PROJECT-BASED POLICY DEVELOPMENT: BUILDING THE CASE FOR BOSTON'S GREEN BUILDING POLICY

*Bradford Swing**

In January 2007, the City of Boston became the first major municipality in the nation to require *private* building construction to follow the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards.[1] The Boston Zoning Commission's green building requirement fulfilled Boston Mayor Thomas M. Menino's 2004 pledge—announced at a major public event—to adopt citywide green building standards within three years as recommended by his Green Building Task Force. The zoning change was the end result of eight years of policy work that started with the City's

* Director of Energy Policy, City of Boston, Office of the Mayor, Environmental and Energy Services. M.P.A., Harvard University, John F. Kennedy School of Government (2004); J.D., University of Pennsylvania Law School (1988); B.A., Oberlin College and Conservatory of Music (1983). From 1995 to 2003, the author served as Special Assistant Corporation Counsel and Policy Advisor in the Mayor's Office of Environmental Services. The author is indebted to Professors Ronald A. Heifetz and Dean Williams, with whom he studied leadership at the Harvard Kennedy School. The author also wishes to thank Judith Kurland, Chief of Staff to Mayor Thomas M. Menino; James W. Hunt, III, Chief of Environmental and Energy Services; Joy Conway, Chair, Mayor's Green Building Task Force; and, particularly, Sarah D. Zaphiris, Policy Advisor, Office of the Mayor, with whom the author has partnered for many years to develop the City of Boston's green building and energy policies.

1. *See* BOSTON, MASS., ZONING CODE art. 37 (2007), *available at* http://www.ci.boston.ma.us/bra/pdf/ZoningCode/Article37.pdf [hereinafter Article 37]; *Boston Honored with Governor's Green Award*, U.S. FED. NEWS SERV., Oct. 26, 2007. Developed by the U.S. Green Building Council, "[t]he Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. . . . LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality." U.S. Green Bldg. Council, USGBC: Leadership in Energy and Environmental Design, http://www.usgbc.org/DisplayPage.aspx?CategoryID=19 (last visited Dec. 27, 2007).

Earth Day 1999 Charrette[2] for its pilot green project, Boston's Building that Teaches[3]—a public event that the Mayor did not attend.

Using the theoretical framework for understanding leadership initially developed by Professor Ronald A. Heifetz,[4] this paper presents the thematic sequence of public events related to the City of Boston's first green building as an example of project-based policy development. The story behind the sequence and strategy—the complexity of green building policy and the complementary roles of Mayor and staff—illuminate Professor Heifetz's theory, particularly two key theoretical distinctions, between leadership and authority, and between technical and adaptive problems. Leadership through project-related events created a prospective case study[5] of green building policy development. Boston's Building that Teaches identified the adaptive na-

2. "A Charrette is a gathering of people for an intensive meeting to discuss and develop ideas for the design of a building or development project." CITY OF BOSTON, A BUILDING THAT TEACHES, GEORGE ROBERT WHITE NATURE CENTER AT THE MASSACHUSETTS AUDUBON SOCIETY'S BOSTON NATURE CENTER AND WILDLIFE SANCTUARY IN MATTAPAN: THE RESULTS OF THE APRIL 1999 GREEN BUILDING CHARRETTE 5 (2000) [hereinafter A BUILDING THAT TEACHES].

3. The official name of the Building that Teaches is the George Robert White Environmental Conservation Center. The building is owned by the City of Boston's George Robert White Fund and is leased to the Massachusetts Audubon Society. MASS. AUDUBON SOC'Y & CITY OF BOSTON, GEORGE ROBERT WHITE ENVIRONMENTAL CONSERVATION CENTER AT MASS AUDUBON'S BOSTON NATURE CENTER: A CASE STUDY OF BOSTON'S FIRST GREEN BUILDING 3 (2005), *available at* http://www.massaudubon.org/PDF/sanctuaries/BNC/BNCcasestudy905.pdf [hereinafter A CASE STUDY OF BOSTON'S FIRST GREEN BUILDING].

4. RONALD A. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS (1994) [hereinafter HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS]. *See also* RONALD A. HEIFETZ & MARTY LINSKY, LEADERSHIP ON THE LINE: STAYING ALIVE THROUGH THE DANGERS OF LEADING (2002) [hereinafter HEIFETZ, LEADERSHIP ON THE LINE]; DEAN WILLIAMS, REAL LEADERSHIP: HELPING PEOPLE AND ORGANIZATIONS FACE THEIR TOUGHEST CHALLENGES (2005) (building upon Professor Heifetz's theory) [hereinafter WILLIAMS, REAL LEADERSHIP].

5. The traditional case study method that originated in American law schools and is now used to teach business and public policy is retrospective. *See, e.g.*, Harvard Bus. Sch., The Case Method, http://www.hbs.edu/case/index.html (last visited Nov. 4, 2007); John F. Kennedy School of Government at Harvard University: About the Case Program, http://www.ksgcase.harvard.edu/content/About_the_Case_Program.html (last visited Nov. 4, 2007). *See also* Maria L. Nathan, *How the Past Becomes Prologue: A Sensemaking Interpretation of the Hindsight-Foresight Relationship Given the Circumstances of Crisis*, 36 FUTURES 181, 182 (2004) (discussing a case study of organizational learning, how "organizations remember the past in order to take more foresight-full action in the future"). Pioneered by Harvard Law School in the 1870s, the case study method is rooted in the principle that rather than studying summaries of legal rules, as is common in most legal code countries, the best way to learn American law, due to the Anglo-American common law tradition, is to read actual judicial opinions that became law under the rule of stare decisis. *See* Claudio Grossman, *Building the World Community: Challenges to Legal Education and the WCL Experience*, 17 AM. U. INT'L L. REV. 815, 821 & n.17 (2002).

ture of green building policy change, provided a framework for education and partnership, and created a process through which to keep politically viable progress on track.

Project-based policy development is an effective leadership model because thematically-related events structure an environment in which to resolve systemic value conflicts and to build consensus. Events create a permanent record of governmental "facts,"[6] and the sequencing of events can turn these facts into a governmental "theme."[7] With Boston's first green building, each governmental event contained the kernel of group dynamics involved in green building policy development.[8] Each event mirrored conflicts within larger group systems, particularly those between environmental and economic development factions. Each event was a leadership intervention in those dynamics, a reality-testing moment both for staff focused on substantive green building issues and for the Mayor's "trans-substantive"[9] vision of Boston. Boston's Building that Teaches became a

6. One definition of "fact" is "[a] real occurrence; an *event*." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed. 2000) (emphasis added).

7. The words "fact" and "theme" are related; they derive from the same Indo-European root, "dhç." *Id.* at 2025–26. For a discussion of Indo-European roots, see Calvert Watkins, *Indo-European and the Indo-Europeans, in* THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE, *supra* note 6. At the Harvard Kennedy School, leadership classes include the requirement that students identify key words from group meetings and discuss the relevance of their etymologies to the dynamics of the group. *See* Dean Williams, (PAL-101) Exercising Leadership: Mobilizing Group Resources, General Course Information (Jan. 30, 2004) (unpublished course syllabus, on file with the *New York University Journal of Legislation and Public Policy*).

8. In reordering the traditional understanding of "case study" by suggesting that a project can be a prospective case study, this paper suggests that each event related to that project itself contains the kernel of policy development, its own mini "case study" of the group dynamics involved in change. Here, the equation of "case study" with the "kernel" containing the dynamics of policy development invokes the use of the word "case" in the U.S. Constitution and the limiting of Article III judicial power to deciding "cases and controversies" with specific scope as compared with Congress's Article I power to investigate policy and make law. To play out the analogy, each green building project-related event is a "case" with specific operative facts, and the sequencing of events creating the governmental theme is similar to the result of stare decisis creating common law. *See supra* note 5. In this sense, the legal system's fundamental "fact-law distinction" structures an understanding of the forces implicated by project-based policy development.

9. Although not used by Professor Heifetz, the term "trans-substantive" usefully describes the position of a formal authority figure such as the Mayor of Boston who is contending "with meeting the multiple expectations of multiple constituencies," each constituency having its own substantive issue focus. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 188. "Trans-substantive" is a term borrowed from American legal theory, originally describing the goals of the Federal Rules of Civil Procedure in 1938 to establish unified rules to govern civil actions no matter the substantive basis of the federal court's jurisdiction. *See* Robert G. Bone, *Securing the*

case study that, instead of the traditional *retrospective* re-creation of a particular decision-making situation, used project-related events as the *prospective* opportunity to build the case for change.

Part I of this Article identifies governmental events and provides a timeframe for events related to Boston's Building that Teaches that facilitated the formation of Boston's green building policy. Part II sets forth Professor Heifetz's theory to frame the project-based policy development model and its thematic sequencing of events as an exercise of leadership. Part III returns to the Boston case study and analyzes each event's specific governmental actions within Professor Heifetz's framework to present project-based policy development as a leadership model capable of managing complex change.

I.
The Events that Facilitated Boston's Green Building Policy Development

Within the Office of Mayor Thomas M. Menino, the "coin of the realm" is an hour on the Mayor's crowded schedule of public events.[10] An event—a groundbreaking, a ribbon-cutting, a speech at a policy conference—is a moment where governance and politics unite. Each event provides a setting for the Mayor to thank partners for assistance with a project, to visit a Boston neighborhood to meet with residents, and to receive favorable press. From the initial scheduling request to the event's detailed briefing, the Mayor's staff is required to reduce project complexity to written bullet points. Themes approved for inclusion in the Mayor's prepared remarks become the filter through which actual progress on policy development happens. To stay on a politically viable track, the Mayor must be able to describe the policy

Normative Foundations of Litigation Reform, 86 B.U. L. Rev. 1155, 1156 (2006). The focus of project-based policy development on the process of events implicating substantive policy change is similar to the relationship between procedural and substantive law. *See, e.g.*, Martin H. Redish & Uma M. Amuluru, Essay, *The Supreme Court, the Rules Enabling Act, and the Politicization of the Federal Rules: Constitutional and Statutory Implications*, 90 Minn. L. Rev. 1303, 1314 (2006) ("It is beyond controversy today that many Federal Rules of Civil Procedure implicate substantial policy issues, often going to the core of modern political and ideological debates.").

10. This description reflects Boston's strong mayor/weak city council form of government. Governing Greater Boston: Meeting the Needs of the Region's People 25 (Charles C. Euchner ed., 2d ed. 2003) ("Boston's strong mayor form of government allows very little opportunity for the City Council to exert a strong voice on public policy. The City Council may pass legislation, but has little control over city budgets. The council may approve or delete spending from the mayor's budget but may not add new initiatives.").

change celebrated with a project-related event directly to potential voters—the people of Boston.

From 1999 to 2007, a thematic series of mayoral events related to Boston's Building that Teaches carved Boston's green building policy pathway:

TABLE 1

Date	Event
April 1999	Earth Day Green Building Charrette[11]
April 2000	Earth Day Neighborhood Festival and Issuance of Charrette Report[12]
January 2002	Groundbreaking[13]
October 2002	Dedication[14]
January 2003	"Economics of High Performance 'Green' Building" Policy Panel[15]
June 2003	Announcement of the Mayor's Green Building Task Force[16]
November 2004	Announcement of Proposed Green Building Standards[17]
October 2006	Announcement of $2 Million Green Affordable Housing Program[18]
January 2007	Adoption of Green Building Zoning, the First-in-the-Nation *Private* Development Green Building Standard[19]
April 2007	Promulgation of Executive Order Relative to Climate Action, Including Codification of *Public* Development Green Building Requirement[20]

11. A BUILDING THAT TEACHES, *supra* note 2, at 1.

12. *See id.*; Talking Points, Mayor Thomas M. Menino, Earth Day Celebration 2000 (Apr. 20, 2000) (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Talking Points (Apr. 20, 2000)].

13. Press Advisory, Envtl. Servs., City of Boston, Celebrating the Ongoing Construction of *A Building that Teaches* (Jan. 8, 2002) (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Press Advisory (Jan. 8, 2002)]; Gareth Cook, *Audubon Home Seeks to Be City's 'Greenest'*, BOSTON GLOBE, Jan. 11, 2002, at B1.

14. Press Advisory, City of Boston & Mass. Audubon Soc'y, Dedication: George Robert White Environmental Conservation Center, "Boston's Building that Teaches" (Oct. 29, 2002) (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Press Advisory (Oct. 29, 2002)].

15. Invitation, Mayor Thomas M. Menino, The Economics of High Performance "Green" Buildings (for Jan. 30, 2003, panel) (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Policy Panel Invitation].

16. Press Release, Office of the Mayor, City of Boston, Mayor Menino Announces Green Building Task Force (June 18, 2003), http://www.cityofboston.gov/news/default.aspx?dept=55 (search by date for June 2003; follow titled link) [hereinafter Press Release (June 18, 2003)].

17. Thomas C. Palmer, Jr., *Menino Gives the Green Light*, BOSTON GLOBE, Nov. 10, 2004, at D7.

18. Press Release, City of Boston, Mayor Menino Announces Grants to Promote Green Affordable Housing (Oct. 3, 2006), http://www.cityofboston.gov/news/Default.aspx?id=3318 [hereinafter Press Release (Oct. 3, 2006)].

19. Article 37, *supra* note 1.

20. Exec. Order, Thomas M. Menino, Mayor, An Order Relative to Climate Action in Boston ¶ 7 (Apr. 13, 2007) (on file with the New York University Journal of Legislation and Public Policy).

Before discussing these events in detail, this Article turns to Professor Heifetz's theory of leadership to frame project-based policy development and its thematic sequencing of events as an exercise of leadership.

II.
The Heifetz Leadership Theory—Mobilizing Groups to Make Progress on Problems

This Part sets forth the theory of leadership developed by Professor Ronald A. Heifetz in conjunction with his years of teaching "practitioner students."[21] Based on their real successes and failures, Professor Heifetz built a general theory, a conceptual framework that has practical application.[22] Part III presents the case study of Boston's Building that Teaches—project-based policy development as effective leadership and change management—which demonstrates the practical application of Professor Heifetz's leadership theory.

