, but broad in the fact that they created a vision for their communities and provided baseline assessments for health and well-being outside of the original scope of each HIA. Some of the recommendations made in the Aerotropolis HIA were not made specifically to the decision makers for Aerotropolis, but rather to other important players in the community. This was done to bring visibility to *"a well-functioning, integrated project that supports the quality of life and health of a city."* (Aerotropolis interview) HIA can elucidate larger issues within communities and can inform next steps to address such issues. The Aerotropolis HIA also raises some larger policy issues for the City of Hapeville and their overall integration with the airport and neighboring City of Atlanta. As the interviewee from the Aerotropolis HIA stated, *"This is about creating a vision and pathways to that vision and, you know, plus some assessment about how difficult those paths are...you lay down principles"*. This demonstrates that HIA has the potential to set the direction for future community improvements.

The Fort McPherson HIA also discovered and developed recommendations beyond the scope of the HIA. The stakeholders were very engaged, but often had ideas about promoting health that did not directly related to the zoning of the fort. The community members,

> *…had a few additional recommendations that were fantastic and good for health that did not relate back to the decision point so we [HIA team] actually included them as kind of an additional findings or an addendum of the report, as a way to reflect that we were still hearing what they said.* (Fort McPherson HIA, interview, January 16, 2013)

This illustrated a successful way to ensure that community members were heard and respected. The participating stakeholders had very serious health concerns and put a lot of time and energy into thinking about ways their community could be improved. The HIA team found a creative way to ensure that the stakeholders' efforts did not go to waste. By including recommendations outside of the scope of the HIA in an addendum to the report, they were able to balance the technical requirements of an HIA and the ethical responsibility to disclose the voices and concerns of the community.

Conducting HIA and disseminating the reports facilitated more effective stakeholder engagement for future projects. Being such a long term project, the BeltLine HIA also functioned as an assessment of how to proceed with the project, even after the HIA was complete. The interviewee mentioned that, "*What is true for Atlanta is not necessarily true for Birmingham...I think cultural factors could be different."* (BeltLine HIA, interview, February 11, 2013) The team wanted to understand the unique culture of Atlanta and the community of focus, to more effectively complete the BeltLine project by understanding the strengths, weaknesses, and assets within the community.

Overall Barriers to and Facilitators of Stakeholder Involvement

"HIA or any kind of assessment is often not funded well enough to do a full-blown stakeholder engagement."

"We have really, really strong players on both sides to execute these kinds of projects"

(BeltLine HIA, interview, February 11, 2013).

Interviewees mentioned many factors that impacted the quantity and quality of stakeholder involvement. These factors fall into three overarching categories: outside influences, HIA resources, and prior experiences.

Barriers

The main barrier to having sufficient and high quality stakeholder engagement was limited resources to conduct the HIA, including staff and time. As the interviewee from the BeltLine stated "*really good stakeholder engagement is expensive [...] and, unfortunately, I think a lot of funding for HIA or any kind of assessment is often not funded well enough to do a full-blown stakeholder engagement."*

The interviewees from both the Aerotropolis and BeltLine HIA mentioned that these HIA were underway when the economic recession hit. The larger economic context caused the decision makers to speed up the timeline and change some of the development plans. Since stakeholder advice is typically sought early, the original development plans were usually what the stakeholders had responded to. As a result of this, and the fact that stakeholder input was either completely or partially analyzed by the time of the changes, the feedback elicited from stakeholders did not always align perfectly with the project as it had changed. Thus, limited resources caused changes that reduced the value of the stakeholders' input, and limited resources also made it impossible to gain addition input once the changes had occurred.

Clearly, more funding would likely improve any HIA, but limited funds are a reality for HIA practice. One interviewee spoke to the resource constraints as something an HIA must acknowledge and accept as a limitation*: "we had very little staff and no external funding. We recognized that there were a lot of stakeholder groups, even within those neighborhoods around the community that we just were not able to engage"* (Fort McPherson HIA, interview, January 16, 2013). All interviewees reflected on stakeholder processes they would have liked to have done differently, or other information they would like to have collected from the communities,

but they had to choose where their time and efforts would be most beneficial and what was feasible to get done in the given timeframe with the given resources.

