Wisconsin Health Impact Assessment Initiative
Bureau of Environmental and Occupational Health
Division of Public Health
Department of Health Services
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State Capacity Building for the Built Environment and Health Impact Assessments

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**Wisconsin State/Territory-Level Capacity Building for
Built Environment Projects and Health Impact Assessments
ASTHO Final Report**

Introduction

The counties of Wisconsin are largely non-metropolitan. However, Wisconsin has witnessed increasing numbers of satellite communities built to accommodate urban hubs, intensifying commuter traffic and further stressing local and regional transportation infrastructure. In fact, the 1996 final report by the Wisconsin State Interagency Land Use Council found a 30% decline in the amount of Wisconsin farmland from 1950 to 1990.[1] Like many states, Wisconsin also faces transformations in business and manufacturing, which contribute to abandoned buildings, poor land stewardship, non-point-source pollution, environmental contamination, and degradation in water quality. These environmental factors, many of which are more specifically related to the build environment, have a large impact on communities. In essence, as Wisconsin's communities look to expand or revitalize their infrastructure, a fundamental requirement will be utilizing resources while emphasizing public health. Historically, public health has often been left out of conversations regarding community planning. Therefore, it is necessary to have trained individuals who can advocate for public health as a priority, early in the planning stages and a focused public health strategy to enrich comprehensive community planning.

In 2009, Wisconsin's Bureau of Environmental and Occupational Health (BEOH) was awarded funding by the Association of State and Territorial Health Officials (ASTHO) to build capacity among state and local partners to implement health impact assessments (HIAs) by primarily providing training, resources, and technical assistance. This grant supported the formation of a clear focal point to coordinate and integrate the wide array of expertise, resources, and networks to address the health consequences of the built environment, engaging state and local partners in employing the HIA framework. The report presented herein documents the planning, activities, and outcomes related to this capacity building initiative.

The overarching goal of this project was to build the capacity of local health departments and their partner organizations to participate in decision-making processes using health impact assessments. Once funding was awarded, BEOH embarked on an ambitious nine month work plan with the aim to:

- Train state and local partners on the HIA framework
- Provide technical assistance to trained local partners
- Develop a Wisconsin-specific HIA toolkit
- Develop a working model for HIA in Wisconsin
- Create a Wisconsin HIA network

Training State and Local Partners on the HIA Framework

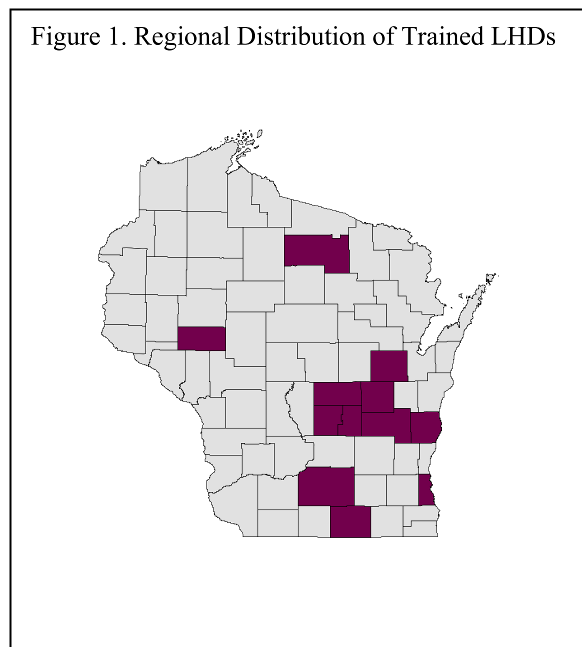
Although BEOH programs had demonstrated experience and capacity in working with communities to bring health into decision-making regarding such issues as Brownfields redevelopment, the bureau lacked the staff time, resources and curriculum to independently deliver trainings on a standardized approach to HIA. Therefore, BEOH initiated a contractual

relationship with the non-profit organization, Human Impact Partners of Oakland, California. The decision to work with Human Impact Partners (HIP) was based on their stellar reputation nationwide for providing training on HIA and their documented experience in implementation of HIA. HIP was also highly recommended by state health departments who had previous or existing contractual relationships with them.