A. The Key Distinctions in the Heifetz Framework

In his seminal 1994 work, *Leadership Without Easy Answers*, Professor Heifetz structures a theory of leadership based on two key distinctions: between leadership and authority, and between technical and adaptive problems.[23] Differentiating between adaptive and technical problems is important in determining whether authority or leadership is needed.[24]

1. The Distinction Between Leadership and Authority

Professor Heifetz's definition of leadership—"mobilizing people to tackle tough problems"—revolves around the concept of influence rather than subordination or coercion, not forcing a community to follow an individual's vision but influencing a community to face its problems.[25] Leadership is the ability to meet an adaptive challenge,

21. Heifetz, Leadership Without Easy Answers, *supra* note 4, at 7.

22. *Id.* at 7–8. The theory is "empirical in the sense that it reflects engagement with real problems. But it is not empirical in the rigorous sense of methodically categorizing . . . cases on which to examine and test the full range of possible hypotheses." *Id.* at 7.

23. *Id.* at 8.

24. Ki ThoughtBridge, Leadership and Authority, http://www.kithoughtbridge.com/pages/42_leadership_and_authority.cfm (last visited Dec. 15, 2007). *See also* Heifetz, Leadership on the Line, *supra* note 4, at 14 ("[T]he single most common source of leadership failure . . . is that people, especially those in positions of authority, treat adaptive challenges like technical problems.").

25. Heifetz, Leadership Without Easy Answers, *supra* note 4, at 14–15.

the gap between values and reality.[26] It is an activity that can be undertaken by anyone willing to take initiative[27] and is not, as is commonly understood, a set of personal characteristics or an individual's role.[28]

In contrast, authority is power conferred by others to perform a service and lies at the base of all organizations, from family to nation.[29] People who sit at the head of the table—whether the traditional father figure, a committee chair, or the president of the United States—have authority.[30] Groups in distress turn to authority for order.[31] The person in authority defines where the group is headed, what outcomes are expected, and establishes clear boundaries, roles, and relationships in the performance of tasks.[32]

Professor Heifetz divides authority into two forms: formal and informal.[33] Formal authority comes with the various powers of the office; an officeholder granted formal authority promises to meet a set of explicit expectations defined, for example, by a job description or legislative mandate.[34] Informal authority comes with "the power to influence attitude and behavior beyond compliance"; it derives "from promising to meet expectations that are often left implicit (expectations of trustworthiness, ability, civility)."[35] Formal authority changes "in quantum jumps . . ." when formal mandates for action are given: swearing-in, hiring, firing, signing legislation";[36] informal authority "changes constantly as one's popularity and professional reputation rise and fall."[37]

---

26. *Id.* at 254.

27. *Id.* at 20.

28. *Id.* at 16.

29. *See id.* at 57 ("This definition will be useful to the practitioner of leadership as reminder of two facts: First, authority is given and can be taken away. Second, authority is conferred as part of an exchange.").

30. *Id.* at 185 (discussing the table metaphor and the traditional gender roles of male at the head, female at the foot: "Leadership without authority has been the domain to which women have been restricted for ages.").

31. *Id.* at 69. *See also id.* at 49 ("From a human perspective, evolution reached a major milestone when animals began to live in groups, and authority and its precursors, dominance and deference, made this possible.").

32. *See id.* at 69 (noting that authority provides order by "orienting people to their places and roles, controlling internal conflict, and establishing and maintaining norms").

33. *Id.* at 101.

34. *Id.*

35. *Id.*

36. *Id.* at 102.

37. *Id.*

Authority figures with trans-substantive[38] responsibilities—for example, mayors who daily balance demands to improve public safety, health, and education—commonly have the power to determine the decision-making process. Because they can compare different points of view, they are better at testing reality.[39] But change often involves discomfort. Those who have conferred the authority want protection from pain and distress, and this can make it difficult for people in authority to exercise leadership.

By contrast, leaders without authority generally work on a single issue within existing decision-making dynamics.[40] Leaders without the "constraints of authority" enjoy the freedom "to deviate from the norms of authoritative decision making" and benefit from working with frontline information.[41] But the deviance of leading without authority includes the danger of becoming a "lightning rod"—easily attacked and marginalized.[42] Thus, a key "barometer of systemic distress" for the leader without authority is "the behavior of people in senior positions of authority."[43]

While leadership is the "activity or process of mobilizing people and groups to do adaptive work," authority is a "resource that can be used on behalf of leadership but should never be equated as leadership."[44] In order for adaptive work to occur, leadership creates

---

38. *See supra* note 9 (discussing "trans-substantive").

39. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 115 ("By virtue of their authority, they are given a special *vantage point* from which to survey and understand the situation.") (emphasis in original).

40. *Id.* at 188 ("One does not have to contend so fully with meeting the multiple expectations of multiple constituencies and providing the holding environment for everybody. One can have an *issue focus*.") (emphasis in original).

41. *Id.* Often leaders operating with little or no authority are "closer to the detailed experiences of some of the stakeholders in the situation" and "can more readily raise questions that disturb." *Id.*

42. *Id.* at 208.

43. *Id.* at 220 ("[O]ne who leads beyond his authority will often have little information about the other sources of stress within the system. He may challenge the system too far and too fast and invite his own suppression. He has to understand, therefore, the response patterns of the community into which he intervenes.").

44. Dean Williams, Orienting Concepts for the Exercise of Leadership (2004) [hereinafter Williams, Orienting Concepts] (unpublished handout, Harvard University, Kennedy School of Government, Center for Public Leadership, on file with the New York University Journal of Legislation and Public Policy). *See also* WILLIAMS, REAL LEADERSHIP, *supra* note 4, at xiv (describing his book as "primarily about exercising leadership with authority" that builds on the work of Ronald Heifetz and Riley Sinder and distinguishing "(1) leadership from authority and (2) technical challenges from adaptive challenges"); *id.* at 5 ("[W]e need a new notion of what it means to be a real and responsible leader—one that does not emphasize the dynamic of *leader-follower and goal* but the dynamic of *leadership-group and reality.*") (emphasis in original).

dissonance whereas authority constrains the level and depth of work.[45]

2. *The Distinction Between Technical and Adaptive Problems*

The second key theoretical distinction is between technical and adaptive problems. A technical problem is one that can be solved with "work that is . . . straight-forward in regards to the application of expertise to a particular problem."[46] Some problems can be resolved with a quick fix. Hiring a plumber to unclog a drain, a mechanic to fix an automobile, or even a surgeon to remove a tumor is giving a person authority to resolve essentially technical problems. The situation calls for someone with authoritative expertise to "have the right procedures, the right norms, and the right knowledge."[47] In Professor Heifetz's theory, technical challenges do not call for leadership but rather the application of existing expertise.

Adaptive[48] problems, by contrast, "are not amenable to authoritative expertise or standard operating procedures."[49]

> They cannot be solved by someone who provides answers from on high. . . . [T]hey require experiments, new discoveries, and adjustments from numerous places in the organization or community. Without learning new ways—changing attitudes, values, and behaviors—people cannot make the adaptive leap necessary to thrive in the new environment. The sustainability of change depends on having people with the problem internalize the change itself.[50]

---

45. *See* Ki ThoughtBridge, *supra* note 24.

46. Williams, Orienting Concepts, *supra* note 44, at 2. *See also* HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 121 ("In technical situations, where the authority has the expertise to define and solve the problem, people generally opt for autocratic or consultative decisionmaking. . . . Adaptive situations, however, tend to demand a more participative mode of operating to shift responsibility to the primary stakeholders."); WILLIAMS, REAL LEADERSHIP, *supra* note 4, at xiv–xv.

47. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 18 ("What makes a problem technical is not that it is trivial; but simply that its solution already lies within the organization's repertoire.").

48. Professor Heifetz's concept of adaptation "arises from efforts to understand biological evolution." HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 30. *See also id.* at 3 (discussing how "behavior reflects an adaptation to circumstances" and that "[o]ften, biological adaptations are transformative, enabling species to thrive in a new environment").

49. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 13.

50. *Id.*

Racism is an adaptive problem.[51] So is addiction, whether in a community facing alcoholism and drug abuse,[52] or in a nation addicted to oil. Leadership for an adaptive challenge must orchestrate a process to engage factions who own a piece of the problem to do adaptive work within a group,[53] to undertake a change in the hearts and minds of the people with the problem.[54] Far from being value-neutral, leadership is value-laden. Because conflicts over values and purposes occur frequently, clarifying and integrating competing values becomes adaptive work.[55]

B. The Need for a Holding Environment

By its nature, change causes disequilibrium and sustained periods of anxiety.[56] To keep the stress of adaptive work at a productive level, a leader needs to work within a holding environment,[57] "a space formed by a network of relationships within which people can tackle tough, sometimes divisive questions without flying apart."[58] A holding environment is a metaphoric "container that serves to hold a group, or groups, together so that work can get done."[59] It "consists of any relationship in which one party has the power to hold the attention of another party and facilitate adaptive work."[60]

---

51. Racism as an adaptive problem frames Heifetz's in-depth discussion of civil rights in the 1960s and the relationship between Martin Luther King, Jr.'s considerable informal authority and President Lyndon Johnson's formal authority. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 129–49.

52. Professors Heifetz and Linsky introduce their discussion of leadership with the example of a woman on a Native American reservation who, in a community with pervasive alcohol abuse, gets sober and leads the community by setting up chairs for meetings of Alcoholics Anonymous. At first people watched the woman "sitting there in that circle of chairs, all alone. . . . [N]o one came to those meetings for a long time, and even after three years, there were only a few people in the room. . . . But ten years later, the room was filled with people. The community began turning around." HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 9–10.

53. WILLIAMS, REAL LEADERSHIP, *supra* note 4, at xiv–xv.

54. *Id.* at 7 ("Adaptive work is the effort that produces the organizational or systemic learning required to tackle tough problems. These problems often require an evolution of values, the development of new practices, and the revision of priorities.").

55. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 3.

56. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 107–08.

57. *Id.* at 102 ("[Y]ou need a holding environment to contain and adjust the heat that is being generated by addressing difficult issues or wide value differences.").

58. *Id.* at 102–03.

59. Williams, Orienting Concepts, *supra* note 44, at 3 ("It includes rules, procedures, shared purpose, common values, group norms and traditions, rituals, ceremonies, timeframes, etc.").

60. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 104–05.

Corporations often create holding environments by hiring an outside facilitator and taking a group off-site to work through a conflict. Therapists also use holding environments to hold the patients "in a process of developmental learning . . . so that the patients can begin to see more clearly the nature of their problems."[61] A holding environment, "with structural, procedural, or virtual boundaries," allows people to feel safe enough to address difficult problems.[62]

C. Interventions: Back and Forth from Dance Floor to Balcony

Interventions are necessary to exercising leadership.[63] Anytime someone speaks up in a group discussion to make an observation, asks a question, or offers an interpretation, that person is intervening in the group dynamic.[64] Similarly, taking action, whether walking out of a meeting, protesting against governmental action, or invading a country, is an intervention. Interventions constitute the heart of leadership activity; they get the group's attention and, when effective, keep that attention focused on making progress on problems.

Leadership, with or without authority, is "both active and reflective"; a leader alternates "between participating and observing."[65] Professor Heifetz develops the metaphor of alternating between "the dance floor and the balcony," the "iterative, not static" process of making interventions and "observing their impact in real time, and then returning to the action."[66]

> Engaged in the dance, it is nearly impossible to get a sense of the patterns made by everyone on the floor. . . . To discern the larger

61. *Id.* at 104.

62. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 103.

63. *Id.* at 134. *See also* Williams, Orienting Concepts, *supra* note 44, at 6 (defining intervention as "the heart of leadership activity" and the "process of getting the group's 'attention' on behalf of doing work"). Professor Heifetz's use of the term "intervention" reflects his background as a psychiatrist. In his introduction to *Leadership Without Easy Answers*, Professor Heifetz explains that this background led him to believe that "many adaptive and communicative processes are unconscious," that "many difficulties with making headway on problems arise from poorly orchestrated and unresolved conflicts," and thus, "[a]s a consequence, I *intervene* in people's lives and social systems with the aim of increasing their adaptive capacity—their ability to clarify values and make progress on the problems those values define." HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 5 (emphasis added).

64. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 134–39.

65. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 252.

66. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 53–54 ("The goal is to come as close as you can to being in both places simultaneously, as if you had one eye looking from the dance floor and one eye looking down from the balcony, watching all the action, including you own. This is a critical point: When you observe from the balcony you must see yourself as well as the other participants. Perhaps this is the hardest task of all—to see yourself objectively.").

> patterns on the dance floor—to see who is dancing with whom, in what groups, in what location, and who is sitting out which kind of dance—we have to stop moving and get to the balcony.[67]

Intervening back and forth from dance floor to balcony allows a leader to form a "diagnostic framework" within which to exercise the "strategic principles of leadership . . . : identifying the adaptive challenge, regulating distress, directing disciplined attention to the issues, and giving the work back to people."[68] This discussion now turns to these four strategic principles.

1. Identifying the Adaptive Challenge—Diagnose "Mirroring" Factions

The first strategic principle of leadership—identifying the adaptive challenge—involves understanding basic mechanisms of group dynamics.

> A group recognizes the presence of a problem when the level of stress in the group goes up. Stress arises from disorientation in the face of a complex task, and effective groups normally generate an authority structure in response, sometimes quite informally. The authority structure establishes places and roles for group members, including the role of chairperson, and by so doing creates a coordinating problem solving mechanism.[69]

Groups strongly prefer technical interpretations of work because these problems allow for a "simple, straightforward solution, one that does not require any hard work or adaptation on the group's part."[70] Identifying an adaptive challenge involves analyzing the sources of distress when an intervention identifies "a gap between the shared values people hold and the reality of their lives" or "a conflict among people in a community over values or strategy."[71] For adaptive challenges, "people's hearts and minds need to change, . . . not just their

67. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 253.

68. *Id.* at 254. *See also* HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 55 (suggesting four diagnostic tasks to engage in from the balcony: (1) "[d]istinguish technical from adaptive challenges"; (2) "[f]ind out where people are at"; (3) "[l]isten to the song beneath the words"; and (4) "[r]ead the behavior of authority figures for clues").

69. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 57.

70. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 57.

71. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 254 (discussing how distress itself, when not alleviated by technical know-how and existing procedures, "provides a clue to what the adaptive challenge is").

preferences and routine behaviors."[72] The authority figure does not have a quick fix answer.[73]

Groups in conflict over an adaptive problem "generally consist of representatives from interested parties that act as factions."[74] From the principle that "people represent issues," Professor Heifetz develops the concept of mirroring, that "problems in working effectively within an organization will often *mirror* the problems in the larger community that the organization aims to solve."[75] Thus, individual disagreements within a group, rather than being personal competitions over power, often mirror factional conflicts in the outside community.

Getting to the balcony is key to identifying the nature of an adaptive challenge. Conflicts over seemingly technical issues—procedures, schedules, structure—are often "proxies for underlying conflicts in ways of life."[76] The distress caused by conflicts are diagnostic clues to the outside community's "dysfunctions and impediments."[77] Understanding the causes of the distress, the internal contradictions represented by the distress, and the histories of these contradictions provides an opportunity to use factional conflicts as "a case in point—a laboratory—for identifying challenges and inventing options for taking action."[78]

2. *Regulating Distress and Disequilibrium—Control the Temperature*

Distress generated by an adaptive challenge must be contained within limits in order to produce progress. To illuminate the second strategic principle of leadership—the need to regulate distress and disequilibrium[79]—Professor Heifetz develops the metaphor of a pressure cooker:

---

72. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 60.

73. *Id.* at 18.

74. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 118.

75. *Id.* at 255 (emphasis added). Any "[i]nternal rivalries, misunderstandings, and patterns of disrespect" of the organization often "mimic patterns in the social environment." *Id.*

76. *Id.* at 254.

77. *Id.* at 256.

78. *Id.*

79. *Id.* at 259. *See also* Williams, Orienting Concepts, *supra* note 44, at 3 (Disequilibrium is "[t]he absence of a 'steady state.' [It i]ncludes the tension, conflict, dissonance, and anxiety associated with shifting fundamental values, assumptions, and behavioral patterns. Disequilibrium is produced as competing views of reality are challenged and explored. Social systems when threatened with chaos generally seek to restore equilibrium.").

> [T]he cook regulates the pressure of the holding environment by turning the heat up or down, while the relief valve lets off steam to keep the pressure within a safe limit. If the pressure goes beyond the carrying capacity of the vessel, the pressure cooker can blow up. On the other hand, with no heat, nothing cooks.[80]

The leadership challenge is to regulate, to the extent possible, the pressure caused by facing an adaptive challenge. To raise the temperature, a leader can "1. Draw attention to the tough questions; 2. Give people more responsibility than they are comfortable with; 3. Bring conflicts to the surface; [and] 4. Protect gadflies and oddballs."[81] To lower the temperature, the leader can "1. Address the technical aspects of the problem; 2. Establish a structure for the problem-solving process by breaking the problem into parts and creating time frames, decision rules, and clear role assignments; 3. Temporarily reclaim responsibility for the tough issues; 4. Employ work avoidance mechanisms; [and] 5. Slow down the process of challenging norms and expectations."[82]

3. Directing Disciplined Attention to the Issues—Allow Issues to Ripen

The third strategic principle of leadership—directing disciplined attention to the issues—recognizes that a leader cannot force a group to confront an adaptive challenge immediately. Issues take time to seep into group consciousness, to ripen.[83]

Leadership interventions must vary depending on whether one is addressing a ripe or an unripe issue:

> Ripe issues have already galvanized attention and generated urgency in a critical portion of the community. The challenge then is to keep attention focused on the dimensions of the problem requiring adaptive work by the interested parties. An unripe issue, however, usually captures the attention of a small minority in the community, and the task for them is to draw attention to the issue, often in the face of resistance by the larger community having other concerns.[84]

Thus, a leader needs to develop a strategy of iterative interventions, either to keep attention focused on a ripe issue or draw attention to an unripe issue. Because authority figures serve as a "barometer of

---

80. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 106.
81. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 111.
82. *Id.*
83. Williams, Orienting Concepts, *supra* note 44, at 5 (explaining the concept of ripening an issue).
84. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 261.

issue ripeness and systemic stress,"[85] leaders without authority need to pay close attention to authority figures' actions. When and how an authority figure pays attention to a problematic issue is an important indication of how to pace the work.

Two tools for ripening unripe issues are education and partnership. Making progress on adaptive problems requires learning; the leader needs to educate both herself and the community. To engage parties with competing interests, a leader needs to engage in self-education in order to "comprehend the stakes and potential losses" involved in the issue.[86] To educate the community, the leader needs to develop an "educative strategy,"[87] which involves "choreographing and directing learning processes in an organization or community."[88]

In addition to education, a leader needs partners—confidants and allies—because "leadership cannot be exercised alone."[89] Leaders need a confidant, "the person to whom one can cry out and complain," to maintain personal strength.[90] But to build political strength, leaders need allies, "partner[s] usually operating across a line of authority or organizational boundary,"[91] for example, someone from a different department willing to co-host a meeting. A leader cannot rely on the logical power of arguments for change alone: partners provide political protection. Partners who are "members of the faction for whom the change is most difficult can make a huge difference" by being advocates in their own camp, sources of intelligence about the opposition, and monitors of resistance.[92]

4. Giving the Work Back—Mobilize Group Resources

The final strategic principle of leadership—giving the work back to people—summarizes the key points of Heifetz's leadership model. When a group faces a genuine technical situation, people appropri-

85. *Id.* at 208 (explaining that the role of an authority figure in a social system is to resolve ripe issues).

86. *Id.* at 262 ("Developing a strategy . . . to accomplish change, and perhaps realize losses or create mutually beneficial solutions, requires knowing with some intimacy the texture of interests in people's lives.").

87. *Id.* at 187. *See also* WILLIAMS, REAL LEADERSHIP, *supra* note 4, at 5 ("At its essence, real leadership orchestrates social learning in regard to complex problems and demanding challenges. People must learn why they are in a particular condition in order to invent pathways forward that produce genuine progress, as opposed to hollow and temporary gains.").

88. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 187.

89. *Id.* at 268.

90. *Id.*

91. *Id.* at 269.

92. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 82–83.

ately opt for autocratic decision making and let experts do their job. But when a group faces an adaptive situation, people must change their hearts as well as their heads. Existing expertise cannot solve the problem; the people involved need to do the work. The leader with authority needs to resist the pressure to treat an adaptive challenge as a technical problem and the pride involved in having answers to tough questions. Leaders with or without authority need to design a process in which issues are "internalized, owned, and ultimately resolved by the relevant parties."[93]

Groups need a holding environment to contain the distress of change. Leadership requires interventions to mobilize groups to focus on problematic realities and a learning strategy to pace progress on those problems. Progress demands new ideas and innovation, as well as changes in people's attitudes and behavior. Leadership "consists of the process of discovering and making these changes."[94] In the end, "the people with the problem" must become "the people with the solution."[95]

III.
The Thematic Sequence of Mayoral Events: Case Study of Boston's Project-Based Green Building Policy Development

With Professor Heifetz's group dynamics leadership theory as a frame, Part III examines the case of Boston's pilot green building, the Building that Teaches, to suggest that project-based policy development—creating a thematic sequence of governmental events—is an effective general model of leadership and change management. Green building "encompasses ways of designing, constructing, and maintaining buildings to decrease energy and water usage and costs, improve the efficiency and longevity of building systems, and decrease the burdens that buildings impose on the environment and public health."[96]

93. *Id.* at 127.

94. Heifetz, Leadership Without Easy Answers, *supra* note 4, at 187.

95. Heifetz, Leadership on the Line, *supra* note 4, at 127 (internal quotations omitted); *see also* Heifetz, Leadership Without Easy Answers, *supra* note 4, at 121 ("Adaptive situations . . . tend to demand a more participative mode of operating to shift responsibility to the primary stakeholders. Because the problem lies largely in their attitudes, values, habits or current relationships, the problem-solving has to take place in their hearts and minds.").

96. City of Boston, Mayor Menino's Green Building Task Force Report, Executive Summary 4 (2004), *available at* http://www.cityofboston.gov/bra/gbtf/documents/GBTF%20Executive%20Summary.pdf [hereinafter Mayor Menino's Green Building Task Force Report]. *See also* U.S. Green Bldg. Council, Building Momentum: National Trends and Prospects for High-Performance

Green building design addresses problems that cannot be solved by applying existing expertise to a particular problem, technical work,[97] but rather classic adaptive work—"[t]he challenging work of shifting values, norms, belief systems, and world views so that progress can be made."[98]

The specific work of greening the building industry involves integrating the design process—bringing architects, engineers, and building users together at the beginning to coordinate decisions that will reduce the building's draw on the earth's resources.[99] The immediate adaptive challenge of this work involves dealing with integrated design's up-front cost, the perceived "green premium."[100] All too often capital budget managers make decisions that save on up-front costs by foregoing green design elements that promise operational cost savings.[101] This occurrence can be mitigated by instituting new ways of

---

GREEN BUILDINGS 4 (2003), *available at* http://www.usgbc.org/Docs/Resources/043003_hpgb_whitepaper.pdf [hereinafter U.S. GREEN BLDG. COUNCIL, BUILDING MOMENTUM].

97. Williams, Orienting Concepts, *supra* note 44, at 2 (defining technical work). *See also supra* Part II.A.2.

98. Williams, Orienting Concepts, *supra* note 44, at 2 (defining adaptive work). *See also supra* Part II.A.2.

99. *See* MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 2 ("Directly and indirectly, buildings consume approximately 40 percent of all energy used in the U.S., and the construction industry produces up to 40 percent of the materials that goes into our landfills."). *See also* U.S. GREEN BLDG. COUNCIL, BUILDING MOMENTUM, *supra* note 96, at 3 (discussing that the construction and operation of buildings accounts for 37% of all energy use and 68% of all electricity demand in the United States).

100. *See* GREG KATS ET AL., NATIONAL REVIEW OF GREEN SCHOOLS: COSTS, BENEFITS, AND IMPLICATIONS FOR MASSACHUSETTS 9 (2005), *available at* http://www.cap-e.com/ewebeditpro/items/O59F7707.pdf.

101. Cost/benefit analyses implicate the "brick wall" between capital and operating budgets. *See, e.g.*, HARVARD GREEN CAMPUS INITIATIVE: GREEN CAMPUS LOAN FUND, *available at* http://www.greencampus.harvard.edu/gclf/documents/EPACaseStudyUpdate4.10.07.pdf (last visited Oct. 27, 2007) (identifying lack of funds as a barrier to overcome in funding green projects). Real estate developers allocate a sum for certain capital expenses of the project, which includes the soft costs of design and project review and the hard costs of labor and materials. *See* BuildMax – Owner Builder Construction Loans and Services, What Are Hard Costs & Soft Costs?, http://www.buildmax.com/help/budgeting_what_are_hard_costs_and_soft_costs.asp (last visited Nov. 27, 2007). Managers of capital budgets, under great pressure to build a capital asset "on time and under budget," employ "value engineering" to bring a building design within the capital budget. The traditional value engineering process often eliminates design elements that promise operational cost savings, such as energy and water use reductions, but that increase the capital budget. *See* Gregory S. Knoop, *Value Engineering and Sustainable Design: The Commonality of Quality*, 14 AIARCHITECT, Mar. 2, 2007, http://www.aia.org/aiarchitect/thisweek07/0302/0302p_bp.cfm. Thus, the general budget challenge involves quantifying the net present value of auditable operating savings from green building design decisions and embedding

relating capital and operating budgets, such as embedding cost savings or "pay back" from green building operations in capital decision-makers' cost/benefit analyses.

The broader adaptive challenge involves the comprehensive societal redefinition of a building's value. Full-cost accounting needs to expand cost/benefit analyses to allow a building's "return on investment"[102] to include the public health benefits of green and healthy buildings and the value of worker and student productivity, which studies indicate may increase in green buildings.[103] But the fundamental adaptive challenge, the key underlying issue motivating green building work, is the threat of climate change.[104]

---

these savings in capital decision-making processes such that value engineering cannot remove them from the final design that is constructed. *See id.* (proposing that "[v]alue engineering needs to focus more on sustainability").

102. The current use of "return on investment" is limited to the amount of profit a property generates under accepted accounting principles. It is defined as "[t]he percentage ratio arrived at by dividing the amount an investor earned by the amount he or she invested." Real Estate Words, A Glossary of Real Estate Terms, http://www.realestatewords.com/byword/real_estate_words_definition_Return_On_Investment,_ROI.htm (last visited Oct. 16, 2007).

103. Energy efficient measures "often improve indoor environmental quality and that may improve occupant health, satisfaction, or work performance." William Fisk, *Health and Productivity Gains From Better Indoor Environments and Their Relationship with Building Energy Efficiency*, 25 ANN. REV. ENERGY ENV'T 537, 559–60 (2000). Studies indicate that improved indoor air quality, increased natural daylight, and improved thermal comfort, result in higher worker productivity, better student performance, and lower absenteeism. *See* GREG KATS ET AL., THE COSTS AND FINANCIAL BENEFITS OF GREEN BUILDINGS: A REPORT TO CALIFORNIA'S SUSTAINABLE BUILDING TASK FORCE 58–60 (2003), *available at* http://www.ciwmb.ca.gov/greenbuilding/design/costbenefit/report.pdf [hereinafter KATS, COSTS AND FINANCIAL BENEFITS]; GREGORY KATS, GREENING AMERICA'S SCHOOLS: COSTS AND BENEFITS 10–11 (2006), *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=2908; Fisk, *supra* note 103, at 541, 550–56. Existing evidence suggests that "sick building syndrome" symptoms—such as irritation of eyes, nose, and skin; headache; fatigue; and difficulty breathing—can be reduced by 20–50% through improvement in indoor environmental conditions. Fisk, *supra* note 103, at 548, 552. Additionally, such improvements could result in a 0.5–5% increase in annual productivity. *Id.* at 556. *See also* Patricia M. Burke, *Boston's Green Affordable Housing Program: Challenges and Opportunities*, 11 N.Y.U. J. LEGIS. & PUB. POL'Y 1, 28 (2008) (noting that many green building standards address healthy homes criteria that seek to minimize "occupant health risks such as asthma and respiratory disease, unintentional injury, and toxic substances").