Facilitators

In some cases, existing structures and legislation supported the stakeholder involvement in HIA and aligned with the existing vision. For example, the City of Hapeville had public requirements that projects allow the public to comment on them at certain points. For many projects, public commentary is already a requirement and decision makers and other professionals saw the HIA as a way to fulfill these requirements. Likewise, another contextual facilitator for the Aerotropolis HIA was that *"building civic capacity in the community was an important part in what they [public officials] were trying to do for the city as a whole, anyways."* Because of this, the City officials and planners involved were described as extremely supportive in eliciting input and feedback from community members.

While each HIA has objectives and goals, so do the decision makers who ultimately use the HIA to promote better health. The motivations and attitudes of the main decision-makers had serious implications for stakeholder involvement and the HIA in general. With regard to the Fort McPherson HIA, the vision of the director of the local redevelopment authority was closely aligned with the goal of the HIA so it facilitated the process:

> *We had anticipated he would have a lot more resistance...I think one of the things that, the contextual factors, was that one of their goals in redeveloping this property was to create this local health center, with the vaccine research and that sort of thing. He really wanted CDC* [Centers for Disease Control and Prevention] *to be one of the organizations that would agree to locate on the property. So, the fact that we had an official connection with CDC as the, the part that initiated this project, I think was one of the main reasons that he played nicely with us.* (Fort McPherson HIA, interview, January 16, 2013)

The larger social, political, and economic environment, at times, facilitated HIA and stakeholder involvement. The interviewee from the BeltLine HIA went into depth about how the unique context and environment of Atlanta is particularly conducive to HIA and eliciting quality engagement from stakeholders about their health:

> *The unique positioning here in Atlanta is always the fact that we've got very strong planning academics as well as, obviously, you know, Emory University's Rollins School of Public Health, GSU's public health program, and CDC here. And so, we have really, really strong players on both sides to execute these kinds of projects.* (BeltLine HIA, interview, February 11, 2013)

This underlines the context as a facilitator of stakeholders' involvement. Atlanta has qualified professionals from the technical side, and is also home to many research institutions and universities. As a result, there may be a general understanding of the need for research and community participation, which helps motivate community members to be a part of projects such as HIA.

Stakeholder Perceptions

"*They told us at the end of the process that they felt like they were heard by us. They felt like, what they told us that we reflected back to them, we reflected back to the other groups.*"

(Fort McPherson HIA, interview, January 16, 2013)

Stakeholder engagement only happens because the community members are aware of the HIA and decide to be a part of the process. The HIA reports mentioned stakeholder perceptions in terms of the survey data collected to assess health impacts and community characteristics, but not in terms of the HIA process or their involvement in HIA. Fortunately, these were gleaned from the interviews, as they are necessary in order to fully understand the experience of stakeholder involvement and potential implications.

Formation and Assessment of Perceptions

Perceptions of potential stakeholders can form prior to beginning an HIA and may have implications for stakeholder engagement. In some situations, in order to design the most effective strategies, it may be useful to assess stakeholders' perceptions before engagement begins. Understanding the context and experiences of potential stakeholders was an important component in planning the HIAs and assessing what was realistic. Strategies for identifying, recruiting, and collecting input from stakeholder groups were strongly affected by the prior context, but could also be tailored to take advantage of the circumstances.

The BeltLine project experienced marked media coverage for several years before the HIA began. Therefore, staff was in a position where community members already had strong opinions about the development and some members had been engaged in other sorts of public forums. The BeltLine interviewee acknowledged the situation the staff were coming into and explained that, *"We were also recognizing that, to some degree, there was already a little bit of burnout before we even got there in terms of an interest in really engaging in, and thoughts about, health impacts associated with [the BeltLine]."* While this informed their approach, they used other strategies, even before the formal engagement process occurred. Due to both the media attention around the BeltLine and the scope of this huge project, their initial way to collect data and design their survey was retrospective and involved the print media. The interviewee described how they began the process and why:

> *The mainstream media is one avenue by which people can actually suggest, or tell a broader audience, what their perceptions are, and what their opinions are, and what their desires are about a project. So, we did a content analysis of the newspaper coverage...prior to beginning, full-blown, the HIA, to look at how people, when they talked about the BeltLine, how they talked about things that might be related or have impacts and outcomes on health.* (BeltLine HIA, interview, February 11, 2013)

By seeing what had already been said by the community, the HIA team minimized redundancies and stakeholder burnout. For example, the surveys the team created did not need to ask everything about health impacts, but could focus on priorities previously expressed by communities to gain further opinion on important and debated topics.