HIP worked closely with BEOH in the first 3 months (October-December 2009) of the grant period to develop the training curriculum and tailor its content to specific issues in Wisconsin, highlight Wisconsin specific resources, and identify intervention points for HIA in the planning or policy making processes of the state. A significant amount of time was spent screening and defining timely and relevant case studies for training participants to be able to walk through the HIA framework. For example, case studies regarding land use and community design examined the health implications of Madison's city zoning ordinance revision and local ordinances incorporating Wisconsin's Livestock Facility Siting Law. An additional case study explored the potential health implications of policy recommendations made by Governor Doyle's Global Warming Task Force to develop viable, actionable strategies to reduce greenhouse gas emissions in Wisconsin and make Wisconsin a leader in implementation of global warming solutions. BEOH learned a great deal about the screening step from this exchange with HIP.

BEOH and HIP collaborated to provide two, 2-day trainings on the HIA framework in January and March, 2010 (training slides available at http://www.dhs.wisconsin.gov/hia/webcast.htm). BEOH used a number of approaches to advertise and promote the trainings including an informational survey, newsletters, personal emails, and phone calls. The January training was held in Madison and geared towards state agencies and organizations. Forty participants attended the training, representing 16 diverse governmental, academic, and advocacy organizations and agencies. The second training was conducted in Milwaukee in March for local health departments (LHDs) and their community partners. Thirty-four participants from 24 organizations and agencies attended the training. In addition, six participants returned from the January training to help facilitate the March training. For this training, LHDs were asked to screen relevant programs, plans or policies for their local community to use as HIA case studies in the training. In total, 16% of Wisconsin's LHDs participated in the 2-day HIA trainings. These LHDs were diverse in regards to staff capacity, resources, geographic location (Figure 1), and communities served.

Figure 1. Regional Distribution of Trained LHDs



In order to reach out to LHDs and other partners who were unable to attend the 2-day trainings, BEOH and HIP jointly developed a three-part webinar series in May and June of 2010. The first webinar offered an introduction to HIA, the second focused on the screening step of HIA, and

the third webinar was dedicated to practical steps for implementing HIA, highlighting Wisconsin specific tools, pilot studies, data and analytical sources, and potential funding resources. HIA webinars were advertised via the HIA network (training participants), listservs for LHD health officers, environmental health officers, and through personal email contact. Table 1 provides the total count for registration of participants at each of the HIA webinars. HIA webinars were recorded and archived on the WI HIA Online Toolkit (https://dhs.wisconsin.gov/hia) and can be accessed directly through the links below.

Table 1. Registration Data for the HIA Webinar Series.

Webinar Title	Date	Number of Registrants
Introduction to HIA	May 18, 2010	37
HIA Step 1: Screening	June 2, 2010	19
Putting HIA Into Action	June 23, 2010	25

Webinar #1: Introduction to HIA
http://dhsmedia.wi.gov/main/Viewer/?peid=6e8ef7499bdd4aa5857c6ad01a24d23b

Webinar #2: HIA Step 1 Screening
http://dhsmedia.wi.gov/main/Viewer/?peid=6e8ef7499bdd4aa5857c6ad01a24d23b

Webinar #3: Putting HIA into Action
http://dhsmedia.wi.gov/main/Viewer/?peid=0114cc1c27914167a5c10d490e5fc318

Providing Technical Assistance to Trained Partners

After trainings were completed, BEOH recognized the importance of continuing the conversation with emerging HIA practitioners, providing technical assistance for community outreach with relevant partners and supporting ongoing screening efforts. BEOH provided staff time, data and analytical resources, supported and facilitated community outreach and engagement, and consulted on health-based message development to influence decision-making. HIP also continued to offer technical assistance and support to BEOH, LHDs, and community partners in this process.