104. Although early attention to the causes of global warming focused on vehicle emissions, green building advocates drew attention to the 30–40% of greenhouse gas emissions linked to buildings. *See* UNITED NATIONS ENV'T PROGRAMME, BUILDINGS AND CLIMATE CHANGE: STATUS, CHALLENGES AND OPPORTUNITIES v (2007), *available at* http://www.unep.fr/pc/sbc/documents/Buildings_and_climate_change.pdf. For an example of a global warming resolution focusing only on President Clinton's 1996 automobile fuel economy goals, see Res. No. 490-01 (San Francisco, Cal. 2001), http://www.sfgov.org/site/uploadedfiles/bdsupvrs/resolutions01/r0490-01.pdf.

Each project-related event beginning with the Earth Day 1999 Charrette tested the group dynamic implicated by green building's integrated design principles, particularly between competing environmental and economic development factions. The holding environment created by the thematic sequence of events contained the conflicts created by the cross-factional interventions that reframed environmental work within economic development and energy policy terms. Leadership, from both municipal staff with substantive issue focus and the Mayor with trans-substantive responsibilities, meant that the City of Boston was ready when green building issues, both within the local dynamic and the broader society it mirrored, became ripe.

In 1999, both climate change and green buildings were unripe issues, which systemically had "capture[d] the attention of [only] a small minority in the community"[105]—certain scientists and environmentalists. Economic development forces, evident in the United States' refusal to adopt the Kyoto Protocol, completely marginalized the environmental focus on climate change and green buildings as impractical.[106] Throughout the development of Boston's Building that Teaches, the challenge of repositioning environmental green building issues from the margin to the mainstream—whether within the dynamic of city government or the community at large—mirrored this macro national dynamic.[107] The Building that Teaches proved an ideal leadership project to "mobiliz[e] people to tackle tough problems"[108] and to define the work—"the issue[s] or concern[s] that must be addressed if organizational or societal improvement is to be achieved"[109]—that needed to be accomplished for green building in Boston to move forward. As Professor Heifetz uses the word, the real "work" implicated by green building policy is saving the planet.

105. *See* HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 261.

106. *See* S. Res. 98, 105th Cong. (1997) (stating that the United States should not be a signatory to any protocol limiting greenhouse gas emissions that would result in "serious harm to the economy of the United States" unless it is "accompanied by an analysis of [its] detailed financial costs and other impacts on the economy").

107. *See* HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 258 (discussing how a group can mirror the problem dynamics in the community).

108. *Id.* at 15.

109. Williams, Orienting Concepts, *supra* note 44, at 3.

A. Earth Day 1999 Green Building Charrette—Exercising Leadership Without Authority

In 1999, the green building movement was in its infancy and resisted by traditional developers as costly and impractical.[110] However, a trust managed by the City of Boston, the George Robert White Fund, decided to fund the design and construction of a green building.[111] This building was to become the educational centerpiece of the Massachusetts Audubon Society's Boston Nature Center, which was created from sixty-eight acres of a former state hospital campus in a historically underserved neighborhood of Boston.[112] Because it was not publicly funded, the Boston Nature Center project operated independently from the City's regular building process, and no one from the Public Facilities Department—the municipal department generally responsible for public construction[113]—was involved. Nor was the Boston Redevelopment Authority (BRA)—the quasi-city agency responsible for planning and economic development[114]—implicated in the project.

To raise awareness of the green building movement, the Mayor's Office of Environmental Services (Environmental Services)[115] organ-

110. *See* Press Release, U.S. Green Bldg. Council, Green Buildings Are Going Mainstream, says Harvard Business Review (June 21, 2006), http://www.usgbc.org/News/PressReleaseDetails.aspx?ID=2401 ("Before 2000, companies generally regarded green buildings as interesting experiments but unfeasible projects in the real business world."). For an overview of the history of the green building movement, see Charles J. Kibert, SUSTAINABLE CONSTRUCTION: GREEN BUILDING DESIGN AND DELIVERY (2005).

111. BOSTON PARKS & RECREATION DEP'T, OPEN SPACE PLAN 2002–2006, at 171 (2002), *available at* http://www.cityofboston.gov/parks/pdfs/os3j.pdf. The Mayor of Boston, *ex officio*, is Chair of the Board of Trustees of the George Robert White Fund. Database of Greenspaces and Neighborhoods in the Heart of Boston, George Robert White Fund (Board of Trustees), http://ksgaccman.harvard.edu/hotc/DisplayOrganization.asp?id=325 (last visited Dec. 27, 2007).

112. For discussion of the Boston State Hospital and the creation of the Boston Nature Center and Wildlife Sanctuary, see Mass. Audubon Soc'y, Boston Nature Center and Wildlife Sanctuary, http://www.massaudubon.org/Nature_Connection/Sanctuaries/Boston/index.php (last visited Oct. 24, 2007).

113. *See* Act of Sept. 3, 1966, ch. 642, 1966 Mass. Acts 614–17, *available at* http://archives.lib.state.ma.us/actsResolves/1966/1966acts0614.pdf (creating the Public Facilities Commission and describing its authority over public construction in Boston through a Public Facilities Department).

114. The Boston Redevelopment Authority is the quasi-city agency, governed by a Board of Directors, responsible for planning and economic development. *See* Boston Redev. Authority, About the BRA, http://www.cityofboston.gov/BRA/HomePageUtils/about_us.asp (last visited Nov. 7, 2007) (describing the Boston Redevelopment Authority's statutory authority and responsibilities).

115. The Environmental Services Cabinet (renamed Environmental and Energy Services Cabinet in 2005, *see infra* note 217 and accompanying text) is part of the Office

ized the Earth Day 1999 Green Building Charrette.[116] Because Environmental Services lacks regulatory authority over building development review, its decision to organize the Earth Day 1999 Green Building Charrette was an exercise of leadership without authority.[117] This absence of authority meant that Environmental Services' first intervention—the introduction of green building design principles through the Charrette[118]—had creative latitude to "deviate from the norms of authoritative decision making."[119]

The adaptive nature of the undertaking—the engagement of issues from outside the "boundaries"[120] that define the discussion of building in Boston—was reflected by the participation of an outsider. The keynote speaker at the Charrette was Professor David Orr, Chairman of Oberlin College's Environmental Studies Department, who delivered a presentation discussing Oberlin's green building project, which was under construction and became one of the nation's first green buildings.[121] As a source of new ideas, Professor Orr repre-

---

of the Mayor. CITY OF BOSTON, OPERATING BUDGET FISCAL YEAR 2008: CAPITAL PLAN FISCAL YEARS 2008–2012, at 146–47 (2007), *available at* http://www.cityofboston.gov/budget/pdfs/volume1_2008/11_Budg_Org_Glos.pdf. Each Cabinet is headed by a Chief with responsibility for certain municipal departments and programs. *See id*. Since 1996, the City's Environment Department's *Guidelines for High Performance Buildings and Sustainable Development* has collected information on green building design elements to include in its comments on developments undergoing review by the Commonwealth of Massachusetts and the Boston Redevelopment Authority. For a current version of these Guidelines, see City of Boston Env't Dep't, Guidelines for High Performance Buildings and Sustainable Development, *available at* http://www.cityofboston.gov/environment/pdfs/hpb_guidelines.pdf (last visited Oct. 24, 2007).

116. A BUILDING THAT TEACHES, *supra* note 2, at 5 ("A Charrette is a gathering of people for an intensive meeting to discuss and develop ideas for the design of a building or development project. Usually a Charrette happens at the beginning of a project, during its 'visioning' stages, and involves, hands-on work with maps, drawings, and brainstorming about a design project.").

117. The City's Environment Department's *Guidelines for High Performance Buildings and Sustainable Development* suggested that agencies responsible for enforcing zoning and building codes incorporate green building design principles, but these suggestions were treated as advisory only. *See* City of Boston Env't Dep't, Guidelines for High Performance Buildings and Sustainable Development, *supra* note 115, at 1 ("Informational materials and Guidelines should be used as a resource for minimizing the environmental impacts of proposed projects.").

118. A BUILDING THAT TEACHES, *supra* note 2, at 8–9.

119. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 188.

120. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 101 (explaining that adaptive work requires "engagement with something in the environment lying outside our perceived boundaries").

121. *See* A BUILDING THAT TEACHES, *supra* note 2, at 5. For information about Oberlin College's Adam Joseph Lewis Center, see Oberlin College, Adam Joseph Lewis Center for Environmental Studies, http://www.oberlin.edu/ajlc/ajlcHome.html (last visited Oct. 24, 2007).

sented interests that lie far outside the boundaries[122]—both geographically and culturally—of Boston's traditional governance dynamic.[123] Oberlin College's aim to construct an Environmental Studies Department "building that teaches"—a structure that students both "learned in and learned from"—was imported into the kernel of forward-moving green building policy development in Boston.[124]

The Charrette brought architects, academics, and neighborhood residents together to apply green building techniques to the ongoing design work for the Boston Nature Center building.[125] The event's message was distinctly environmental. The invitation to the event advertised consideration of four issues: (1) how can the building best be powered by sunlight; (2) how can the building purify its own wastewater; (3) whether the building can be built "without compromising human and environmental health somewhere else or at a later time"; and (4) whether the building can be designed to give more than it takes.[126]

Thus, at the event—"on the dance floor"—there was an all-encompassing focus on green building's exciting new environmental opportunities. However, from a systems perspective—looking down "from the balcony"—the intervention of green building concepts resonated only with one faction: the architects, academics, and neighborhood residents willing to spend a Saturday focusing on the burdens that buildings impose on the environment and public health.[127] No real estate financiers, contractors, or building union representatives attended, nor did the municipal counterparts—Boston Redevelopment Authority and Public Facilities Department—whose responsibilities

122. For a discussion of the importance of leadership challenging traditional boundaries, see HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 101. *See also* Williams, Orienting Concepts, *supra* note 44, at 3 (suggesting that "[s]ocial systems that are 'highly bounded' rarely survive, as new information cannot enter").

123. Whereas Oberlin College has a progressive, activist culture, Boston historically has an insular nature. *Compare* Alex Kingsbury, *Oberlin College: Putting the "Art" in Liberal Arts*, U.S. NEWS & WORLD REPORT (Aug. 17, 2007), http://www.usnews.com/usnews/edu/college/articles/brief/cbvisitohio.oberlin_brief.php, *with* THOMAS H. O'CONNOR, THE HUB: BOSTON PAST AND PRESENT xii–xiii (2001) (describing Boston's insular nature).

124. Environmental Services staff developed the phrase "learn in and learn from" to describe a green building's opportunity to instruct. For recent use of this phrase in the green building planning context, see Red Deer College News & Events, Red Deer College Thinks Greener: Green Campus Task Group Exploring Campus-Wide Initiatives, Aug. 28, 2007, http://www.rdc.ab.ca/news_events/?2007-08-29-09-38-54.html.

125. A BUILDING THAT TEACHES, *supra* note 2, at Acknowledgments, 4.

126. A BUILDING THAT TEACHES, *supra* note 2, at 6.

127. An issue "resonating" with only one faction is "unripe" and will generally remain marginalized. *See* HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 116.

mirrored these more traditional real estate and economic development factional interests.[128] The event agenda included "Mayor Thomas M. Menino (invited)"—a public signal that the event was officially sanctioned but that his actual presence was not definite. The Mayor did not attend.

For the Environmental Services staff that planned the event, the most significant reality, given the Mayor's absence, was the understanding that making green building a citywide priority would require significant strategic education, within both municipal government and the community at large. As with all unripe issues, the process involved drawing attention to green buildings "in the face of resistance by the larger community having other concerns."[129] Exercising leadership required building the case for green buildings.

B. Earth Day 2000 Neighborhood Festival and Issuance of Charrette Report—Intervening with an Educative Strategy

The need to educate motivated the City's Environmental Services staff to secure non-public funds with which to hire an environmental consultant to draft a report about the Earth Day 1999 Charrette activities.[130] The title of the report, *A Building that Teaches*, borrowed Oberlin College's description of its new Environmental Studies Department building, underlining that lessons embodied in design choices would reinforce, rather than contradict, lessons taught in the classroom.[131] This approach—that "the building should educate by example"—shaped the ongoing design of the Boston Nature Center building project.[132] The report was officially issued at the Earth Day 2000 Neighborhood Festival and served as an introduction to green building principles with a sample of green design guidelines.[133]

---

128. *See* A BUILDING THAT TEACHES, *supra* note 2, at Acknowledgements. *See also supra* notes 113–114 and accompanying text.

129. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 261.

130. Funding came from the George Robert White Fund, the trust that funded the design and construction of the Building that Teaches. *See supra* note 111 and accompanying text.

131. *See* John E. Peterson, *The Environment and Oberlin: An Update*, OBERLIN ALUMNI MAG., Summer 2002, http://www.oberlin.edu/alummag/oamcurrent/oam_summer2002/feat_enviro.htm.

132. A BUILDING THAT TEACHES, *supra* note 2, at 1 ("The educational mission should include showcasing local community choices, green design as a demonstration lab, i.e., solar aquatics, artificial wetland, materials' life cycle (extraction, manufacture, transport, installation, use, demotion, reuse), and assist children, teachers, and other adults in utilizing green design in their lives.").

133. Green design guidelines discussed in the report included site, energy, resource management, building materials, transportation, food self-sufficiency, and economy. *Id.* at 8–9. The report included a discussion of full cost accounting, which considers

The first three key recommendations from the Charrette contained the kernel of the City's project-based green building policy development: (1) that "the building should educate by example," (2) that "this design program and process . . . [should] influence future public buildings," and (3) that "[i]nvest[ing] more up-front money and green design experts . . . [will] maximize long-term benefits."[134]

With respect to the first two recommendations, educating by example and influencing future construction, the Environmental Services staff—with no formal authority over building construction—faced the challenge of connecting the project's green building principles to the policies governing Boston. This effort confronted understandable resistance from agencies with formal authority for public construction and private development review—the Public Facilities Department and Boston Redevelopment Authority.[135] These agencies argued that green building was untested, potentially costly, and impractical.[136]

With respect to the third recommendation, the need for more up-front investment, because the economic development factions of the group dynamic implicated by integrated design principles were not represented in the discussion, the environmentalists were only preaching to the choir. In this sense, the intervention did not tackle tough problems because the people who needed to work on the challenging issues—for example, real estate developers dealing with capital development budgets—were not involved.[137]

"the costs associated with environmental impacts caused by extraction, and energy consumed by production and transport of a particular material." *Id.* at 9. The report also included a list of the Massachusetts Audubon Society's Environmentally Sound Design Elements, which had already been integrated into many of the Society's existing facilities, that applied "to overall design, heating/ventilation/cooling, electricity, water, sewage, and building materials." *Id.* at 7.