For the Aerotropolis HIA, the target community was small and, in the past, had not been involved in community research. So, for them, there was a feeling of intrigue. The Aerotropolis interviewee stated that, "*The fact that it was a HIA added a certain level of novelty to it, which might not have been there if it wasn't a HIA."* In other words, in gaining community participation, there seems to be something unique about the HIA process, and asking specifically about perceived health concerns, that may help encourage participation.

When the Fort McPherson HIA team attended their first community meeting, they were approached by a leader in the community who was initially confrontational. According to the Fort McPherson interviewee, the community member asked, "*Who are you? Why are you here? Don't be another researcher who writes a report and sets it on the shelf.*" In stark contrast to the Aerotropolis HIA which was conducted in a small and relatively well-off city, the predominantly low-income African American communities surrounding Fort McPherson have often been the subject of research. Members of the staff from the Fort McPherson HIA worked closely with the skeptical community member to build trust and establish a relationship that proved to be instrumental throughout the rest of the work. Therefore, understanding the unique context and history of the community before approaching members for recruitment was crucial in gaining sufficient stakeholder engagement and conducting the best HIA possible.

Perceptions of involvement

According to those interviewed, stakeholders involved had overwhelmingly positive attitudes toward and opinions about the HIA process. When approached about the HIA and their

potential role, interviewees described stakeholders' initial reactions as feelings of interest, enthusiasm, welcome, and intrigue.

> *People generally seemed to be really interested in anything that might improve health and talking about health and so people were really open to it"* and " [Stakeholders] *told us, at the end of the process, that they felt like they were heard by us. They felt like what they told us that we reflected back to them we reflected back to the other groups, and we felt like we kind of served as the intermediary role for them.* (Fort McPherson HIA, interview, January 16, 2013)

Promoting Equity

"*People that were living in those neighborhoods surrounding the property were often disenfranchised groups and this allowed them the opportunity to participate in a different way"*

(Fort McPherson HIA, interview, January 16, 2013)

Since equity is one of the core values of HIA, and the definition of HIA includes the distribution of impacts, all the HIA reports include some aspect of equity and identify subgroups that may experience differential impacts. "Equity and Access" and "Access and Social Equity" were categories of health impacts assessed in two of the HIA. Additionally, all reports specifically examined either social capital or social cohesion. In spite of this, which stakeholders were involved and which were left out is never mentioned in relation to equity. Furthermore, the reports do not include any monitoring of impact or evaluation of the HIA, so it cannot be said that the HIA improved health, reduced health disparities, or promoted health equity. One report does provide questions that interested parties and stakeholders should ask to assess the HIA, but the questions were not actually asked. The questions provided included: "To what extent did the HIA engage all of the appropriate voices?", "Were there stakeholders that did not participate in the process? "and "to what degree was the process useful for the community? "

To conclude each interview, the interviewee was asked to explain the HIA they conducted did or did not promote health equity. The interviewee from the BeltLine reiterated that health equity was part of the purpose of conducting the HIA because,

> *The BeltLine covered such a broad area in the city that we recognized that there were some very stressed neighborhoods, and, um, and not fully served neighborhoods and communities in the BeltLine study area. And, therefore, there was an important opportunity to address access and equity.* (BeltLine HIA, interview, February 11, 2013)