Wisconsin HIA Pilot Projects

BEOH contributed to the efforts of state programs, LHDs, and university partners in the grant-writing process for several HIA-related proposals that were submitted to the EPA, CDC, and Pew/Robert Wood Johnson Foundation. In addition, several community-based initiatives emerged from the HIA capacity building efforts that offered opportunities to implement the framework. BEOH worked closely with two communities on pilot HIA projects: 1) Milwaukee River Estuary Area of Concern (AOC), termed Lincoln Park, Sediment Remediation and 2) Marquette County Ice Age Trail Corridor Planning.

The Milwaukee River Estuary was designated an AOC by the EPA, and Lincoln Park contains a contaminated water body within this AOC, located in the Milwaukee area. The urban community

surrounding Lincoln Park faces issues with water quality problems from runoff in urban areas, floodplain development, and upstream agricultural practices. Most concerning for population health are the high levels of polychlorinated biphenyls (PCBs) in the waterways. Decision makers, such as the Wisconsin Department of Natural Resources (DNR), EPA, and several Milwaukee County Departments have plans to remediate, stabilize, and reconstruct the area using funding from the Great Lakes Legacy Act. Local citizens expressed a desire to be better informed about the details of the project and some have been vocal about their concerns, from opposite perspectives in some cases, on aspects of the revitalization plan. An issue of particular contention is the status of the Estabrook Dam, an impoundment in Lincoln Park which is currently in disrepair. Milwaukee County Parks Department is in the process of deciding whether to repair or to remove the dam, which regulates the water flow in the Lincoln Park area. BEOH provided technical assistance to this community using the HIA framework to engage citizens around their concerns using an evidence-based approach that would help to democratize decisions associated with the remediation of the area, particularly decisions pertaining to public health. Specifically, BEOH assisted in community engagement, outreach, and education. Activities included convening community input meetings, developing educational materials, conducting literature reviews, and providing technical support for systematic application of the initial HIA steps. Partnership development across sectors – facilitating collaboration among the EPA, DNR, and local agencies – was critical to effectively conducting these activities.

BEOH's second pilot HIA project took place in rural Marquette County. This project involved the proposed development and expansion of the Ice Age Trail, a National Scenic Trail. The Ice Age Trail is a one thousand-mile footpath within Wisconsin that is recognized for its route among scenic landscape features created by a historic glacial retreat. The trail route has not yet been determined in Marquette County, nor have plans for its implementation (supporting outreach and health promotion activities). In the 2010 Wisconsin County Health Rankings, Marquette County ranked 70th (out of 72) for health outcomes and for health behaviors, which included physical activity, healthy eating, tobacco use, drug use, alcohol abuse, and violence. The local health department demonstrated interest in conducting an HIA to estimate the potential impacts of trail expansion on the county's health, broadly defined. BEOH assisted the local health department and community partners in initiating an HIA by providing training on the HIA process, sharing HIA tools and resources, conducting an intensive literature review, supporting development of educational and survey materials, and providing technical and analytical support for implementing HIA steps.

Developing a Wisconsin-specific HIA Online Toolkit

An additional goal of this project was to build a Wisconsin specific HIA toolkit that included links to practical guides, case studies, survey tools and indicators, data resources, professional/community organizations, and an opportunity to join and connect through the HIA Network. The intent was to connect site visitors to already established tools and information and where possible, offer Wisconsin specific resources and links.

In developing the toolkit, BEOH aimed to organize this information in a practical and accessible manner, acknowledging that the toolkit would need the flexibility to evolve over time. BEOH

made multiple requests for feedback on content and format via LIVE meetings, conferences, trainings, and over emails in order to improve the utility of the site and make it user-friendly.

The toolkit was launched on July 30, 2010 and can be found at: http://dhs.wisconsin.gov/hia. The toolkit development process continues to be iterative. After its launch, BEOH staff have revisited it to make revisions to enhance its value and update resources.