134. *Id.* at 1. Green building policy was so unripe at the time that environmental staff could not yet conceive that the City could require green building standards for *private* development. Another key recommendation was that "the building should strive to meet 'GOLD LEED' standards or equivalents," but the George Robert White Fund and the Massachusetts Audubon Society, which leases the building from the Fund, decided against spending scarce funds on the cost of applying to the United States Green Building Council for official Leadership in Energy and Environmental Design Certification. *See id.*

135. *See supra* notes 113–114 and accompanying text.

136. Evidence to the contrary was not yet in place. In October 2003, however, Greg Kats published a report comparing the cost and benefit data from 33 high performance green buildings nationwide and concluding that the average cost premium over conventional construction was less than 2%. KATS, COSTS AND FINANCIAL BENEFITS, *supra* note 103, at 14–15. This report provided significant support to the Mayor's Green Building Task Force's work. *See* MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 12.

137. *See supra* note 101 and accompanying text.

The presentation of the report at the Earth Day 2000 event demonstrates a key aspect of project-based policy development: how the authority figure indicates the ripeness of an issue.[138] Given the intense competition for an hour on the Mayor's event calendar, Environmental Services staff knew that the Mayor would not agree to appear at an event based solely on the release of the Charrette report.[139] Thus, they created the Earth Day 2000 event to be a neighborhood family festival at the future location of the green building with nature tours, food, and gifts for school children branded with the City seal.[140] The event was a mayoral priority because it publicly celebrated the Massachusetts Audubon Society's success in raising $10 million to endow the Boston Nature Center and its Urban Naturalists education program.[141] The Mayor's discussion of the Charrette report was only an incidental aspect of the event's agenda.

In that context, the Building that Teaches' environmental education program, of which green building was but one component, was a successful intervention. The Building that Teaches satisfied the Mayor's basic requirement for holding an event: to make the point that "government serves people."[142] Project-based policy development builds on this realization: *what* the authority figure is willing to discuss in his remarks at a public event becomes the filter for policy development; *when* the authority figure is willing becomes the pace of change. The authority figure is a "barometer of issue ripeness."[143]

---

138. *See supra* notes 43 and 85 and accompanying text.

139. Because his responsibilities are trans-substantive, *supra* note 9, the Mayor reviews a stack of event scheduling requests from every conceivable substantive direction, each making the case for mayoral attention on a specific substantive issue. Leaders without authority intervene with specific substantive issue focus. *See* HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 188. The Mayor's willingness to accept scheduling requests then are the "words and behavior of the authority figure" which provide "a critical signal about the impact of [the advocacy] on the organization as a whole." HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 67–68.

140. *See* Talking Points (Apr. 20, 2000), *supra* note 12.

141. *See* Press Advisory (Jan. 8, 2002), *supra* note 13 ("The Audubon Society in partnership with the Menino Administration through the George Robert White Fund has raised more than $10 million in private, corporate and foundation support to perpetually operate and maintain the Boston Nature Center's infrastructure and programs.").

142. At every event over which Mayor Menino presides, after completing his prepared remarks, the Mayor invariably concludes with off-the-cuff observations about the event and how "government serves people."

143. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 261. Because an event locates a moment where governance and politics unite, the authority figure's participation provides a key element of change management: maintaining political viability. As discussed above, from the initial schedule request to the event's detailed briefing and preparation of the Mayor's remarks, project and related policy complex-

C. Groundbreaking and Dedication—Strengthening the Holding Environment

Groundbreakings are routine mayoral events for the public relations machinery of the municipal agencies responsible for public and private building development. But because the Building that Teaches was not a routine Boston Redevelopment Authority or Public Facilities Department project, the Mayor's Office of Environmental Services organized the January 2002 groundbreaking event.[144] In his remarks at the groundbreaking, the Mayor pointed out that the project's green design was projected to use thirty percent less energy and that development costs were competitive with traditional buildings.[145] Environmental staff convinced the *Boston Globe* to report a green building story, which it had not yet done,[146] and to publish a cross-section graphic of the design that identified the building's specific green features under the heading "A building that teaches."[147]

---

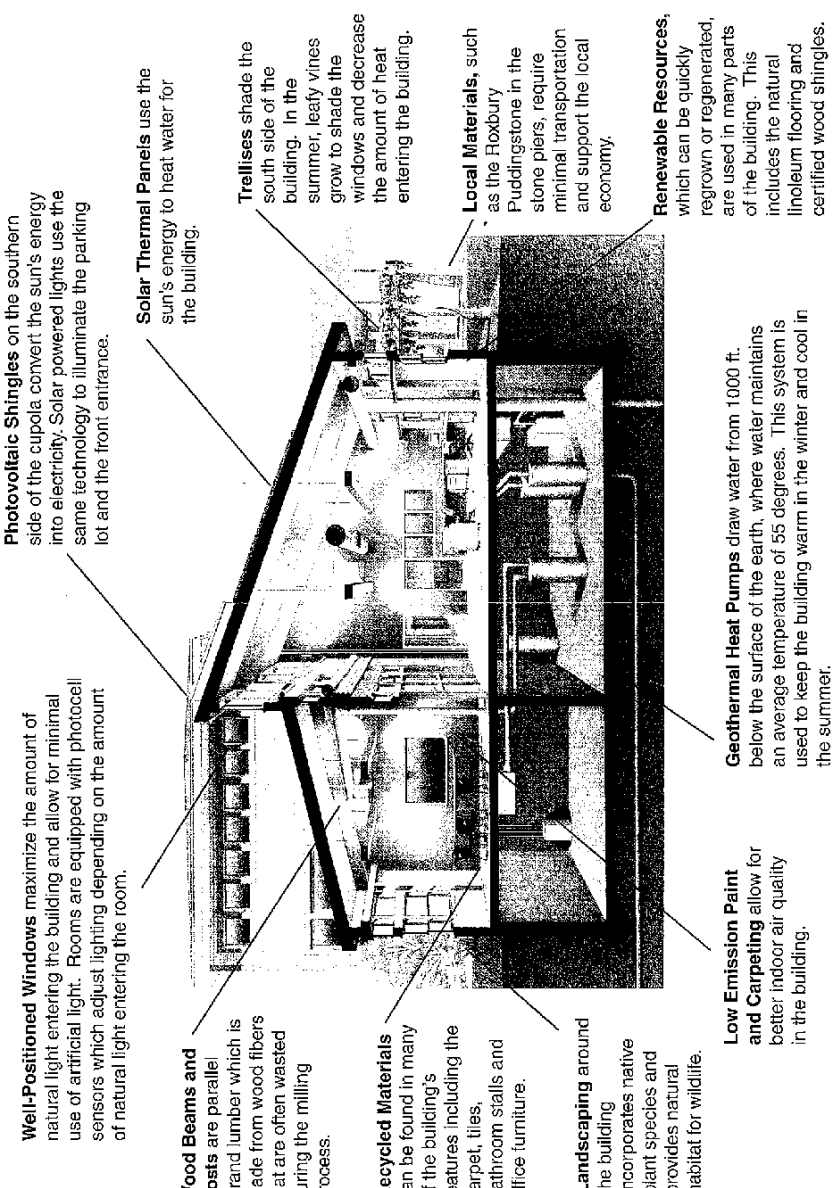
ity must be reduced to what the Mayor is willing to say (the "facts") and, with his presence, embody what city government is willing to do (the "theme"). With the Charrette Report, Environmental Services staff had the opportunity to draft statements for approval by the Mayor to be included in the Charrette report's Foreword, an opportunity for key new concepts to become part of the official record of the Mayor's governance. The Mayor's Foreword stated that "this Final Report sets forth the ideas developed by charrette participants to make the Nature Center a green building that is a model for public buildings in Boston and elsewhere." A BUILDING THAT TEACHES, *supra* note 2, at 3.

144. *See* Press Advisory (Jan. 8, 2002), *supra* note 13.

145. *See* Cook, *supra* note 13, at B1.

146. Environmental Services staff initially envisioned that the groundbreaking event would focus on the construction of the first geothermal heat pump in Boston. The pump, one of the green building's more innovative features, extends down a 1500-foot well and provides earth-generated heating and cooling to replace traditional HVAC (heating, ventilation, and air-conditioning) systems. *See* Press Advisory (Jan. 8, 2002), *supra* note 13, at 2. But ten days before the event planned for the first-ever geothermal heat pump in Boston, the Boston Globe printed a story about the decision of Trinity Church, the architecturally significant structure in Boston's Copley Square, to build a geothermal heat pump as part of a major restoration project. Michael Paulson, *One Power Station Under God, Hundreds of Feet Beneath Copley Plaza's Trinity Church, Construction Crews Are Drilling Boston's First Geothermal Energy Tap*, BOSTON GLOBE, Jan. 1, 2002, at E1. Although the article was welcome evidence of growing interest in green building issues, the story required Environmental Services staff to reframe the pitch to the paper and to re-brand the event as "Celebrating the Ongoing Construction of *A Building that Teaches.*" *See* Press Advisory (Jan. 8, 2002), *supra* note 13, at 1.

147. Cook, *supra* note 13, at B4. *See* Figure 1.



In October 2002, the Mayor dedicated the green building, formally named the George Robert White Environmental Conservation Center.[148] The Mayor's remarks again discussed the building's com-

148. Press Advisory (Oct. 29, 2002), *supra* note 14.

petitive development costs and highlighted the projected thirty percent reduction in energy consumption.[149] For this event, press coverage included a local television piece featuring elementary school students singing "America the Beautiful" and detailing the building's green design.[150]

Both the groundbreaking and dedication events created governmental "facts" and became part of the City's public record.[151] The sequencing of mayoral events iterated a theme: with this project, the City of Boston expressed serious interest in green buildings. For staff, both events provided opportunities to deliver positive press. Yet, however beneficial and educational these stories, from a systems perspective, their focus on the environmental novelty of green building design functioned to keep the project squarely within the environmental faction. For the still unripe green building issue, the Mayor's repeated presence and related good press served the basic need of directing disciplined attention to the issues.

Project-related events created a process that informed the substance of ongoing policy development. They created a holding environment—the metaphoric "container that serves to hold a group, or groups, together so that work can get done"[152]—that held the attention, however tenuously at first, of the economic development factions. Each mayoral intervention into that holding environment allowed "reality testing"[153]—opportunities to observe what happened when, metaphorically, city government "danced" with green building issues. Of particular interest was whether issues that implicated the economic development faction caused friction. Moreover, the completed building made the metaphoric holding environment a concrete reality that itself identified the adaptive challenges of green building policy development. The Mayor's repeated discussion of the building's comparative development cost and projected reduced energy consumption seeded upcoming adaptive work involving the economic

149. *See* Videotape: Newscast of WCVB-TV Channel 5, Boston, Mass. (Oct. 29, 2002) (on file with author).

150. *Id.* Local television news coverage of a governmental event is uncertain and often depends on whether reporters attend to obtain a mayoral sound bite for the unrelated top local story of the day and are sufficiently impressed with the event's substance to create a story. In this case, Environmental Services staff's efforts to create camera moments resulted in a local television channel, which intended to obtain an unrelated sound bite, developing a full green building story, including an explanation of the project's key green design elements. *See id.*

151. *See supra* notes 6–7 (discussing facts and themes).

152. Williams, Orienting Concepts, *supra* note 35, at 44 (defining "holding environment"). *See supra* Part II.B.

153. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 22.

development faction and its concern with the perceived "green premium."[154]

Nevertheless, however planned and necessarily scripted each mayoral event was, the reality of these moments was often surprising. At the dedication, an elementary school-aged student with asthma approached the Mayor to say that being in the building helped him breathe better. Because of the building's green features—minimal "off-gassing" from carpeting made from recycled plastic bottles, paint with low volatile organic compounds, no on-site furnace, and the building's tight envelope—air quality is noticeably better than in a traditionally constructed building.[155] That moment proved crucial: the Mayor wanted staff to continue working on anything that improved Boston's public health, particularly for a child from one of the neighborhoods with the highest percentage of asthma hospitalization in the City.[156] Green buildings became a Boston governmental priority, part of the solution to real problems.

D. "Economics of High Performance 'Green' Buildings" Policy Panel—Intervening Cross-Factionally

In January 2003, the Mayor's Office of Environmental Services partnered with the Greater Boston Real Estate Board[157] to transform one of the Board's regular educational panels into an introductory "Economics of High Performance 'Green' Buildings" policy session.[158] The Mayor co-hosted the event, which was held at the Build-

154. For a discussion of the "green premium," see notes 100–101 and accompanying text. The projected thirty percent reduction in energy use was an example of the kind of operational cost savings that challenges the "brick wall" between capital and operating budgets and that green building policy development pushed to have embedded in capital decision-making. *See supra* note 101.

155. *See supra* note 103 and accompanying text.

156. *See* MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 7 ("The George Robert White Environmental Conservation Center is gathering data on the decreases in both the frequency and severity of asthma attacks among users of that facility. Eleven percent of Boston Public School students suffer from asthma. Dorchester, Roxbury and Mattapan have Boston's highest percentage of asthma hospitalization.").

