Boston Green & Healthy Building Network: A Case Study

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Executive Summary

From April 2005 to present (early 2008) the Boston Green & Healthy Building Network has provided a forum for collaboration to promote green and healthy buildings for representatives from about ten Boston-area non-profit organizations and the City of Boston. The Network was launched in 2005 at the initiative of the Barr Foundation, where a senior program officer both identified the similar objectives of numerous non-profit grantees and City agencies working on this topic and recognized that their work was not coordinated. Barr sponsored a facilitator/coordinator to help the Network self-organize and determine its most useful objectives and practical actions.

Since the Network’s start-up, it has contributed materially to advancing green and healthy building construction and maintenance policies, practices, and programs in the City. In a survey done in mid-2007, 95% of Network participants also indicated that the Network had helped their organizations advance their missions.

The survey also showed that the key accomplishments of the Network fall into four areas:

- Enhanced connectivity among the Network participants, leading to new relationships, expanded knowledge, and greater awareness of each other’s work;

- Greater alignment and coordination of advocacy work by these non-profit organizations and enhanced access to decision-makers;

- Integration of green and healthy building objectives in tangible projects by the City of Boston and within the work of participating non-profit organizations; and

1 Members of the Network as of December 2007: Asthma Regional Council; Boston Urban Asthma Coalition; City of Boston; Environment Northeast; Green Roundtable; Health Care Without Harm; MA Coalition for Occupational Safety & Health (MassCOSH); Northeast Sustainable Energy Association; New Ecology, Inc.; and National Center for Healthy Housing, Inc. Sustainable Step New England is the Network’s Coordinator/Facilitator consultant.
• New collaborations among Network organizations, leading to significant gains in promoting green and healthy buildings.

Some key challenges the Network has faced include how to ensure that:

• Participants get sufficient benefit and value out of the time they dedicate to participating in the Network;

• Network members find the most fruitful ways to collaborate; and

• There is clarity about the Network’s purpose and goals as it evolves.

Lessons of this experience that could be applied more broadly include these findings:

• The group saw as critical the Foundation’s funding for a facilitator to coordinate the Network and its meetings while remaining mainly “hands-off” in directing how the Network developed.

• The Network’s early focus on learning what each group did, including developing a matrix to map who was doing what types of work, helped people to see new opportunities for joint action, increased coordination, and reduced duplication of effort.

• Lastly, the Network’s focus has been flexible and has evolved in response to the larger context (e.g., the City of Boston’s green/healthy building agenda) and individual members’ needs.
Boston Green & Healthy Building Network: History and Development

The **Boston Green & Healthy Building Network** brings together representatives from about ten non-profit organizations with representatives of the City of Boston, all of whom are working to promote green and healthy building. The Network was launched in April 2005 and has contributed materially to advancing green and healthy building construction and maintenance policies, practices, and programs in the City.

For several years the Barr Foundation has funded various Boston-based organizations advocating for green or healthy buildings. In 2005, Senior Program Officer Mariella Puerto initially identified the need for a network among these non-profits and City agencies. She realized that public health-oriented groups saw unhealthy buildings as a root cause of illnesses such as asthma, while environmental groups saw the need to make buildings energy-efficient and non-toxic as a way to address climate change and other environmental problems. She also identified that while their “causes” were different, the groups’ goals of constructing, renovating, and operating buildings to high-performance standards were quite similar, and that these advocates were often approaching the same people in City government or same policy makers, asking for similar things.

Mariella thought that by connecting these groups in a network, they could better align their organizing efforts, find joint projects, share information, and send a more unified message to policy makers. In April 2005, she and her Barr colleagues invited representatives of each organization to a meeting to get to know each other and become aware of the common purpose of their work. *(Appendix 1: Agenda of April 2005 meeting).* Prior to the meeting, each organization submitted background information, which all groups had a chance to review, about their organization and its current green and healthy building projects *(Appendix 2: Background information submitted by invited organizations before the April 2005 meeting)*.

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At the initial meeting, the participants explored some of the common challenges faced in getting green and healthy building standards adopted and identified common themes underlying these challenges. Participants split into small groups to explore these themes and how they might work together to take action. Roberto Cremonini, the Chief Knowledge & Learning Officer of Barr, presented an overview of social network theory and created a social network map of the room (“who knows whom?”) by surveying the people attending the meeting. This network map showed two clusters of dots, one representing people in health organizations and the other people in environmental organizations, and that these groups were not well connected (Exhibit 1: April 2005 – Participants were asked how well they knew each other).