It was noted that most HIA approach equity by looking at the distribution of impacts on the most vulnerable groups, but the Fort McPherson HIA had a different approach because "*it was all consistently the same demographic group, it was primarily low-income African American populations for all of the different neighborhoods."* Instead, the team focused on where resources were located within the neighborhoods. The Fort McPherson interviewee stated that, *"From an equity perspective, we tried to emphasize our recommendations being the highest priority for the ones that had the least access to those resources already."* The way the Fort McPherson HIA promoted equity was by providing space for the community to advocate for themselves and influence the decisions that would impact their community. Without the HIA, this opportunity would not likely exist because,

> *[The] base realignment and closure process is mandated in how it's done, to a great extent, by the Department of Defense guidelines. Some of those guidelines specifically state that the redevelopment must focus on the property itself, and not the community surrounding the property. So there was no structured way for the community members to have their voice be represented by others.* (Fort McPherson HIA, interview, January 16, 2013)

The HIA provided the space for the disenfranchised groups around the base to participate in the decisions that would eventually impact their health and well-being. The HIA served as a third

party to interpret what the community said and relay the information back to the developers, both informally and in the HIA report. This means that, in the process of stakeholder involvement, communities can voice their concerns and be included in the decision-making process, which can build community capacity and support democracy building.

When considering the impact on equity, the interviewee from the Aerotropolis HIA responded with, *"It depends on which scale you're talking about. At the scale of the Hispanic population, they would be the most disenfranchised, I don't know that it will be that helpful." T*he Hispanic population was described as the most disenfranchised group in the area surrounding the new development, was not involved in the HIA, and therefore, seemed unlikely to benefit. It was noted that some over the overall improvements brought along with the development may improve some of the circumstances facing this population. But what was described as a main concern in promoting equity in this project was the problem of gentrification in the future, and who will really benefit from the new development in the long term.

One interviewee stated that, *"HIA today are not really well designed to do anything other than identify the problem."* While HIA can identify issues and inform decision-making, the Fort McPherson HIA takes its purpose further by stating that,

> "The process of conducting an HIA also has the potential to enrich and improve the decision-making process by encouraging collaboration, informing potential health impact decisions, and empowering engaged parties with tools for future use (Fort McPherson Report, p.11)"

CHAPTER 5: DISCUSSION

Factors, Processes, and Outcomes of Stakeholder Involvement

The in-depth interviews in this study answered the research questions regarding the identification and recruitment of stakeholders and the use of stakeholder input. Furthermore, the use of grounded theory elicited deeper knowledge and understanding of the components that impact stakeholder involvement in HIA. The core elements derived from the data provided a framework for a model of stakeholder involvement in HIA, which has been visually represented in Figure 1.

Prior Conditions

HIA are informed, and their success influenced, by the context in which they are conducted. Interviewees identified ways in which the larger economic, political, and social environments, both nationally and in Atlanta, specifically impacted HIA. These impacts could be positive, for example national attention on health assessments and evaluation, or could be negative, such as the economic recession which occurred during two of the HIAs studied. Additionally, the data indicate that prior relationships and experiences with similar projects, developers, and communities can better inform the approach and strategies for HIA. In the case of the BeltLine HIA, the burnout of the public around BeltLine issues was a determining factor that shaped what data was collected from community members, and how much time was required by them. Furthermore, if the conducting agency has existing relationships with professionals, public officials, and community leaders, the engagement of stakeholders and overall HIA can happen more effectively and may require less work up front.

Figure 1. Model of Factors, Processes, and Outcomes of Stakeholder Involvement in HIA