157. Founded in 1889, the Greater Boston Real Estate Board has 7500 members engaged in all sectors of the real estate industry. BOSTON REAL ESTATE BD., ABOUT US / WHO WE ARE, http://www.gbreb.com/gbreb/about_us/ (last visited Oct. 20, 2007). The Board has five major divisions: the BUILDING OWNERS AND MANAGERS ASSOCIATION, THE COMMERCIAL BROKERS ASSOCIATION, THE REAL ESTATE FINANCE ASSOCIATION, THE RENTAL HOUSING ASSOCIATION, AND THE GREATER BOSTON ASSOCIATION OF REALTORS. *Id.*

158. Policy Panel Invitation, *supra* note 15. The event flyer asked, "Why see Boston's 'Green' Building? It's economical—Construction costs only $185 a square foot! The operation saves money—Energy costs are 35% lower! Design materials

ing that Teaches and attended by seventy-five real estate developers, the vast majority of whom were unfamiliar with the green building movement. Top officials from the Boston Redevelopment Authority, the Public Facilities Department, and the Boston Housing Authority[159] also attended the event. The event created a significant external cross-factional intervention,[160] from environmental to economic development—a partnership that the leadership theory identifies as the most important aspect of "thinking politically."[161]

The policy panel proved to be a crucial event in the sequence that created Boston's green building policy. Planning the event allowed Environmental Services staff to work with the factions within city government that mirrored the economic and real estate development factions in the larger community. Scheduling the event provided a timeframe to secure significant external resources with which to strengthen the holding environment. Locating the event at the green building grounded the panel's educative strategy in a concrete case study and created a strong framework for the hard work ahead by demonstrating that the general change under discussion was in fact feasible.

The policy panel event revealed a general key component of project-based policy development: after initial events have created the theme, the planning process for each subsequent related event itself becomes a useful location for managing policy and program development. To prepare for the policy panel, Environmental Services organized an "Energy Efficiency and Green Building Briefing"[162] for the

---

are cutting edge—The carpet is recycled soda bottles! Indoor air quality is improved—A geo-thermal pump heats and cools! It's beautiful—'Green' buildings need not be ugly! *You have to see it to believe it!*" *Id.*

159. The Boston Housing Authority is a quasi-City agency. Boston Hous. Auth., Welcome to the Boston Housing Authority, http://www.bostonhousing.org/index.html (last visited Oct. 20, 2007).

160. For more on cross-factional intervention, see HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 186–87. *See also supra* Part II.C.

161. For Environmental Services staff, the Board's partnership reflected Professor Heifetz's observation that "people who begin without any authority often have to place their contributions within an on-going tradition or organization that provides a vessel of trust to hold the distress they generate." HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 187. *See also* HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 75 ("Able politicians know well, from hard experience, that in everyday personal and professional life, the nature and quality of the connections human beings have with each other is more important than almost any other factor in determining results.").

162. Agenda, Office of Envtl. Servs., City of Boston, Energy Efficiency and Green Building Briefing (Jan. 7, 2003) (on file with the New York University Journal of Legislation and Public Policy). The briefing included the Boston Environment Department's *Guidelines for High Performance Buildings and Sustainable Development*

Boston Redevelopment Authority and Public Facilities Department. This allowed Environmental Services staff to work with representatives of the economic development and real estate finance factions within city government that mirrored the upcoming cross-factional intervention with the Greater Boston Real Estate Board.[163]

Environmental Services staff used the Mayor's approval of the event's scheduling request to obtain his basic endorsement for the policy initiatives to be announced in his keynote address, most significantly, the creation of a green building task force in his name. The success of the building—a project that served real people—had convinced the Mayor that the green building and public health issues embodied in the building deserved municipal planning attention. Moreover, the panel's firm date provided the timeframe—indeed urgency—for resolution of program development issues, such as approval of environmental staff funding requests for the new initiatives that the Mayor announced at the event. In the months preceding the event, the schedule created leverage with which to convince a local foundation to fund the non-profit entity that developed the year-long education program for the Mayor's Green Building Task Force.[164]

---

discussed *supra* in note 115, an introduction to the Massachusetts Technology Collaborative (MTC) and its Renewable Energy Trust's green buildings program, and information about the recent creation of the Mayor's Energy Management Board. *Id.*

163. The mirroring of this internal process event reveals how policy development is structured like three-dimensional chess. Environmental Services' briefing of the Boston Redevelopment Authority and other city departments mirrored the factional conflicts to be explored at the policy panel with representatives of economic and real estate development factions, a discussion that in turn predicted the factional conflicts in the larger community that the Mayor's Green Building Task Force aimed to address. *See infra* Part III.E. At a fundamental level, all group dynamics mirror each other. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 255. The kernel of environmental and economic development interests mirrored in the internal briefing reflect the group dynamics of the city, the nation, and the world. *See id.*; *supra* Part II.C.1.

164. Briefing, City of Boston, Press Announcement of "Mayor's Green Building Task Force" 3 (June 18, 2003) (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Briefing (June 18, 2003)] ("An anonymous foundation has dedicated a significant portion of a $125,000 grant to the Green Roundtable to support the work of the Green Building Task Force."). Environmental Services staff was aware that an anonymous foundation in Boston had given a grant to the Green Roundtable, Inc. Because of the building's success, the staff was able to convince the foundation to redirect some of this funding to facilitate the upcoming educational program of the Task Force. Given the municipal government's budget constraints, the foundation's willingness to provide funding went hand-in-hand with the Mayor's willingness to name a green building task force. Moreover, the foundation's desire that the City use its own name—Mayor's Green Building Task Force—and not that of the foundation strengthened the political viability of the policy development work.

Similarly, staff worked with the Massachusetts Technology Collaborative (MTC), a quasi-state agency dedicated to promoting renewable energy in Massachusetts,[165] to secure funding for the Task Force,[166] the City's energy management plan,[167] and a Boston Harbor Islands renewable energy study.[168]

Boston's Building that Teaches was the obvious location for the panel. It physically and programmatically embodied the kernel of green building policy development and served as the case study of the group dynamics implicated by integrated design principles.[169] The building itself became both a real and metaphoric holding environment where people, particularly competing environmental and economic development factions, experienced actual green building policy development.[170] Moreover, project-based policy development, based on the actual experience of the Building that Teaches, concretely identified green building policy issues ready for development within the broader Boston governance dynamic.[171] From a systems perspective,

165. The MTC operates the Renewable Energy Trust, which was created in 1998 in conjunction with the Commonwealth's restructuring of the electric utility industry and is funded by a per kilowatt hour charge on electric utility bills. Renewable Energy Trust, Mass. Tech. Collaborative, Frequently Asked Questions, http://www.mtpc.org/RenewableEnergy/faq.htm (last visited Nov. 28, 2007).

166. The MTC granted $130,000 to support the Mayor's Green Building Task Force. Briefing (June 18, 2003), *supra* note 164, at 3.

167. The $216,000 funding for the City's Integrated Energy Management Plan came from the MTC ($60,000), the U.S. Department of Energy ($40,000), the electrical utility NSTAR ($91,000), the gas utility KeySpan ($25,000), and local electric and natural gas utilities. Memorandum from Bradford Swing, Dir. of Energy Policy, to Eileen McHugh, Div. of Energy Res. (Jan. 23, 2006) (on file with the New York University Journal of Legislation and Public Policy).

168. The MTC gave money to the Urban Harbors Institute of the University of Massachusetts Boston and to the Island Alliance (the non-profit agency dedicated to the development of the Boston Harbor Islands National Park Area) to study renewable energy on the Boston Harbor Islands. This study resulted in the creation of the *Boston Harbor Islands Renewables Planning Guide*. URBAN HARBORS INST., UNIV. OF MASS. BOSTON, & THE ISLAND ALLIANCE, BOSTON HARBOR ISLANDS RENEWABLES PLANNING GUIDE v (2005), *available at* http://www.uhi.umb.edu/pdf_files/BHI_Renewables.pdf. The MTC worked hard to process the City's requests for grant funds in time for the event—another example of how having a fixed mayoral event helps staff keep policy work on track.

169. *See supra* notes 99–100 and accompanying text (explaining integrated design principles).

170. *See supra* Part II.B (discussing the need for a holding environment).

171. The educative strategy continued with panelists discussing "Financing Green Buildings," "Due Diligence for Green Building Investments," and the specifics of the MTC's "Grants for Green Buildings." Policy Panel Invitation, *supra* note 15. For each, real estate experts, none of whom had previous specific green building experience, prepared by studying early green building reports and, in one instance, visiting "Boston's Building that Teaches" in advance of the event to learn about green buildings generally.

the project-focused dynamic that created the Building that Teaches had been "a case in point—a laboratory—for identifying challenges and inventing options for taking action outside," and provided "diagnostic clues for comprehending the dysfunctions and impediments in the outside community that the organization needs to address."[172]

With respect to the cross-factional intervention, the Greater Boston Real Estate Board's willingness to transform one of its regular educational panels into an introductory "Economics of High Performance 'Green' Buildings" policy session meant that representatives of the many sectors of the real estate industry within the economic development faction were introduced to green building policy development. The cross-factional intervention involving building owners and managers, commercial brokers, real estate finance experts, rental housing owners, and realtors greatly strengthened the holding environment in which systemic value conflicts over the economics of an environmental initiative could be identified.[173] The cost savings of energy efficiency became the first area of common ground.[174] This reframing of the dynamic to include both environmental and economic development issues, particularly energy policy issues, allowed the policy panel to lay out the fundamental adaptive challenges posed by green building policy development.

With the experience of real integrated design as a frame, the Mayor delivered a keynote address on his vision for an energy efficient Boston, asking the panel and the real estate developers in attendance to focus on what one could learn from the green building.[175]

---

172. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 256. *See also supra* notes 5, 8 (discussing the case study methods in various professional disciplines and the judicial definition of "case" under Article III of the U.S. Constitution).

173. The cross-factional intervention also addressed the general group dynamic that Heifetz identified as work avoidance by marginalization. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 37. A common way for dominant factions within a group dynamic not to address a challenging adaptive challenge is to ignore it. *Id.* When only the environmental faction is heard raising the challenges of green building, the economic development faction can push the work away by keeping the issues branded as environmental and irrelevant to the needs of business. The cross-factional intervention facilitated the important leadership skill of "giving the work back to the people," which frequently takes the form of "orchestrating the debate among competing factions." HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 207–08.

174. As Environmental Services staff designated municipal green building policy development as a component of the Mayor's directive to make Boston more energy efficient, certain green building advocates pushed back with concerns that the focus on energy efficiency ignored other equally important goals—such as reduced water use and improved indoor air quality—that green buildings provide.

175. Remarks, Thomas M. Menino, Mayor, City of Boston, Economics of High Performance "Green" Buildings 2 (Jan. 30, 3003) (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Remarks (Jan. 30, 2003)].

After noting the green building's thirty-five percent energy savings, the Mayor announced the formation of an Energy Management Board, comprised of four cabinet chiefs, to develop a comprehensive energy plan for the City.[176] He also declared his intention to name a task force to examine how to achieve the environmental benefits and energy savings of green buildings citywide.[177] Finally, the Mayor announced funding for the Task Force provided by an anonymous foundation and the MTC.[178]

After the Mayor's address, developers heard from a panel that included the project architect, the construction project manager, a real estate finance practitioner, a real estate investment trust executive, and the Director of the MTC's Green Building Program.[179] The architect presented the green building movement's key change from traditional development to integrated design, which at the project's initiation convenes stakeholders to think about each aspect of the proposed building and asks designers and engineers to think through the interactions of building systems. The discussion was based on the experience of the Building that Teaches, which proved that, through integrated design, "a green and sustainable design can be crafted that combines maximum energy savings, minimum added initial cost, positive architectural impact, and high levels of occupant comfort and safety."[180] One

176. *Id.* In 2001, the Mayor formed an advisory committee of civic leaders and staff to identify energy policy issues that the City of Boston needed to address. In 2003, the Mayor named four cabinet chiefs to serve as his Energy Management Board and tasked the Board to conduct integrated energy management planning to achieve his goals for reducing energy consumption. City of Boston, Mayor's Energy Management Board, http://www.cityofboston.gov/environmentalandenergy/energy.asp (last visited Nov. 9, 2007).

177. Remarks (Jan. 30, 2003), *supra* note 175, at 5.

178. *See supra* notes 164–168 and accompanying text.

179. Policy Panel Invitation, *supra* note 15. The panel discussion, moderated by a leading traditional developer, explored Green Building Design, Innovative Technology & Cost; Green Building Construction: Lessons Learned; Financing Green Buildings; Due Diligence for Green Building Investments; and the MTC's Renewable Energy Trust Grants for Green Buildings. *Id.*

180. Steven Winter Assocs., Inc., Green / Sustainable Design, http://www.swinter.com/Services/04Green_Sust/gs_gs.html (last visited Oct. 23, 2007) (introducing architects' methodology). The chief architect, Kirk Sykes, of The Primary Group, worked with Steven Winter Associates, a leading expert on sustainable energy efficiency, which engaged the team in "a 'whole building' systems-oriented approach to design that integrates the architecture with the mechanical, electrical, and plumbing systems to create positive synergy." *Id*. The green building movement generally has latched onto the long-standing practice of architects to engage in a "charrette," an intensive meeting, usually during a project's "visioning" stages, to discuss and develop ideas for a project's design, and to suggest when and where early stage integration of engineering with design can occur. A BUILDING THAT TEACHES, *supra* note 2, at 5. The City's Earth Day 1999 Green Building Charrette applied the "charrette" concept

specific benefit of adopting integrated design was the project's early decision to build a geothermal system, at an equivalent cost of a conventional heating and cooling system, which resulted in the team's pre-construction elimination of an unnecessary back-up furnace system.[181] This would not have resulted from traditional design, because engineers and designers would not have been cooperating as early in the process. Following this description, the project manager described lessons learned from the project, particularly the challenge of procuring the specific materials that make a building "green."[182]

The policy panel's title—"Economics of High Performance 'Green' Buildings"—by itself must have made the invited high-powered real estate developers wonder about the direction in which the Mayor was taking municipal policy. Each aspect of the Mayor's announcements—the formation of both an external Green Building Task Force process and internal Energy Management Board plan and the feasibility study for renewable energy on the Boston Harbor Islands—indicated that new ideas were going to be carefully studied and that significant external funding would support comprehensive processes. Thus, event planning allowed municipal leadership—Mayor and staff—to predict the disequilibrium resulting from the agenda and the adaptive challenges presented in the keynote address. The message was that there was challenging work ahead but also that difficult change was not expected right away. From a systems perspective, change would ripen at a measured pace.[183]

E. Announcement of the Mayor's Green Building Task Force—Orchestrating Conflict in the Pressure Cooker

In June 2003, again at the Building that Teaches, the Mayor named twenty-one leaders from Boston's design, construction, and finance communities[184] to serve on the newly branded Green Building

---

loosely to the early-stage gathering of community members and architects not directly involved with the George Robert White Center to emphasize the importance of early-stage visioning to the green building process. *Id.*

181. Interview with Robert J. Fleming, Executive Sec'y, City of Boston Trust Office (including George Robert White Fund), in Boston, Mass. (Oct. 16, 2007). *See also* A CASE STUDY OF BOSTON'S FIRST GREEN BUILDING, *supra* note 3, at 7 (discussing the "financial and environmental" benefits from using geothermal systems: avoiding an oil or gas-fired heating system and eliminating the need for HVAC).