Feedback from this initial meeting showed sufficient interest, given the opportunity, for the groups to form a network that came to be called Boston Green & Healthy Building Network. The Barr Foundation hired Sustainable Step New England (SSNE) to provide coordination and facilitation. SSNE’s is a neutral third-party convener for dialogues that advance sustainability in the region. Beth Tener of SSNE served as the Network facilitator and Paul Lipke of SSNE participated representing SSNE as an organization.

An on-line survey gathered participants’ input about what they would like their network to do and demonstrated that over 90% of respondents agreed or strongly agreed that the April meeting was a good use of their time. The top three priorities for network action, based on survey results were:

- Development of a more formal green and healthy building network;
- Joint planning on projects so that they are integrated; and
- More coordination of organizing and outreach efforts

The survey also showed that, as a result of the first April meeting, better communication was occurring between and among groups and the number and depth of joint projects increased.

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3 [http://www.ssne.org/](http://www.ssne.org/)
At the Network’s second meeting in October 2005, members shared success stories. Working in small groups, they problem-solved to help participants make positive change on issues or projects they currently had underway. The full group then explored what it could do together to help advance their shared goals, especially on projects that no one organization could complete on its own. They decided their first joint project would be to align members’ advocacy for green and healthy buildings in Greater Boston, particularly for building projects in which the City of Boston had leverage.

To align their advocacy, Network members contributed to the creation of a matrix that laid out, for all the participating groups:

- The type of buildings they were working on to make green and healthy—e.g., housing, hospitals, schools.
- The core programs and strategies they were using for making this building type green and healthy—e.g., standard development, conferences, legislative advocacy.
- The key audiences they were trying to influence, such as key departments in City government, corporate property owners, etc.
- The audiences with which they would like to be in dialogue in the future.

Beth Tener, as Network facilitator, provided an on-line survey to collect this data, and created spreadsheets detailing who was working in what areas (Exhibit 2: Who works in what area matrix). Subsequent analysis showed many groups were trying to influence the same City department, such as the Department of Neighborhood Development (DND), and other areas where few groups were working, such as in legislative advocacy. This information materially informed both the Network’s and its members’ plans and actions.

During 2006 and 2007, the Network held regular quarterly conference calls to better coordinate its efforts, particularly in support of the City of Boston’s 2004 Green Building Task Force recommendations,⁴ and assisted a major program of

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the Department of Neighborhood Development to create green, healthy, affordable, renewably-powered housing. During these calls, valuable information was shared about new developments, recent green and/or healthy building research, and updates on each group’s work. In this same period, the Network’s facilitator periodically conducted and reported on research projects to the Network members. These efforts included exploring the status of legislative advocacy in Massachusetts related to green and healthy buildings and how Network members might support other groups’ lobbying efforts.

The Network also instituted periodic meetings with key staff at City Hall, including the Mayor’s Office, the Environment Department, and the Boston Redevelopment Authority (BRA). These meetings provided an opportunity for the Network groups to learn how the City’s programs were moving forward and enabled Network members to suggest ideas, resources, and connections to help the City successfully implement programs and policy changes. For some Network members, these meetings offered valuable new access to decision-makers that was lacking prior to participating in the Network.

2007 Network Assessment

During the summer and early fall of 2007, an assessment of the Network was conducted by Sustainable Step New England and Connective Associates, in collaboration with the Barr Foundation. This assessment included conducting a network mapping analysis using social network analysis tools and methods, conducting stakeholder interviews with most Network participants, and sharing these results and getting input from the Network members at an in-person meeting in September 2007.

The following sections summarize the Network’s key accomplishments to date, its current challenges, some lessons learned, and ideas on future directions. This assessment synthesizes conclusions from the Network survey, the stakeholder interviews, and the in-person meeting.