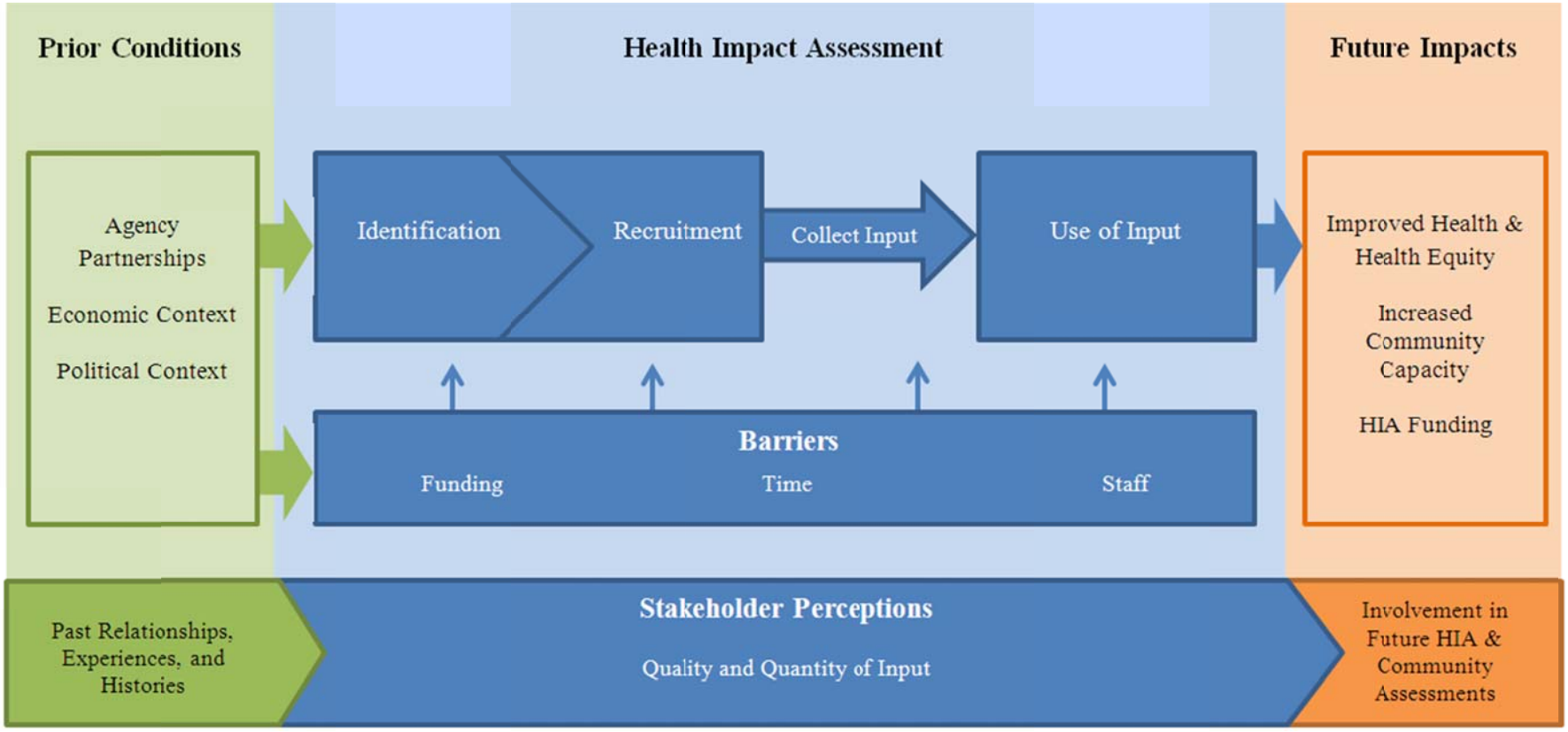

Figure 1. Depicts that there are core elements and activities for conducting stakeholder involvement in HIA(center section). But stakeholder involvement during the HIA cannot be viewed in isolation, as it depends heavily on prior conditions and the larger context (left section) and has serious implications in the future (right section). Cross cutting the model (bottom) are the attitudes and perceptions of stakeholders, which are fundamental to the success of HIA, shaped by the past, and can encourage future benefit.

Health Impact Assessment

Identification/Recruitment: The middle area of the model represents steps and factors involved in actually conducting the HIA. All three HIAs studied used structured organizations as the main strategy to both identify and recruit stakeholders. The other consistent technique used by all three HIAs was using defined geographic boundaries around the development project in order to narrow the scope of who would be considered a community stakeholder. While all interviewees spoke to the limitations of this approach, they identified then as efficient and feasible ways of beginning the stakeholders' involvement in HIA.