182. *See* A CASE STUDY OF BOSTON'S FIRST GREEN BUILDING, *supra* note 3, at 15–17 (discussing lessons learned).

183. *See supra* Part II.C.3 (discussing ripening issues and pacing work).

184. The Task Force included top officials from FleetBoston Financial (which became Bank of America during the Task Force's term); the Boston Architectural Center; Partners Health Care System, Inc.; Berkshire Mortgage Finance Corporation;

Task Force.[185] The planning process for this event itself became a useful locus for managing policy and program development, particularly for importing economic development issues into environmental planning. Environmental Services staff facilitated six meetings with the Chief Planner of the Boston Redevelopment Authority, the Director of MTC's green building program, and the Executive Director of the Green Roundtable to develop a list of names for Task Force membership, expand knowledge about green building issues, and further the Mayor's directive to make "Boston more energy efficient."[186] In terms of the Heifetz framework, this preparatory work allowed staff to observe "from the balcony" the impact of the Mayor's repeated interventions "on the dance floor."[187]

Lessons learned from the balcony were incorporated into the Mayor's announcement of the Task Force when he reiterated the cross-factional reframing from environmental to economic development now guiding green building policy development. Naming a top executive of the Greater Boston Real Estate Board to chair, the Mayor stated that the Task Force would evaluate market forces, industry practices, and regulatory processes to recommend actions to improve the prospects of building high performance green energy buildings in Boston.[188] The Mayor expressed his confidence that "green buildings

---

Equity Office Properties (then the largest property owner in Boston); Suffolk Construction Company; International Brotherhood of Electrical Workers (IBEW) Local 103; The Life Initiative; Harvard University School of Public Health; Massachusetts Housing Partnership; and the architecture firms Goody, Clancy & Associates; Bergmeyer Associates; and The Primary Group. MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 2. The Mayor also named a peer advisory group, green building experts from government and non-profit groups to advise and support the Task Force's work. *Id.* at 17.

185. *See* Agenda, City of Boston, Mayor Thomas M. Menino, Green Building Task Force: Meeting #1 (June 18, 2003). The Mayor also dedicated the Center's new photovoltaic system roof and real-time data acquisition and display system. Press Release (June 18, 2003), *supra* note 16.

186. *See* Agenda, Office of Envtl. Servs., City of Boston, Energy Efficiency and Green Building Briefing (Jan. 7, 2003); Agenda, Office of Envtl. Servs., City of Boston, Green Building Task Force: Staff Meeting #1 (Mar. 4, 2003); Agenda, Office of Envtl. Servs., City of Boston, Green Building Task Force: Staff Meeting #2 (Mar. 28, 2003); Agenda, Office of Envtl. Servs., City of Boston, Green Building Task Force: Staff Meeting #3 (Apr. 16, 2003); Agenda, Office of Envtl. Servs., City of Boston, Green Building Task Force: Staff Meeting #4 (May 12, 2003); Agenda, Office of Envtl. Servs., City of Boston, Green Building Task Force: Staff Meeting #5 (May 22, 2003); Agenda, Office of Envtl. Servs., City of Boston, Green Building Task Force: Staff Meeting #6 (June 13, 2003) (all on file with the New York University Journal of Legislation and Public Policy).

187. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 53–54. *See also supra* Part II.C.

188. *See* Press Release (June 18, 2003), *supra* note 16.

also make good economic sense."[189] Invoking good business sense addressed the resistance to green buildings as costly, reducing interfactional concerns.[190]

Supported by $230,000 in grant funding,[191] the Task Force met for one year,[192] organized its inquiry into seven broad categories,[193] and "took a uniquely interdisciplinary and thorough approach to the challenges and opportunities of improving Boston's built environment through green building practices."[194] The year-long process proved an excellent example of a pressure cooker: in a strong holding environment, the Task Force chair, city staff, and the foundation-funded nonprofit green building experts expertly turned "the heat up or down" to "keep the pressure within a safe limit."[195] As viewed from a systems perspective and Professor Heifetz's theoretical principle that "people represent issues,"[196] Task Force membership included "experts and major stakeholders in every area of real estate development, finance, and management."[197] The competing environmental and economic dynamic that built Boston's Building that Teaches "'mirrored' conflicts within larger group systems," represented by the Mayor's Green Building Task Force, which itself mirrored conflicts within the Boston

189. *Id*.

190. Around this time, studies began to address the issue of the initial cost of construction—the so-called "green premium"—to suggest that, despite having a start-up cost slightly higher than that of conventional buildings, green buildings have lower operating and maintenance expenses. *See* U.S. GREEN BLDG. COUNCIL, BUILDING MOMENTUM, *supra* note 96, at 5–6 (noting average energy savings for high-performance green buildings of 20–50%).

191. *See* Briefing (June 18, 2003), *supra* note 164, at 3. The MTC funding allowed members of the Task Force to learn best practices in Chicago and Seattle and provided five $20,000 early-stage feasibility grants that the Boston Redevelopment Authority awarded to projects upon completion of the task force's work. Briefing, City of Boston, Green Building Feasibility Grant Announcement 1 (Aug. 23, 2005) (on file with the New York University Journal of Public Policy and Legislation).

192. MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at inside cover. The Task Force's first meeting was at the site of the Manulife Financial's LEED certified U.S. headquarters on the South Boston Waterfront. *Id.* at 13.

193. The categories of investigation included (1) education, awareness, and training; (2) incentives; (3) sustainable planning and leadership; (4) building a green team; (5) capital and operating finance; (6) business/economic development; and (7) standards, measurement, and verification. *Id*. at 8–9.

194. *Id.* at 8.

195. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 106. *See also supra* Part II.C.2.

196. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 255.

197. MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 2.

community and its environmental and economic development factions.[198]

Beneath the surface of the Task Force's seven broad categories of investigation were basic conflicts over the values implicated by green building's fundamental challenge: the early stage integration of design and engineering coupled with new thinking about efficiency, life-cycle costs, and investment payback.[199] Competing values about the proper way to structure work among Task Force members revealed a conflict between "loyalty" cultures and "new process" cultures. Traditional developers often move forward on real estate development projects with tested, often deeply personal, community-based relationships—values rooted in *loyalty* to established teams. Green developers, on the other hand, insist on opening up old team relationships to early-stage, costly, professional integration: values rooted in *new process*.

By pacing the year-long discussion to achieve consensus recommendations in the form of a ten-point action plan, the Chair "choreograph[ed] and direct[ed] learning processes"[200] that facilitated repositioning of the group dynamic's competing factions and led to the ultimate reception by the broader community of the implementation of change.[201] The Task Force's most significant decision was its recommendation that the City of Boston adopt clear standards for both public and private development using the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) standards.[202]

---

198. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 256. Through the Task Force, the distinct factional interests of real estate financiers, contractors, property owners, property managers, architects, labor union members, and academic representatives all tackled "the work"—"[t]he particular issue or concern that must be addressed if organizational or societal improvement is to be achieved." *See* Williams, Orienting Concepts, *supra* note 44, at 3.

199. *See supra* notes 101, 102, 133 (discussing ways of reframing the cost/benefit analysis of green buildings).

200. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 187.

201. In discussing the pacing of adaptive work, Professor Heifetz's leadership theory identifies that facilitating change involves compassion for people's losses. HEIFETZ, LEADERSHIP ON THE LINE, *supra* note 4, at 61 ("[P]ersistence of conflict usually indicates that people have not yet made the adjustments and accepted the losses that accompany adaptive change."); HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 241 ("The pains of change deserve respect. . . . Leadership requires compassion for the distress of adaptive change, both because compassion is its own virtue, and because it can improve one's sense of timing. Knowing how hard to push and when to let up are central to leadership.").

202. *See* MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 9. In recommending the adoption of the LEED standards, the Task Force fully recognized that the LEED system was "still evolving and not a perfect system." *Id.*

F. Announcement of Proposed Green Building Standards—Directing Disciplined Attention to the Issues

On November 5, 2004, just one week after the first Boston Red Sox World Series win since 1918, the Mayor accepted the Task Force's recommendations at a major public event in front of Fenway Park's fabled "Green Monster."[203] The firm date mandated completion of the *Mayor's Green Building Task Force Report*, which, like the previous Charrette report, *A Building that Teaches*, served both as an update on City of Boston-specific policy development and as a general green building primer. Policy and program specifics moved forward in conjunction with building Boston's "brand," including the report's introduction of the "Boston Green Brick," created by a strategic communications firm, to appear side-by-side with the city seal as symbol of the Mayor's green building program:

Drafting the report also pushed agreement on the Task Force's recommendations—its "10 Point Action Plan." The first recommendation suggested that the City of Boston "LEED by example" and "adopt LEED Silver as the design and construction standard for the renovation and construction of all city facilities."[204] The report went further, though, and boldly recommended amending the City's zoning code "to require LEED Certifiable as the design and construction standard for all projects undergoing . . . project review."[205] Other cities require LEED for their own projects,[206] but Boston became the first

---

203. Green Roundtable, Municipal Policy, http://www.greenroundtable.org/policy/test_page.html (last visited Dec. 18, 2007). *See also* Palmer, *supra* note 17, at D7 (noting Mayor Menino's plans to implement the Task Force's recommendations).

204. MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 15. The Task Force also recommended that the City "[r]equire LEED [certification] . . . for all new construction and major renovation projects receiving City funding or land." *Id.* The original charge to the Task Force was to focus on private development with the understanding that the Mayor's Energy Management Board would focus on engaging the City's capital construction division in investigating green building standards for city construction. *See* Press Release (June 18, 2003), *supra* note 16; City of Boston, Mayor's Energy Management Board, *supra* note 176.

205. MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 15.

206. U.S. GREEN BLDG. COUNCIL, LEED INITIATIVES IN GOVERNMENTS AND SCHOOLS (Sept. 1, 2007), https://www.usgbc.org/ShowFile.aspx?DocumentID=691

major municipality to suggest that *private development* be required to achieve a basic green building standard.[207] "To allow for public notice, staff development, and changes in professional and industry practice," the Task Force also recommended that the City of Boston craft a three-year implementation work plan with training for city employees and technical assistance to project developers.[208]

The final Task Force recommendation was that the City support the development of distributed generation in Boston such as photovoltaic cells and onsite combined heat and power generation units.[209] Distributed generation generally involves locating small-scale electric power generation close to where load is being served and, when used properly, can "improve power quality, boost system reliability, reduce energy costs and help defray utility capital investment."[210] Similar to the manner in which references to the Building that Teaches and reduced energy consumption in the Mayor's announcement of the Task Force seeded upcoming adaptive work involving the economic development faction, the inclusion of this distributed generation recommendation seeded the upcoming creation of the City's energy policy.[211] Again, energy efficiency provided common ground.

As green design results in the improved energy efficiency of an individual building, the City supported interconnection of distributed generation to improve the general energy efficiency of the electricity

---

(noting, for example, adoption of LEED standards in Portland, Oregon, in 2005 and in Seattle, Washington, in 2002).

207. Stephanie Pollak, *Green (and Better) Building*, BOSTON BUS. J., Jan. 19, 2007, http://boston.bizjournals.com/boston/stories/2007/01/22/editorial2.html; Boston Green Bldg. Initiative, City of Boston, Boston Zoning Commission: Public Hearing 13 (Jan. 10, 2007), http://www.cityofboston.gov/bra/gbtf/documents%5CBoston%20Zoning%20Commission%20-%20Pres%2007-01-10.pdf (noting that, of eighteen other cities implementing LEED standards, Boston was by far the largest).

208. MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 15.

209. *Id*. The Task Force recommended that the City continue to work with the MTC Distributed Generation Collaborative and with the Commonwealth's Department of Telecommunicates and Energy, which is now the Department of Public Utilities, to develop consensus on "the role of distributed generation in the distribution of electric power." *Id.* The Task Force's interest in distributed generation issues stemmed from its December 2003 Special Hearing on Energy and Green Buildings at which regulatory barriers were discussed. *See* Agenda, Green Bldg. Task Force, Special Hearing on Energy and Green Building (Dec. 18, 2003), http://www.cityofboston.gov/bra/gbtf/documents/HearingAgenda03-12-18.PDF.

210. *See* James Hall, The New Distributed Generation (Oct. 1, 2001), http://telephonyonline.com/mag/telecom_new_distributed_generation/.