5 http://connectiveassociates.com/
Key Accomplishments

A clear majority of Network members reported in the survey that being in the Network helped them advance their organization’s mission, as illustrated below:

The key accomplishments fall into four areas as follows:

- Enhanced connectivity among the Network participants – this has led to new relationships, expanded knowledge, and greater awareness of each others’ work;

- Greater alignment and coordination of advocacy work by the non-profit organizations and enhanced access to decision-makers;

- The integration of green and healthy building objectives in tangible projects by the City of Boston and within the work of participating non-profit organizations; and

- New collaborations among Network organizations – these have led to significant gains in promoting green and healthy buildings.

Each of these is explored in more detail below.
Connectivity: New Relationships, Knowledge, and Awareness of Others Work

One of the primary accomplishments of the Network is that people involved in promoting green and healthy buildings in the same region now know each other and each others’ work. This shift can be seen graphically by comparing the original April 2005 network map of relationships (Exhibit 1: April 2005 – Participants were asked how well they knew each other) with the August 2007 network map (Exhibit 3: September 2007 – Participants were again asked how well they knew each other). These show that many more connections now exist between and amongst the participants, especially between those who previously did not know each other at all and now know each other somewhat. In particular, there are more links among environmental organizations and health organizations, and strong links between government and both. (Note: the people noted on the edges of the 2007 graphic did not participate in the original 2005 survey).

The participants’ awareness of the type of work and expertise of other groups has increased, as is graphically shown in the mid-2007 network map provided in Exhibit 4: September 2007 – Participants were asked how aware they were of each other’s work. Interestingly, there are now many links between people in environmental organizations, health organizations, and government. A participant from a health non-profit noted how much she appreciated these initial introductions to people in environmental organizations, including getting connected to leaders in the building science and the solar and energy efficiency worlds. This helped her gain exposure to new ideas and broader thinking, particularly on how energy efficiency can be good for health.

The Network’s work with the City of Boston enabled the City to learn about the missions, efforts, and technical expertise of these local non-profits. One City staffer said, “The City has learned who the different groups are and what they offer, particularly about the non-profits on the health side.” City staff from various departments reported that the Network has been a valuable resource for technical questions, training, and education. City staff have attended various environmental and health-related trainings offered by the non-profits, and one of them commented that the Network participants have a high level of expertise, both in technical issues and experience.

Fairly regular communication amongst many members of the Network now happens. Exhibit 5: September 2007 – Who communicates every month or so
illustrates the Network members who communicate “every month or so.” It excludes both the more frequent communication of co-workers and the less frequent communication of those who never talk except when convened by the Network. One notable feature of the monthly communication network map is its “core-periphery” structure. About half of the Network members are in a densely interconnected core at the center while the other half form a periphery, where they depend on the core for their connections to the Network.

Exhibit 6: September 2007 – Who communicates every month or so – highlighting cross-sector links and those people who communicate the most across sectors rearranges these monthly communications to highlight the degree of cross-sector links—for example between environmental groups and health groups or between government and environmental groups. The people who communicate the most to other sectors show up with the larger circles.

**Aligned Advocacy Work, Enhanced Access to Decision-Makers**

The Network’s early focus in aligning advocacy and the subsequent joint meetings with Boston City Hall staff have resulted in better coordinated advocacy for green and healthy building objectives. A leader of a health non-profit said, “Three years ago, green and healthy [agencies] competed against each other for resources and contact with the City. I think we now collaborate and support each other more.” A representative in Boston City government said, “The City is eager to work with the for-profit and non-profit players out there but we haven’t had a venue for doing so. The Network has increased the visibility, connections, and opportunities to connect among the stakeholders.” A Network member from another non-profit said, “Where there is overlap we try to coordinate to avoid asking the same stakeholders the same questions.”

For several non-profit members, the Network has opened an avenue to access to decision-makers in City of Boston government that they did not have before and created opportunities for providing technical input at key moments. For example, a health non-profit member said, “When the City of Boston was looking to green construction standards, we participated, and that wouldn’t have happened without the Network.” Network groups provided review and technical input to the DND’s Residential Building Design Guidelines to ensure they included appropriate green and healthy homes measures. Most of these were incorporated into the standards.
In another example, the Massachusetts Coalition for Occupational Safety & Health (MassCOSH), one of the Network non-profit member organizations, was able to use the Network and the green/healthy building framing of issues to make progress on an important policy initiative. For several years, MassCOSH had been working with the Boston Public Schools (BPS) to use green and less toxic cleaning products, and BPS implemented a pilot in four schools. After a few years, MassCOSH wanted them to go beyond the pilot and adopt use of these products system-wide. As a result of MassCOSH’s exposure to the environmental organizations in the Network (and at Mariella’s suggestion), they framed their position to BPS by showing how this action was “consistent” with the mayor’s goal of greening the City and the new recommendations of his Green Building Task Force. This frame resonated with BPS and they agreed to implement the policy system-wide.