Over time, BEOH hopes to expand the capabilities and utility of the toolkit. Specifically, future development might include resources such as a discussion forum for HIA topics, a step-by-step guide to indicator development, HIAs completed in Wisconsin and accompanying recommendations for best practices.

Developing a Working Model for HIA in Wisconsin

As previously mentioned, many of Wisconsin's counties are rural and as a result, LHDs, who may have limited staff and resources, are shouldered with responsibilities across a broad range of public health topics. Since typically LHDs are relied upon to support, coordinate, and integrate HIAs, working to understand the implications of placing LHDs at the epicenter of HIA activities is important to realizing the potential of HIA. Therefore, BEOH solicited LHD participation in developing a working model for HIA in Wisconsin.

BEOH convened focus groups composed of 8-10 LHD staff to assess the strengths, weaknesses, opportunities, and barriers of employing HIA at the county/local level and facilitated discussions on the topic at both HIA trainings. BEOH collaborated with several health professionals participating in the Wisconsin Public Health Quality Initiative (WPHQI) who had a particular interest in using the principles of quality improvement to address the processes and protocols for integrating health into the built environment arena. The WPHQI health professionals directed the focus group discussions and through their efforts, helped BEOH to gain a better understanding of the LHD perspective on HIA and its potential.

Feedback and input from the focus groups was very informative. LHDs stated that one important reason for integrating HIA into their public health practice is leadership. LHDs acknowledged that their staff need to be at the table for important decisions and HIA provides a tool for them to take on a leadership role. LHDs also stated the importance of having collaborative systems across government departments to better integrate health into existing processes as opposed to LHDs continually seeking out opportunities to employ HIA. Additionally, they discussed the possibilities for requiring health to be a part of processes through notification of the LHDs when proposed projects, plans, or policies emerge , ensuring that health staff are kept fully aware and up to date. Despite the barriers that LHDs cited, such as time and resources, they recognized that becoming involved in decision-making outside of their traditional scope of work (using HIA) was a proactive and potentially resource-saving approach since the implication is either getting involved on the front end or mitigating effects on the back end of any decision. LHDs also emphasized the importance of further democratizing the decision-making processes of their community, that all too often, community members are not included and important decisions are made in a vacuum.

In terms of practical steps for implementing HIA, LHDs stated they planned to integrate the framework into their routines by going to planning or project meetings, reaching out to city commissioners, and keeping up with local news. LHDs proposed strategies for engaging community groups to democratize decision-making by reaching out to those who have expressed interest or concern and finding ways to provide food or financial incentives, education through attending local meetings to spread the word on HIA, and empowerment through establishing citizen advisory committees with the intent to follow through on recommendations. Finally, LHDs suggested resources for collaborating on the steps of assessment, monitoring, and evaluation. They cited partners at state agencies, universities and colleges, and community organizations. In addition, LHDs proposed processes and venues to support these HIA steps at the local level by creating an electronic system to help with data sharing and organization (such as the Healthy Development Measurement Tool), circulating evaluation frameworks created, seeking data or analytical resources from the Wisconsin Public Health Association or the Wisconsin Department of Health Services, and presenting on HIAs implemented at local conferences, meetings, and statewide sessions (such as the Wisconsin Environmental Health Association meeting). In summary, LHDs saw significant value in the HIA framework and despite noted barriers to implementation, optimistically proposed approaches, partners, and resources to overcome limitations.

Creating a Wisconsin HIA Network

The Wisconsin HIA network was born out of the grant planning meetings and training sessions conducted in the Fall of 2009 and Winter of 2010. Early on, it was recognized that emerging HIA practitioners would need a way to continue communicating about potential projects and opportunities for collaboration or simply seek advice on resources or tools.