Use of Input: After stakeholders are engaged in the HIA process, they provide input. The HIA cases in this study varied with respect to the data collection methods and types of data, depending on the needs of their HIA. Yet, all the HIAs used stakeholders' input during the Scoping phase, in order to narrow the focus and prioritize health issues of importance to the community. They also use stakeholders' input during the Assessment phase, in which final recommendations are developed. Outside of these phases, use of input varied greatly, depending on the relationship between HIA staff and stakeholders, and levels of stakeholder engagement. All interviewees agreed that community input was an essential form of data that elucidated characteristics and concerns of the community and could not have been found elsewhere. Stakeholders' input was used beyond the HIA to promote health and community engagement in the future. Community concerns and priorities were disseminated beyond the HIA report, to help shape the future vision and work.

Barriers: The largest barrier to identification, recruitment, and use of stakeholder input expressed by all interviewees was limited resources to conduct these HIA. Resources that were limited included funding for the HIA, staff time required for the HIA, and a tight timelines. At times, these barriers can limit the strategies available for outreach to certain community groups, which can challenge the ability of the HIA to gain adequate representation across groups. When

recruitment is not fully effective, the use of community input in the HIA may not represent all voices in the community, especially those who are marginalized. When input is limited, it is likely to leave out important perspectives and concerns about health, and therefore, limit the utility of the recommendations. Overall, the scarcity of resources jeopardizes the depth and quality of engagement

Future Impacts

HIA informs projects and policy in ways that impact the short- and long-term health of communities. All HIA produced recommendations and strategies for development that maximized health benefits and minimized negative health impacts, which may be very influential in the short term. Interviewees also spoke of the HIA process as a way to identify health concerns and health promoting assets within communities that extend beyond the focus of the HIA. Sharing these findings with a broader audience has helped bring attention to community issues, created visions for the future, and provided the foundation for other work to improve conditions around health.

HIA were mutually beneficial for the future of the agency and community as they improved future opportunities for the agency and built relationships that promoted community empowerment. The CQRGD has demonstrated success in conducting HIA, as this organization has received funding to conduct five HIA to date. Soliciting input from stakeholders was identified as a mechanism by which trust and relationships were built. In one case, sustaining this positive relationship enabled the agency to receive funding to conduct other research within the same community, and the amount of time and resources spent on building trusting relationships and identifying gatekeepers for this future research was greatly reduced. By investing the time to develop mutual trust during the HIA, the likelihood of future stakeholder engagement and quality input increased. Furthermore, even after the HIA, this community not only remained engaged with the decision makers about the development of the project, they also leveraged experts'

advice for grants and projects of their own. HIA can provide stakeholders with new relationships, tools, and information, which they can use to build community capacity and advocate for themselves. In this way, HIA can be used as a tool to promote health equity and empower communities.

Stakeholder Perceptions

An underlying assumption behind the model is that community stakeholders will agree to participate and provide quality input. Without these, HIA cannot really develop recommendations that will maximize health benefits and minimize negative impacts on health. Therefore, the perceptions of stakeholders is a cross cutting theme in the model. Stakeholder perceptions are developed during the HIA, but also inform the overall experience based on the stakeholders' prior perceptions, and alter future impacts of the HIA.

Potential stakeholders may have prior experiences with research or other types of community assessments, which may facilitate or hinder the ability of HIA staff to recruit and engage them. While positive relationships with stakeholder groups may make engagement easier, stakeholders who have been mistreated or had negative experiences with participation in research may decline to be involved. Thus, stakeholders who become involved use their experience of participating in an HIA to inform their opinions about the project and the conducting agency, but also their opinions about engaging in similar projects in the future. One case in this study demonstrated that a negative experience with a previous research project made one community stakeholder particularly skeptical about engaging. In the end, however, as a result of the extremely positive relationships developed by the staff who reached out to the community member during the HIA process, he rallied the support of others, and continued to work with the agency in future projects. Throughout the interviews, importance was placed on making the experience a positive one in which stakeholders have the space to provide high quality input and desire to give meaningful feedback on recommendations. Doing so can increase the likelihood of

achieving better health outcomes from the project, build capacity within the community, and justify future HIA funding.