Network groups also work with a range of agencies beyond the City of Boston, such as other municipalities, Massachusetts state agencies, community development corporations (CDCs), and commercial developers. An example of intra-Network assistance is the National Center for Healthy Housing (NCHH)’s previously unanswered efforts to communicate with various CDCs about the health issues associated with poor water conservation practices, particularly leaking toilets. New Ecology (NEI) has an established network of relationships with CDCs and made introductions, and the two groups did some joint meetings with CDCs to educate them not only about water issues of NCHH concern but also issues of concern to NEI. This connection helped open doors for NCHH.

**Integration of Green and Healthy Objectives for Buildings**

About a year after the Network formed, Mariella Puerto of the Barr Foundation and Brad Swing of the Boston Mayor’s Office were panelists at an environmental funders conference. As Mariella was sharing the story of the Green and Healthy Building Network, Brad had an insight about how healthy building could be integrated into the building design process along with green practices like energy efficiency and renewable energy. Brad said, “The existence of the Network was my key path to understanding the issues.” The Network’s meetings provided a forum for many of the participants to appreciate how the objectives of green and healthy building could be integrated and improved their awareness of the diverse ways for achieving their goals.

The City’s understanding of how green and healthy objectives can be integrated translated into a significant project to change the way affordable housing is built
in Boston. When the Massachusetts Technology Collaborative (MTC) offered a total $8 million in grant funding for green building projects, the City of Boston submitted a proposal featuring, front and center, integration of green and healthy building objectives into the design process. As part of the City’s strategy its application highlighted the support and expertise of the Green & Healthy Building Network. The City was awarded a $2 million grant in a highly competitive grant offering and application situation.

In the program underway now, the City of Boston will create the Green Affordable Housing Partnership (Partnership) to incorporate renewable energy, energy efficiency, green design, and healthy homes construction techniques into the City’s affordable housing program. The Department of Neighborhood Development (DND) will operate the program, and developers applying for funding through its established quarterly Requests for Proposals (RFP) cycle will have to demonstrate that their designs meet criteria that include specific renewable energy, energy efficiency, green and healthy home elements. This program also links in partnerships with utilities to coordinate their energy efficiency funding. Applicants to DND’s funding programs are required to attend training sessions on how to incorporate these features into their applications.

Network members not only provided the City with insights and input to support its MTC application but also suggested that DND hire a team of consultants, rather than one person, to aid with implementation. The Network members helped spread the word about the consulting opportunity. Members provided criteria for healthy housing for the DND’s RFP and helped present training sessions on healthy building issues and the integrated design process. Now consultant coordinators at DND are helping implement the grant and integrate this way of addressing health and renewable energy/green building into the way DND operates so it can continue beyond the grant. Integration of health and environment has also been a theme in other City efforts to implement the Mayor’s Green Building Task Force recommendations, including implementing green building zoning.

**Collaborations among Network Organizations for Greater Impact**

The introductions forged through the Network meetings created opportunities for Network members to find ways to collaborate on joint projects. *Exhibit 7: September 2007 – Collaboration (reported by both sides)* illustrates where there is regular collaboration among members of the Network. Each line
represents a relationship where each person reported there is collaboration with the other. Some particularly fruitful examples of collaborations that emerged out of the Network are as follows:

**Health Care Without Harm and Sustainable Step New England.**

The Network provided the initial opportunity for two Network groups, Sustainable Step New England (SSNE) and Health Care Without Harm (HCWH), to connect and launch a significant multi-year collaboration. HCWH brought to the collaboration strong connections to decision-makers in healthcare, technical and sector expertise, and powerful tools like the *Green Guide for Health Care* (GGHC), a 436-page standard for greening health care facility design, construction, and operations. SSNE brought expertise in enabling senior management teams to link green and healthy strategies (including green building) to their larger strategic priorities as well as experience in workshop design and facilitation. The two organizations’ skills and strengths came together in a way that enabled them to do projects and achieve outcomes that neither group could do alone.