BEOH was fortunate that there was already an interagency foundation for the network at the state level in the State Agency Resource Working Group (SARWG), which had been formulated in the late 1990's to support the efforts of the Comprehensive Planning Program. The SARWG was composed of diverse professionals from departments such as administration, agriculture, trade and consumer protection, commerce, natural resources, revenue, and transportation whose goal was to discuss, analyze, and address land use and related policy issues. Several of the SARWG members quickly joined the BEOH HIA initiative and contributed invaluable resources, expertise, and insights in project planning and implementation.

To date, the HIA network includes over 120 contacts from 55 organizations and agencies. The network has been activated for the purposes of sharing information about available training or funding resources, HIA related documentation, making connections with appropriate partners, or requesting feedback on or participation in project activities. The network is anticipated to grow and continues to be advertised via the HIA Online Toolkit. To join email Jennifer.Boyce@wi.gov.

Evaluation of Capacity Building Initiatives

In assessing HIA capacity building efforts, BEOH aimed to document a range of processes and outcomes including, the baseline awareness and demand for HIA among local health partners, impact of the training and technical assistance, potential increase in awareness and ability to implement HIA, and the limitations and successes to the process of capacity building. Accordingly, the evaluation activities undertaken to capture this information are outlined below.

Baseline Capacity

BEOH conducted a baseline survey among LHDs in December 2009 to gain a better understanding of the perceived need for HIA, interest in learning about the framework, and current capacity to employ the approach. The online survey was designed to quickly and concisely capture feedback from Health Officers at LHDs. The survey consisted of 7 questions, anticipated to take 5 minutes and was open to LHDs for input over a 2-week period.

Sixty-five percent (N = 63) of LHDs responded to the survey addressing current HIA capacity, and 30% of respondents were aware of the benefits of HIA. Only 3% of LHDs reported involvement in an HIA, yet 30% knew of proposed projects or policies that could benefit from an HIA. These results indicated that increased HIA capacity in Wisconsin is clearly needed, as demonstrated by the discrepancy between HIA usage vs. identified need for HIAs. Over half of the respondents expressed interest in attending a 2-day training on HIA.

HIA Trainings—Surveys

Human Impact Partners (HIP) designed and co-facilitated the administration of an evaluation survey at the conclusion of the two HIA trainings. The survey aimed to gain participant feedback on training content and delivery as well as solicit ideas on how to improve trainings.

Sixty-five percent of participants completed the January training evaluation survey. Of those responding, 96% agreed or strongly agreed that the content presented at the training deepened their understanding of the subject and HIA. In terms of perceived application, 66% of respondents agreed or strongly agreed that the knowledge and skills gained from the training would be used in future work. Participants particularly liked having diverse presenters and relevant case studies. However, some attendees felt that there was too much material covered in the time allotted and that case studies needed more in-depth introduction. Prior to the training, survey respondents indicated that their level of knowledge of HIA was on average 3.14 on a scale of one to ten (0 = none, 10 = expert). Upon conclusion of the training, the average self-reported level of knowledge had significantly jumped to 7.6 on that same scale ($X^2_{df=8}$= 176.5; $p<0.05$).

For the second training, fifty-five percent of attendees participated in the training evaluation survey. For both days of the training, attendees positively rated the content and tools of the training as good or excellent. Moreover, all respondents agreed or strongly agreed that the content presented at the training deepened their understanding of the subject and HIA, and 75% of respondents indicated that the knowledge and skills acquired would be used in future work

(the remaining 25% were noncommittal). Attendees particularly liked the use of local case studies and Wisconsin-specific resources. However, attendees would have liked to have learned more about failures or lessons learned in HIA implementation, and more on definition of roles for HIA partners and collaborators. Prior to the training, survey respondents indicated that their level of knowledge of HIA was on average 2.55 on a scale of one to ten. Upon conclusion of the training, the average self-reported level of knowledge had significantly jumped to 6.9 on that same scale ($X^2_{df=8} = 22.33$; $p<0.05$).

Overall, participants for both trainings indicated that the trainings provided sufficient information and practice to take steps toward conducting HIAs.