Conclusions

Need for Explicit Processes of Stakeholder Identification and Recruitment

Overall, this study indicates that processes for stakeholder identification and recruitment were lacking. While both the HIA reports and the in-depth interviews described some techniques and strategies used to establish who stakeholders might be and where to recruit from, the overall process is unclear. For example, it was not explained who decides which stakeholders need to be at the table, or how community members are defined. This poses some issues in terms of promoting health equity and including disadvantaged groups. If one person alone makes these decisions, biases may influence which communities are included, and how. Without being able to identify all potentially effected groups, it is not possible to come up with targeted and culturally relevant recruitment strategies to encourage broad participation. Without fair and representative participation, important health impacts may be missed and undermine the HIA results.

While concrete and specific processes do not exist, the interviews were extremely valuable in explaining current techniques and strategies that HIA staff have used to bring communities to the table and overcome barriers. Clearly the size of the community, the purpose of the HIA, and the relationships the HIA team has and builds can strongly influence recruitment techniques and success.

HIA Funding Impacts the Quantity and Quality of Stakeholder Involvement

A majority of the challenges described stem from the limited resources available to conduct HIA. While the three HIAs studied each engaged stakeholders, each also acknowledged that certain groups were left out or that their efforts were limited by the time and money available. For example, faced with low survey responses, the BeltLine team targeted low response

neighborhoods and attended meetings in person. While this strategy proved effective in gaining more responses, it could not be done for every neighborhood due to the extensive staff time it would have required, given the size of the project. Moreover, even with the necessary people at the table, resources strongly influence the type and frequency of engagement. From the interviews, the HIA that focused on smaller geographic areas facilitated regular, in-person meetings to collect data and provided opportunities for stakeholders to provide feedback throughout the process. For larger HIA, the money and time can make these intimate interactions or opportunities to provide feedback impossible, so the data collected may not be as in-depth. At times, resources prevent HIA from using their preferred types of engagement or alter the type of data they can feasibly collect. When the quality of the data is less than ideal, it may hinder the HIA staff's ability to fully understand the health concerns of stakeholders and make the best recommendations. Scare resources limit the opportunity for HIA to effectively involve all necessary groups and to collect in-depth community input. This makes even the best intentioned recommendations and project developments incomplete in addressing the health of all. In turn, the ability of HIA to promote health equity and empower communities is reduced.

Staff is an especially important resource for HIA. The interviews demonstrated that personal relationships between the conducting agency and the target community can be an important asset for HIA. Based on the experience of trying to recruit HIA staff for the study and the anecdotal stories from interviewees, staff turnover in HIA is frequent. Even among the three interviewees, one had not worked for the agency or on HIA for years, and another indicated that the staff member who led the stakeholder engagement portion of the HIA had left the agency, and that she, herself, would also be transitioning to a new job. Since previous relationships were identified as important facilitators of stakeholder engagement in HIA, the turnover of HIA staff involved in the stakeholder engagement process is of concern because of its potential to break important ties with the community. Future investigations should examine if staff turnover impacts

the relationship between the community and the agency, or how the staff can be transitioned in a way that helps transfer the trust and rapport built.

What are extremely promising are the interviewees' accounts of feasible and effective ways to approach identification and recruitment of stakeholders, given limited resources. The ability of these three HIA's staff to achieve success and build new relationships reflects their creativity and efficiency in involving stakeholders in HIA, given such limited financial and human capital resources. It is important that experiences in overcoming adversities and developing innovative strategies be sharable with the larger HIA community. All in all, the thoughtfulness of these interviewees and their focus on learning from past shortcomings to improve future HIA shows great promise for the field.

Study Limitations

As is a limitation of most qualitative studies, the findings from this research proposal cannot be generalized to a wide population or to all HIA. Nonetheless, the study addresses the aim of better understanding how the context in Atlanta, Georgia shapes how stakeholders are identified to participate in HIA. A potential limitation is that each HIA was conducted for very different projects and purposes, and the distinct strategies utilized for stakeholder identification and recruitment in each HIA vary. Despite their differences in purpose, however, because all three HIA were on development projects in the Atlanta Metro area, this exploratory study allows for some comparisons among them. The similarities and differences in HIA processes and perspectives indicate barriers and facilitators to obtaining stakeholder involvement in the HIA conducted in Atlanta and add valuable information about which projects require which types of stakeholders. Much can be gained about how specific circumstances influence the stakeholders' involvement.