Despite being one of the City’s largest sectors – over $3 billion is being invested in new health care buildings now and in coming years—health care was not an original focus of the Mayor’s Green Building Task Force. Together HCWH and SSNE have played a major role in getting health care onto the City’s green building agenda. Through the Boston Redevelopment Authority’s Article 80/37, their work has contributed to changes in City permitting of health care (and other) buildings and a multitude of other successes, including the greening of Spaulding Rehabilitation Hospital’s planned new $200 million + replacement rehabilitation hospital building. The City of Boston has mandated green building in all area hospitals, and a similar standard built on Boston’s leadership will likely be a statewide mandate within a year.

HCWH and SSNE have put on about a dozen joint educational events for health care facility operations and engineering managers in greater Boston. These events have connected these audiences to internationally-renowned speakers at the leading edge of green design and research. Various charrettes and seminars

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also have brought new ideas and research to the design firms working on health care facilities in Boston. HCWH and SSNE have also collaborated on over half a dozen in-house senior management briefings with hospitals, design firms, etc., to promote green and healthy building design. A two-year Green Health Care Facilities Seminar Series is planned to continue educating health care facility people in Boston about topics such as construction waste recycling, healthy food, effective team work, and the *Green Guide for Health Care*.

**Diesel emissions around hospitals.** Collaboration between two Network members helped to address diesel emissions in and around hospitals. Ellen Tohn, a Network member in her work with the Asthma Regional Council (ARC) and NCHH, was working with Greater Boston Breathes Better (GBBB). Using her new-found connection through the Network to Bill Ravenesi of HCWH, she could pick up the phone and brainstorm with him on how to promote reduction of diesel emissions. Ellen helped GBBB write an application for a grant funding from the City of Boston’s air pollution office to use construction retrofits to reduce diesel emissions in and around hospitals. This step now earns applicants points under the Article 37 zoning process.

**Green & Healthy building presentations at the NESEA BuildingEnergy Conference.** Network members have found opportunities to present about green and healthy building at Northeast Sustainable Energy Association’s (NESEA) 2000-attendee annual BuildingEnergy conference in Boston. NCHH organized a health track featuring speakers about aspects of healthy buildings at this conference that has traditionally focused on renewable energy and green building features. HCWH and SSNE presented joint workshop sessions as well.

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7 [http://www.buildingenergy.nesea.org/](http://www.buildingenergy.nesea.org/)
Challenges of the Network

In the summer of 2007, the survey of the Network participants asked what the Network needs to do to be better and some common themes emerged as illustrated below.

Over 80% of participants mentioned concern about ensuring that they get sufficient benefit and value out of the time they dedicate to participating in the Network. The next most commonly voiced challenge related to the belief that the Network members could find more ways to collaborate in the future. About three-quarters of participants said they felt that greater clarity on the Network’s purpose and goals would be helpful for them and for the Network’s work. These challenges and others are explored in more detail below.

**Challenge 1: The time vs. value trade-off.** People in the Network are busy and may be stretched thin on resources, which leads to concern about the amount of interaction time compared to the value people get out of it. The Network has experimented with a mix of in-person meetings and phone calls, at a frequency sufficient to keep momentum and achieve progress but not too demanding of people’s time. Some of the most well-connected members reported that the Network did not provide much additional value since they already had these connections.

A related challenge is how to focus on tangible discrete projects of interest to enough Network members while keeping up the interest and participation of all
members. When there is a focus in one area, some Network members may naturally be less engaged there, and they may not see a reason to keep participating. An example: when the Network focused on the affordable housing project with the City of Boston, groups that don’t work on such housing started to see less value in the Network.

The fact that the Network is organized and supported by the Barr Foundation, which funds the non-profits participating, provides a motivation to participate. For some of the non-profits no longer funded by Barr, there is a concern that they do not have the resources to devote the time to the Network. The Barr Foundation has maintained a fairly hands-off approach, letting the Network members decide how to focus and run the Network (with the help of a facilitator funded by Barr.) The Foundation’s view is that the Network should help advance the work of the non-profits, and that the value they get should be worth the time and resources they need to participate. Several non-profits in the survey reported that the Network is so valuable that they would be there whether they were being funded by Barr or not. As one said, “If it’s important for everyone’s organizations, then they will make the time.”