HIA Training—Key Informant Interviews

Follow-up interviews were conducted with a convenience sample of approximately 20% of partners or 15 people who had participated in the HIA trainings. Interviews were conducted over the phone in May, June and July of 2010 by BEOH staff. The interview protocol consisted of 19 questions, and ranged in duration from 15 to 20 minutes. The interview intended to acquire feedback on the use of HIA and health-based analysis, knowledge of and readiness to implement HIA, networking and collaboration, and mentorship.

During the interviews, participants shared that they found the HIA training and materials still relevant and useful. The majority of interviewees had not completed an HIA since the training but were interested in or planning to complete an HIA in the future. Participants cited several key components as necessary for conducting an HIA: increased organizational capacity through time, funding, training, and technical support, particularly for researching best practices, conducting data analysis and literature reviews, and support for overcoming the difficulty changing both internal cultures and working across sectors. Table 2 (next page) provides results from questions from the survey quantified using a Likert scale.

The reported impact of the HIA training on daily work was largely on the dialogue in the participant's agency – changing the discourse to include HIA and look at health broadly. Participants also reported being able to better identify potential HIA projects. Future state-level HIA efforts may be improved by offering intermediate-level HIA trainings, providing mini-grants and continued technical support, and better fostering sustainable relationships across sectors.

Table 2. Quantified Key Informant Responses.

Questions & Responses Using a Likert Scale	*Average*	*Range*	*Mode*
Q2. On a scale from 1-5, how often does your organization/agency use health data or information to inform decision-making? (1: not at all – 5: routinely done)	4.00	2-5	4
Q3. On a scale from 1-5, how effective is your organization/agency at using health data or information to inform decision-making? (1: not effective at all – 5: very effective)	3.67	2-5	4
Q6. On a scale from 1-5, how effective is your organization or agency at bringing a health perspective to new and different issue areas? (1:not at all – 5:very high ability)	3.37	1-5	4
Q9. How would you rate your knowledge of HIA (why, when, and how to conduct one) since participating in the HIA training? (1:no knowledge – 5: very high knowledge)	3.27	2-5	3
Q10. How would you rate your "readiness" to get started on an HIA? (1:not at all ready – 5: very ready)	3.13	2-5	4
Q15. On a scale from 1 – 5, how often does your organization/agency collaborate with other groups/agencies that do not have a traditional health focus (planning, transportation, housing, etc.)? (1: not at all – 5: routinely done)	4.20	2-5	5
Q16. On a scale from 1 – 5, how effective is your organization/agency at collaborating with other groups/agencies that do not have a traditional health focus (planning, transportation, housing, etc.)? (1: not at all – 5: very well)	3.77	2-5	4

Webinar Series

At the conclusion of each webinar, 4 live polling questions were posed to participants. The questions included 1) Overall, this webinar met the intended educational objectives. (Response on a scale of 1 (strongly agree) to 5 (strongly disagree)); 2) I would recommend this webinar to my colleagues (Yes/No); 3) I am interested in participating in future HIA webinars (Yes/No/Undecided - I would need more information); and 4) Having attended this webinar, I am now more familiar with the HIA framework (Yes/No).Table 3 provides a summary of polling results.

Table 3. Summary of HIA Webinar Series Polling Question Results.

Webinar Title	*Met Learning Objectives*	*Recommend Webinar to a Colleague (% Yes)*	*Interest in Future HIA Webinars (% Yes)*	*More Familiar with HIA Framework (% Yes)*
Introduction to HIA	90% Strongly Agree/Agree	92%	92%	93%
HIA Step 1: Screening	90% Strongly Agree/Agree	100%	66% (33% need more info)	100%
Putting HIA Into Action	68% Strongly Agree/Agree	(did not ask)	(did not ask)	100%

Though no formal evaluation has been done on the impact of the webinars, anecdotally they provided LHDs an additional opportunity to receive training on HIA and will continue to serve as a resource as they are readily accessible on Wisconsin HIA toolkit. Through previously mentioned evaluation efforts, the need for additional resources has been well documented among Wisconsin LHDs. The Webinar series allowed BEOH to connect with various regions of the state to offer a concise but thorough training on HIA. BEOH looks forward to continuing its pursuit of innovative ways to provide training and resources that can meet the range of needs of current and potential HIA practitioners.