Another limitation is the small sample size. Recruitment efforts and staff mobility resulted in interviewing only one representative from each of the three case HIA. A potential shortcoming of this sample is that the data are from the perspective of one individual, and other important team members may have provided additional and valuable insight.

Another limitation is the potential for response bias. While the HIA have been completed, some of the actual implementation of the projects/policies are ongoing. Therefore, some respondents may be hesitant to critique or provide negative information about the stakeholder process. While the retrospective nature of the study allowed staff to reflect on the processes after the fact, it is possible that responses were biased in the positive direction, as staff may have been uncomfortable admitting mistakes and room for improvement, especially for the two interviewees who continue to work at the conducting agencies. Careful phrasing of questions and insurance of confidentiality was reinforced, to encourage staff to feel comfortable airing concerns and shortcomings in order to limit this response bias.

Implications for Public Health

This study has significant implications for HIA and public health in general. Currently, there is no detailed description of specific stakeholders, or how stakeholders are defined, identified, and recruited in HIA. The lack of these descriptions in the literature is a prominent reason that people critique HIA and underestimate its utility. This study fills that gap by providing examples and experiences of stakeholder identification in three distinct HIA in Atlanta, Georgia. While there will never be one way to identify the right stakeholders, this study provides an in-depth understanding of the steps taken to identify, recruit, and utilize stakeholders across three distinct projects.

This study in an important step in bringing HIA staff closer to developing best practices for stakeholder identification and recruitment. It is the first study of its kind, but can easily be

replicated in other contexts to explore more successful ways to elicit quality participation from stakeholders in HIA. By seeing what worked well and what major challenges existed during stakeholder engagement, other HIA can better plan and approach HIA. It is hoped that future HIA can build upon these study results and understand the unique contexts that influence they ways in which HIA are conducted.

The results of this study add transparency to the stakeholder identification and recruitment process and identify a lack of concrete processes. Using these results as a model will allow the staff of future HIAs to think critically about which stakeholders are involved and which are being left out of the process entirely. This is crucial to the effectiveness of an HIA and, in turn, the effectiveness of public health; if vulnerable, marginalized, or affected peoples are not heard in HIA, the effectiveness of HIA is reduced, and in turn, opportunities to maximize health benefits and minimize adverse health outcomes in a wide range of proposals are missed. Ultimately, the findings of this study can help better inform future HIA by bringing attention to the importance of ensuring that affected communities and groups are represented in the decisions that affect their health and wellbeing. By understanding context-specific stakeholder that promote stakeholder involvement, we can improve these processes, build more support for HIA, and make HIA an even stronger tool to address social determinants of health. In doing so, we can bring attention to the everyday decisions that influence our health and who is making them.

Moving Forward

The results and conclusions of this study pinpoint opportunities for future research on HIA. While HIA appear to lack systematic and defined processes for stakeholder identification and recruitment, it is also possible that these processes existed, but were never documented in the reports or explained in the interviews, even when probed. If this is the case, future HIA research

and practice should dedicate time to documenting some of these processes and challenges so that the lessons can be made available for future HIA.

Identifying additional resources is an important step for improving HIA and the involvement of stakeholders. Even with the lack of increased funding, future investigation should examine if and how staff turnover impacts the relationship between the community and HIA staff, and how the transition of staff can be performed in a way that helps to transfer the trust and rapport already built. Lastly, a weakness of current HIA is the lack of monitoring and evaluation of impacts, also due to limited resources. Future funds and research should be devoted to monitoring both short-term and long-term results of HIA if we are to confirm that HIA is an effective tool for improving health and promoting equity in our communities.

Finally, the development of community led HIA is an important consideration for the future of HIA. Due to the rapid growth of HIA, in terms of numbers and applications, community ownership over part or all of the process should be encouraged. Providing funds and supporting the development of community lead HIA may prove to be more cost effective and to better promote health equity than traditional HIA.

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