**Challenge 2: Finding more ways to collaborate.** Network members voiced that there could be more extensive collaboration, for example partnering to pursue grant opportunities. A specific project emerged from the in-person meeting to create a joint educational event. One example to learn from is a coalition in Massachusetts related to energy reform, as a Network member suggested. “In that coalition, people take on different roles, such as government relations, policy, technical knowledge, analytics, strategic planning, and strategic advocacy. We all know each others’ roles and we are all interdependent on each other. That way we became a very powerful team.”

The on-line survey found that there are many potentially fruitful connections among the Network members in terms of contacts and connections to key audiences and knowledge among other members that would be useful in their work. **Exhibit 8: Number of people having and wanting contacts in key issues/fields** illustrates a range of topics/fields related to green and healthy building and shows where people would like contacts and where people have contacts. **Exhibit 9: Number of people wanting and having contacts with key audiences** shows the same for other audiences, such as contractors or architects, and **Exhibit 10: Number of people wanting and having contacts with government**
agencies shows those who have contacts and want contacts with government agencies.

**Challenge 3: Identifying clear purpose and goals for the network.** The survey showed that participants feel a need for clarity about the purpose and future goals of the Network. In the Network’s early phases, the focus was on finding practical tangible projects that the groups could collaborate on that would help advance work already underway. Over time, the Network (or more specifically, those people participating in its regular meetings) decided to focus on various other issues such as aligning advocacy with the City of Boston. One Network member said, “I’d like to see a more focused attention to the outcomes we are trying to achieve. In the beginning we didn’t really hone in on this.” Another member said, “It would be really helpful if we knew what our purpose is. We, as a collective group, could come up with this and it would energize us. We could also benefit from shorter-term goals. I participate where it makes sense. Sometimes I don’t know what I’m contributing or if it makes sense for me to be there. What are we reaching for? What do we expect from people?” As the larger context changes and the Network makes progress in various areas, there is a periodic need to refocus and clarify goals.

**Challenge 4: Clarifying the advocacy vs. assistance role with the City of Boston.** There have been some inherent challenges in the relationship with the City of Boston relating to the non-profits advocating for change while also serving in a role of providing technical assistance. One City staff person said, “There were different expectations of roles. We think of the Network as advisory and they think of the group as partners. It would be better if we all had the same understanding of what we will all do.” At times, the City staff felt that the Network was directing and pushing for action without understanding the flow of its work. A City staff person said, “We thought we would use the Network as needed. They may have expected more.”

At the start of the MTC grant, the DND was a bit overwhelmed by interactions with the whole of the Network. The Network responded by coordinating its advocacy through one point person who would be the contact for the Network for DND. Some of the Network members resisted this, as it felt like the Network restricted its access.

**Challenge 6: Promoting green and healthy building beyond the City of Boston.** Many of the Network organizations do not focus only on Boston so there
is a desire to find ways for the Network to serve other areas beyond the City. Other potential audiences could include the State of Massachusetts (e.g., HCWH and SSNE are advocating and supporting the greening of hospitals statewide) or other municipalities. The Network could also expand its focus to other types of buildings (e.g., housing has been a focus lately given Boston’s new affordable housing program). Other buildings could include schools (both K-12 and universities), commercial buildings, and hospitals.

**Challenge 7: Meeting the needs of diverse participants.** Several people surveyed expressed a desire that the Network get better at incorporating more diverse participants and audiences into its work. They see a need to make sure that the Network is in touch with and responsive to the needs of people in low and moderate income sectors and communities of color relating to the quality of green, healthy, and affordable housing.

**Lessons Learned**

The following are some of the lessons learned that may be helpful to other foundations or groups considering launching a similar Network.

**Lesson 1: Fund the Network coordination, don’t direct it.** Many Network members have reported that the support of the Barr Foundation in providing a facilitator who can coordinate the Network and its meetings is crucial. The paid facilitator has handled the logistics, facilitated the meetings, and sent the minutes out after the meetings. One non-profit organization person said, “I don’t think the members would do it themselves.” The Foundation’s role as a funder of the non-profits and the Network provides more convening authority. As another Network member said, “Everybody wants to show their best efforts to potential funders. When they know that the funders are watching the process they can put turf issues aside and work better together.” The Foundation’s offering of meeting space has also been a big help, another Network member commented.