Challenges to HIA Capacity Building and Implementation Efforts

BEOH encountered a few challenges that are likely universal with any capacity building initiative. Resistance to the initiative existed among LHDs due to stated limitations in time or resources for HIA, real or perceived. Unfortunately, similar sentiments were expressed among state health partners as this project battled for time and priority against a national epidemic, H1N1. Even some non-health agencies and organizations were less than receptive to BEOH capacity building efforts, generally conveying that the HIA framework did not offer additional value or utility to their work.

Aside from time and resources, a current barrier is community demand for HIA. Because HIA is a relatively new framework in the United States, there is very little demand and certainly no requirement for HIAs from communities or from health professionals in Wisconsin. In many cases, this translates into a lack of momentum at the LHD level in initiating HIA projects as well as a lack of support from supervisory staff in LHDs for utilization of resources and time to implement HIA.

Potential challenges to the implementation of HIA in Wisconsin rest on engaging LHDs as key partners in the process. Building capacity with LHDs as the hub in the wheel of social and professional ties assumes active, dynamic LHD involvement in the community as well as positive community perceptions of their activities. For communities where a healthy rapport is absent, LHDs may struggle to successfully implement HIAs. However, for LHDs that have established strong community relationships, the capacity to conduct HIAs and engage with state and community partners will be fortified by implementation activities.

Successes of Project Activities

BEOH had a number of successes in outreach, education, and implementation activities. In many respects, these successes were enhanced by the ability of BEOH to leverage several existing resources, such as highly energetic and enthusiastic staff who took on project activities in addition to their regular work load, and four public health fellows and student interns placed in the bureau. BEOH also tapped into ongoing initiatives including the Wisconsin Public Health Quality Initiative, and the State Agency Resource Working Group.

The January training, in particular, was well received, so much so that the attendance capacity was expanded and then a waitlist for additional participants created. Moreover, both of the trainings were viewed as useful and worthwhile by participants who had many positive

reflections on the presentations, materials, and resources. Those reached by this capacity building initiative overwhelmingly reported positively on newly created networking and collaborative opportunities as a result of this project.

In response to increased interest in HIA generated from the training and the pilot projects, BEOH found it necessary to develop HIA materials to contribute to an outreach component that grew throughout the grant period. To convey the HIA framework as well as benefits and challenges of the process, an HIA factsheet was developed and materials were designed to increase awareness of HIA and the HIA toolkit. We have used these materials at the Public Health Nurses Conferences, at various community meetings, and when corresponding with LHDs interested in conducting HIAs.

BEOH was also invited to present on HIA capacity building activities at seminars, agency meetings, and conferences including the 9th Annual New Partners for Smart Growth Conference, 2010 Wisconsin Chapter of the American Planners Association Conference, HIA in Americas Workshop, Wisconsin Public Health Association Conference, 2010 Population Health Institute Symposium, 2010 Council for State and Territorial Health Officials Annual Conference 2010 National Association of County and City Health Officials Annual Conference, and the 2010 American Public Health Association Conference.

The support of this grant coupled with other funding opportunities resulted in our collaboration on multiple HIA-related grant proposals with new and diverse partners. Moreover, the successes of this capacity building project established the foundation to leverage BEOH in other competitive grant-writing initiatives.

As previously mentioned, BEOH expanded and enhanced partnerships with the activities and resources supported by this grant funding. This outcome is arguably one of the greatest successes given that BEOH is now being invited to the table for a range of discussions where health had not formerly been integrated into the decision-making processes. For example, BEOH has been invited to participate in the planning process for the Wisconsin Department of Transportation's *Wisconsin Rail Plan 2030*.