Network members also voiced appreciation for the way the Barr Foundation has provided support but not mandated how the Network should function. A Network member said, “The role that Mariella [Puerto] has played has been fabulous in support and distance. She has let it run its course.” Basically, funders should focus more (or exclusively) on whether a network purpose is aligned with their goals, not on the path the network chooses to achieve its purpose.
Lesson 2: Lead with relationship building, follow with collaborative projects. The Network members have a strong preference for working on tangible projects. As one non-profit member said, “I see our continuing relationship around projects and deliverables.” This aligns with the City of Boston’s approach of project-based policy where it helps institutionalize green and healthy building by pursuing specific on-the-ground projects. These become a place to learn and identify areas where new policies or changes are needed to enable this to work. In the survey, members stated their desire that the Network continue to focus on tangible projects. “We could look at the group as policy advocates and program/project oriented people,” said one environmental non-profit leader.

Looking back to the early days of the Network, however, one of the main reasons why members are so eager and willing to work together now is because they had the time to get to know each other better then. Most of the initial Network meetings were spent generating awareness for the work, assets, and struggles that each member and their organizations brought to the table. By sharing success stories, helping each other problem-solve, and creating the “who works in what area matrix” (Exhibit 2), Network members were exposed to new ideas and connections and started seeing new opportunities for joint action, increased coordination, and reduced duplication of effort.

Lesson 3: Be flexible and opportunistic, while maintaining a clear purpose for the Network. Networks are not static infrastructures but systems that adapt and evolve over time. It is important to help members understand that uncertainty and flexibility are advantages not limitations of a network. What helps is constant reinforcement of the purpose of a network. This supports the need and/or desire to belong and participate while managing expectations. In the case of the Green & Healthy Building Network, the initial purpose was not to collaborate but simply to learn about each other and each other’s work. The value delivered by this network was to get exposed to new ideas, share best practices, and become aware of the opportunities and limitations for collaboration.

An open mind and a clear purpose can help network members understand where to draw the network boundaries. Examples from this network were at what point to include other constituencies like the City of Boston and how to clarify participants’ roles (e.g., when to act as partner and when as an advisor). Both boundaries and roles should remain flexible and adapt based on current circumstances and purpose.
**Future Directions**

A key strategic question for the Green & Healthy Building Network at this time is: now that there is this strong network of relationships and connections, what do we want to leverage them to do?

At a recent meeting of the Network to look at where it has been and where it would like to go next, Network members expressed a continued desire to coordinate action on tangible projects that are already on the agendas of network members. Participants immediately found an opportunity to collaborate in organizing and helping to facilitate a series of sessions at a Sustainability Forum organized by New Ecology, one of the Network members.

Also, work is underway to clarify and agree on the Network's purpose and guiding principles, as well as short-term and long-term goals. In light of these, specific projects will be defined for the Network or portions of it to collaborate on. Lastly, now that the Network members know each other better, there is interest in expanding the Network to include other key organizations working in this area, depending on the Network focus and projects.
Exhibit 1: April 2005 – Participants were asked how well they knew each other

Created by Connective Associates for the GHBN (2007)
Exhibit 2: Who works in what area matrix

|                          | ABC | Boston绿和健康网络 | City of Boston | Green Buildings Mass | Health Care | New City | New Cod | Nave | Welcity | Boston BRA Working to employ the New Ecology | Artspace | Artspace
<table>
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<tbody>
<tr>
<td>Housing - affordable single family</td>
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<td>Housing - affordable multi-family</td>
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<td>Housing - market rate single family</td>
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<td>Schools - K-12</td>
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<td>Schools - Universities</td>
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<td>Commercial</td>
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<td>Boston BRA working to employ the New Ecology</td>
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<td>Government - municipal</td>
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<td>x</td>
<td>Boston BRA working to employ the New Ecology</td>
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<td>Government - state</td>
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<td>x</td>
<td>Boston BRA working to employ the New Ecology</td>
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<td>x</td>
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<tr>
<td>Government - federal</td>
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<td>Boston BRA working to employ the New Ecology</td>
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<td>Hospitals</td>
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<td>Boston BRA working to employ the New Ecology</td>
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<td>Other:</td>
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<td>Boston BRA working to employ the New Ecology</td>
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</tbody>
</table>
Exhibit 3: September 2007 – Participants were again asked how well they knew each other.
Exhibit 4: September 2007 – Participants were asked how aware they were of each other’s work.
Exhibit 5: September 2007 – Who communicates every month or so
Exhibit 6: September 2007 – Who communicates every month or so – highlighting cross-sector links and those people who communicate the most across sectors
Exhibit 7: September 2007 – Collaboration (reported by both sides)
Exhibit 8: Number of people having and wanting contacts in key issues/fields
Exhibit 9: Number of people wanting and having contacts with key audiences

Number of People Wanting & Having Contacts

<table>
<thead>
<tr>
<th>Category</th>
<th>Wanting</th>
<th>Having</th>
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<tbody>
<tr>
<td>Contractors</td>
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<td>Material suppliers</td>
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<tr>
<td>Electric &amp; gas utilities</td>
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<tr>
<td>Corporate property owners</td>
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<tr>
<td>Market rate housing developers</td>
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<tr>
<td>Health insurers</td>
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<tr>
<td>Renewable energy developers</td>
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<tr>
<td>Property insurers/lenders</td>
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<tr>
<td>Affordable housing developers</td>
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<tr>
<td>Small property owners/renters (families, individuals)</td>
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<tr>
<td>Realtors</td>
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<tr>
<td>Unions</td>
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<tr>
<td>Hospitals</td>
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<tr>
<td>Architects &amp; engineers</td>
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<tr>
<td>Higher education institutions</td>
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</tbody>
</table>
Exhibit 10: Number of people wanting and having contacts with government agencies

Number of People Wanting & Having Contacts

- Boston Public Facilities Dept.
- State legislature
- Boston Environment Dept.
- State government
- Boston Dept. of Neighborhood Development
- Boston Public Health Commission
- Boston Public Schools
- Boston Redevel. Authority
- Boston Housing Authority
- Federal government - HUD
- Federal government - EPA
- Boston Mayors Office
- Other municipal governments
### Appendix 1: Agenda of April 2005 meeting

<table>
<thead>
<tr>
<th>Time</th>
<th>What</th>
<th>Who</th>
<th>Length</th>
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</thead>
</table>
| 10:00 – 10:14 | Welcome - Why we are here/expectations  
Introductions  
Introduce Pat as facilitator | Mariella     | 14 min |
| 10:14-10:15 | Agenda Review                                                        | Pat          | 1 min  |
| 10:15 – 10:20 | Distribute network assignments and give instructions | Roberto      | 5 min  |
| 10:20 – 10:25 | Pat and Roberto Model “Sharing”                                      | Pat and Roberto | 5 min |
| 10:25 – 10:45 | Sharing of Key Projects, Issues and Challenges (in pairs of organizational groups) | Pat          | 20 min |
| 10:45– 11:45 | Report out to larger group of Each Group’s Key Projects, Issues and Challenges | Pat          | 60 min |
| 11:45     | Breakout Group Instructions -- Staggered Lunch                       | Roberto      |       |
| 11:45-12:40 | Working Lunch: Break-out groups around key themes                    | All          | 55 min |
| 12:45 – 1:00 | Break-out groups report back to Whole Group                          | Pat          | 15 min |
| 1:00 – 1:15 | Discussion of Possibilities for this Group                           | Pat          | 15 min |
| 1:15 – 1:25 | Network Analysis                                                     | Roberto      | 10 min |
| 1:25 – 1:30 | Evaluation of Meeting/Close                                           | Pat          | 10 min |
Appendix 2: Background information submitted by invited organizations before the April 2005 meeting

Organization Address

Organization Phone

Organization Web Site

Contact Name

Contact Phone

Contact E-mail

Organization's Mission

Name/description of key projects

Key issues those projects were developed to resolve

Important challenges the organization/project is now facing in this sector
BARR FOUNDATION

Using KNOWLEDGE, NETWORKS and FUNDING to Build a Better Boston for All

The Pilot House
Lewis Wharf
Boston, Massachusetts 02110
617.854.3500

www.barrfoundation.org