Lessons Learned and Recommendations for Best Practices

BEOH learned a great deal from our efforts to build capacity statewide to integrate health into the decision-making processes where such conversations had not previously been had. Below is a summary of the key lessons learned which could be considered recommendations for best practices for HIA capacity building at the state level.

1) Successful development of a Health Impact Assessment Program at the state level must build off of existing programs or projects as funding for HIA projects is fleeting and often inadequate to support independent staff positions. Program staff must be grounded in other areas.

2) Capacity building efforts are enhanced when promotion of the HIA framework can be erected in unison with existing initiatives and with the support of functional, interdisciplinary groups.

3) Establishing connections and information exchange with other states or organizations building HIA programs or implementing the HIA framework, such as other ASTHO grantees, serves as an excellent resource for linking with new partners, circumventing barriers, and leveraging efforts.

4) With trainings as the centerpiece of capacity building efforts, develop an engaging curriculum that can be catered to the issues and concerns of participants' communities. Trainings must be introduced and advertised well via multiple marketing outlets, including surveys, listservs, conferences seminars, and poster sessions. However, the value of personal contact can not be underestimated.

5) Trainings must be practical and relevant for participants, and sensitive to the potential limitations of rural health departments or understaffed organizations or agencies. Scaffolding the HIA framework and highlighting resources within the community that can alleviate time or staffing restraints increases the perceived feasibility of employing HIA.

6) Multidisciplinary training experiences are preferable to targeting only LHDs. Participants should represent diversity in professional fields of expertise but also in level of management.

7) Participation in HIA capacity building efforts and conducting HIAs requires managerial or supervisory staff to buy-in to the initiative. Since current staff resources for HIA must draw upon existing programs, upper-level consent for use of time and resources for HIA is imperative.

8) It is critical to capitalize on training momentum by establishing and maintaining regular communication with emerging HIA practitioners.

Future Initiatives and Recommendations

As a natural extension of the capacity building initiative BEOH has successfully conducted, future resources for demonstration projects employing HIA are critical to maintaining and fortifying the investment to date. BEOH will actively seek opportunities to utilize existing resources and funding streams to provide mini-grants to LHDs, however, future funding designated specifically for this purpose is needed.

An additional topic of interest to BEOH for future funding would be a focus on effectively communicating the public health implications of a proposal, as determined through the HIA framework, to policy and decision makers to ensure that the resources and energy invested in the assessment are ultimately utilized. As such, resources and opportunities to develop the role of public health communication for HIA would be welcomed.

Wisconsin, like many states, is composed of an urban/rural mix in population density, with rural communities dominating the landscape. Because HIA tools and trainings have generally evolved out of the issues and experiences of urban communities, rural counterparts do not always identify with the underlying criteria or guiding principles of these resources. Thus, rural communities embarking on HIAs would benefit from a pragmatic and in some cases, creative overhaul of HIA training materials, and assessment tools in particular, in order to make these resources more relevant and applicable. Future funding is necessary to support such efforts.

A significant overarching concern for BEOH is the sustainability of our capacity building efforts and the vitality of a Health Impact Assessment program within the bureau. BEOH is committed to utilizing the HIA framework as implementers or in a collaborative role. The bureau has made an effort to leverage resources from other programs, where possible, to support the needs and functions of HIA initiatives. However, current HIA funding opportunities do not provide adequate resources to support dedicated staff for ongoing HIA outreach, education, and implementation. Additional dedicated staff, such as a full time program manager, technical analyst (epidemiologist or researcher) and public health educator are needed to enhance BEOH's HIA-related initiatives or HIA program development in general at the state level.

References

1. Wisconsin State Interagency Land Use Council. Planning Wisconsin — The Report of the State Interagency Land Use Council. Madison: Wisconsin State Interagency Land Use Council. 1996.