211. *See* MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 15 (outlining the 10 Point Action Plan which first recommended distributed generation).

distribution system.[212] Both the Task Force and Environmental Services staff recognized that green building policy needed to look "beyond the building" to how integrated-design structures interconnected with the electric utility system—the grid.[213]

G. Creation of Energy Policy Function and Adoption of Green Building Zoning Article—Giving the Work to the People who Need to do it

Critical to the success of this final phase of green building policy development was the Task Force recommendation that "[t]o allow for public notice, staff development, and changes in professional and industry practice," the City should "develop a work plan . . . [for] full implementation within three years" of its goals.[214] This timeline allowed for the green building issue to ripen. During this period, the Mayor's green building interventions were frequent and continued to provide a location for reframing forward-moving work—this time from environmental and energy policy work to addressing climate change. At each event, the Mayor reiterated his intention to implement the Task Force's boldest recommendation: to amend the City's zoning code "to require LEED Certifiable as the design and construction standard" for all major projects undergoing project review.[215]

---

212. In 2004, the same year in which the Task Force made its recommendations, Mayor Menino filed a bill to support distributed generation (DG) in Boston that addressed certain regulatory barriers flagged by a constituent wanting to install a DG unit. *See* Worksheet, Office of Envtl. Servs., City of Boston, An Act Relative to Distributed Generation: Proposing MGL c 164, § 94 to the 2005–2006 Mass. Leg. Sess. (on file with the New York University Journal of Legislation and Public Policy) [hereinafter Worksheet, An Act Relative to Distributed Generation]. From 2004 on, Environmental Services staff also represented the Mayor's office in investigations into DG issues conducted by the Distributed Generation Collaborative, facilitated by the MTC. *See* MASS. TECH. COLLABORATIVE, RENEWABLE ENERGY TRUST, MASSACHUSETTS DISTRIBUTED GENERATION COLLABORATIVE 2006 REPORT 1, 9 (Mass. D.T.E. No. D.T.E. 02-38-C, 2006), *available at* http://www.masstech.org/dg/mtc-reports.htm; Massachusetts DG Policy Collaborative Online Resource Center, http://masstech.org/dg/02-38-C_2006-Report_filed-6-30-06.pdf.

213. *See* MAYOR MENINO'S GREEN BUILDING TASK FORCE REPORT, *supra* note 96, at 15. Because City staff collaborated with the Task Force in formulating the 10 Point Action plan, the Task Force's recommendation overlapped with staff focus on distributed generation policy.

214. *Id.*

215. *Id.* at 15. With the completion of the Task Force's work, green building events became a regular part of the Mayor's schedule. For example, in 2004, the Mayor keynoted the first-ever Design for Health Summit and pledged the City's support for the *Green Guide for Health Care*, a set of green building best practices for health care facilities that was then under development by the non-profit Health Care Without Harm. Thomas M. Menino, Mayor, Design for Health: Summit for Massachusetts Healthcare Decision Makers (Sept. 29, 2004), http://www.noharm.org/details.cfm?

These announcements, particularly the significant $2 million grant to develop a green affordable housing program,[216] continued to strengthen the holding environment in which the disequilibrium of change could settle.

In early 2005, the Mayor announced the reorganization of his cabinet to re-brand his Office of Environmental Services as the Office of Environmental *and Energy* Services.[217] Although not a specific recommendation of the Task Force, the Mayor directed the change as a way to implement the Task Force's green building and distributed generation recommendations as well as to showcase the City's own focus on becoming more energy efficient.[218] The creation of the City's energy policy office institutionalized the cross-factional environmental and economic development dynamic changes that green building project-based policy development had reframed. The growing importance of energy efficiency became common ground for both environmental and economic development dynamic factional interests.[219] The Mayor recognized that green building policy was significant to the City's economic development strategy and that municipal

---

type=news&ID=92&contentRegionKey=globalsouthspn. *See* Green Guide for Health Care, About the GGHC, http://www.gghc.org (last visited Nov. 10, 2007) (describing the guide, which is specific to health care facilities and links the goals of sustainable design and enhanced individual and community health). At other events in 2004 and 2005, the Mayor announced five $20,000 early-stage feasibility grants from MTC funds to assist projects with integrated design. *See, e.g.*, Press Release, Boston Redev. Auth., Mayor Menino Awards "Green Building Grants" (Aug. 11, 2004) (awarding grants to Third Sector New England and the Dorchester Bay Economic Development Corporation).

216. In 2006, the MTC awarded the City of Boston Department of Neighborhood Development a $2 million grant to develop the City of Boston Green Affordable Housing Program. Press Release (Oct. 3, 2006), *supra* note 18.

217. *See* CITY OF BOSTON, OPERATING BUDGET FISCAL YEAR 2006, CAPITAL PLAN FISCAL YEARS 2006–2010: VOLUME I – OVERVIEW OF THE BUDGET 5 (2005), http://www.cityofboston.gov/budget/fy06.asp. The Mayor named a new Chief of Environmental and Energy Services and restructured an environmental policy support position to become Director of Energy Policy. The Cabinet Chief of Environmental and Energy Services now serves as the Chair of the Mayor's Energy Management Board, which includes the City's Chief Financial Officer, the City's Chief of Public Property and the Executive Director of the Boston Public Health Commission. City of Boston, Mayor's Energy Management Board, *supra* note 176.

218. In 2005, the Board completed its Integrated Energy Management Plan, which studied the energy efficiency potential of 362 municipal buildings and identified the potential energy consumption savings of the top ten buildings. City of Boston, Mayor's Energy Management Board, *supra* note 176.

219. Two years after the City did so, the Commonwealth of Massachusetts created a new "Executive Office of *Energy* and Environmental Affairs." Executive Office of Energy and Envtl. Affairs, Welcome, http://www.mass.gov/envir/ (last visited Nov. 10, 2007). This mirroring at a statewide level reflected the ripeness within society at large of the cross-factional development of environmental and business issues.

intervention in the state, regional, and federal dynamic governing energy systems was similarly vital to economic development.[220] Nonetheless, despite the Mayor's frequent interventions, green building remained essentially an unripe issue met with "resistance by the larger community having other concerns"[221] until 2006 when the national dynamic about the threat of climate change underwent rapid repositioning.[222]

In 2006, during the midst of this repositioning, the *Boston Globe* editorialized its disappointment with the Menino administration, saying that it had "made little progress on its 2004 promise to use the zoning code to require private developers to adopt green building techniques."[223]

> Builders chafe at the extra costs associated with green buildings, which typically range from 2 to 5 percent for construction. The city's redevelopment specialists need to counter those arguments with economic and environmental arguments of their own, including energy savings of 25 percent to 40 percent and lower maintenance costs.[224]

---

220. The Mayor, for example, connected the need for a modern electricity grid with the desire by financial services and hospitals, two key sectors of Boston's economy, for distributed generation to ensure power reliability and cost efficiency. BOSTON REDEV. AUTH., CITY OF BOSTON, THE BOSTON ECONOMY 2007: STEADY GROWTH 10 (2007), *available at* http://www.cityofboston.gov/bra/PDF/ResearchPublications//Rpt 611-V8.pdf. An electricity grid that can accommodate distributed generation is also of keen concern to life-tech and bio-tech industries with energy-intensive laboratory and manufacturing needs, a sector for which the City of Boston competes intensively. *See* Lifetech Boston, Bold Thinking, http://www.lifetechboston.com (last visited Nov. 10, 2007) (describing initiative championed by Mayor Menino and administered by the BRA designed "to attract, retain, support, and strengthen Boston companies engaged in biotechnology, pharmaceuticals, medical devices, and other related industries").

221. HEIFETZ, LEADERSHIP WITHOUT EASY ANSWERS, *supra* note 4, at 261.

222. For polling data showing the change of public opinion, see Nat'l Envtl. Trust, Global Warming Polluting Update: American Attitudes Toward Climate Change, http://www.net.org/policy/global_warming/pdf/polling_update.pdf (last visited Nov. 10, 2007) (compiling polls on the topic of global warming in 2006). *See also* Eric Weiner, *American Conscience Waking Up to Climate Change*, NPR, Sept. 10, 2007, http://www.npr.org/templates/story/story.php?storyId=11787222 ("Was it Al Gore? Or maybe that blockbuster movie The Day After Tomorrow? Or perhaps it was Hurricane Katrina? In the past few years, global warming has catapulted from a fringe issue to a mainstream one. The reason is not clear, but a few pivotal moments emerge.").

223. *Green Promises*, BOSTON GLOBE, May, 8, 2006, at A10.

224. *Id.* The article continued:

> Mayor Thomas Menino has pledged to make Boston a leader in environmental causes. Two years ago, he embraced the green building movement that promotes energy-saving devices, environmentally sensitive site planning, and use of recycled building materials. Boldly, he pledged to

The editorial highlighted the leadership principle of "giving the work back" to the people who need to do the work in order to achieve progress on adaptive change.[225] Instead of the City's environmental specialists doing "the work"[226] of countering arguments against green buildings, the "economic and environmental arguments" needed to come from the city's redevelopment specialists.[227]

The editorial also highlighted the difficulty of following through on a change in municipal policy that required action by an agency, the quasi-City Boston Redevelopment Authority, that had not initiated green building policy development.[228] Thus, the newly named Chief of Environmental and Energy Services needed his formal authority to broker the work with the Boston Redevelopment Authority to secure the necessary recommendation of its Board of Directors for Article 37, codifying the green building requirement. Having secured this recommendation, the Boston Zoning Commission adopted Article 37 in January 2007, making Boston the largest city to have adopted a private green building requirement.[229]

Article 37 requires certain large projects to be "LEED Certifiable," as determined by the Boston Redevelopment Authority, with advice from the City of Boston's Interagency Green Building Committee.[230] Project proponents must submit a LEED checklist with narrative describing how the applicable LEED point minimum will be met when the project ultimately receives its certificate of occupancy

---

adopt the elevated standards of the nonprofit US Green Building Council for all city-owned building projects. He even went a step further than environment-friendly Portland, Ore., by promising to incorporate green building standards into the city's zoning code covering large private developments. Now Bostonians interested in the environment need to know if the mayor is living up to his promises. *Id.*

225. *See id.*; *supra* Part II.C.4 (discussing giving the work back).

226. Williams, Orienting Concepts, *supra* note 35, at 3 (defining work to include "tough conversations, confrontations, conflicts and creative processes that must be undertaken to advance learning and progress").

227. *Green Promises*, *supra* note 223, at A10.

228. *See id.*

229. *See* Article 37, *supra* note 1; Pollak, *supra* note 207 (noting that the "two-year transitional period" since the Task Force made the recommendation and the adoption of the green building requirement "has allowed Boston Redevelopment Authority and City Hall staff, the real estate community and consultants to get up to speed"). In conjunction with this final push, the Mayor met with a representative group of major traditional developers to review the upcoming zoning changes—from a systems perspective, a reality check on the ripeness of the dynamic.

230. *See* Article 37, *supra* note 1, §§ 37-3; 37-5 (cross-referencing BOSTON, MASS., ZONING CODE art. 80B (2007), *available at* http://www.cityofboston.gov/bra/pdf/ZoningCode/Article80.pdf, for Large Project Review, which applies to many projects 50,000 square feet or larger).

from the City's Inspectional Services Department.[231] This codification of the Interagency Green Building Committee institutionalized cross-factional interventions that mirrored the work of the Mayor's Green Building Task Force and its stakeholder representation of similar factional interests. It prevents municipal environmental staff becoming marginalized into working alone on the green building issue and gives the work to the people who needed to do the work.[232]

Finally, in April 2007, at the Boston Children's Museum's new green building,[233] the Mayor issued an "Executive Order Relative to Climate Action" that codified the final piece of Boston's green building policy development: "All new construction and major renovation of City facilities shall obtain Leadership in Energy and Environmental Design (LEED) Green Building Rating System Silver level certification from the U.S. Green Building Council."[234] The Mayor's announcement was front page news,[235] part of his effort to "turn Beantown into Green Town."[236] Its primary focus was that the City would reduce greenhouse gas emissions to seven percent below 1990 levels by 2012 and to eighty percent below 1990 levels by 2050.[237]

---

231. *Id.* § 37-5. In addition to the points identified by LEED guidelines, project proponents can achieve the minimum point requirement by receiving up to four "Boston Green Building Credits," points designed to highlight the Mayor's priorities: "modern grid," "historic preservation," "groundwater recharge," and "modern mobility." *Id.* at Appendix A. Projects invoking Boston Green Building Credits to achieve the LEED certifiable requirement must meet the Zoning Code's "Boston Public Health Development Prerequisite" which requires the diesel retrofit of construction vehicles, an outdoor construction management plan, and an integrated pest management plan. *Id*.

232. Within the administration, one way to avoid change was to keep green building work within the City's environmental faction, or "silo," to invoke a term currently in vogue. *See, e.g.*, Scott D. Pattison, *Eliminating Silos in Government*, MGMT. INSIGHTS, Apr. 5, 2006, http://www.governing.com/manage/mi/6ins0405.htm (describing silos in government as vertical, insular hierarchies that prevent necessary and innovative collaboration with other agencies). *See supra* Part II.C.4 (discussing giving the work back).

233. *See* Green Buildings Case Studies: Boston Children's Museum, http://www.greenexhibits.org/dream/buildings_boston_cm_case_study.shtml (last visited Nov. 10, 2007).

234. *See* Executive Order, *supra* note 20 ("As part of meeting the LEED standards, all new projects shall exceed the basic standard for energy performance by at least 14 percent and all major renovations shall exceed the basic standard by 7 percent.").

235. Raja Mishra, *Mayor Aims to Cut City's Greenhouse Emissions*, BOSTON GLOBE, Apr. 13, 2007, at A1.

236. Peter J. Howe, *Mayor Has New Spin for City Hall Plaza; Menino Wants to Explore Wind Turbine Installation*, BOSTON GLOBE, Sept. 29, 2007, at A1 (internal quotes omitted).

237. *See* Executive Order, *supra* note 20, at ¶ 1. The Order also included new initiatives to evaluate the "feasibility of installing solar, wind, bio-energy, combined heat and power, and green roof installations"; "implement a large-scale, cross-sector con-

Eight years after the Earth Day 1999 Green Building Charrette, green building policy development, both within the governmental dynamic and the broader society it mirrored, had become ripe.

IV.
CONCLUSION

This Article examined the case study of the City of Boston's pilot green building, the Building that Teaches, to present project-based policy development as a model of leadership—"mobilizing people to tackle tough problems." The sequence of project-related governmental events demonstrated leadership both with and without authority: Environmental Services staff proposing events for projects that "deviated from the norms of authoritative decisionmaking" and a Mayor with visionary willingness to preside over events who served as the "barometer of systemic distress." Each event became a fact of the Mayor's administration; the message of the events—new policy filtered through the Mayor's remarks—became a theme in the ever-evolving Boston story.

Policy development benefited from moving forward with events related to, and ultimately held in, a real green building. Actual design and construction experience contained the kernel of policy issues and group dynamics that shaped the agenda for needed learning. Political consensus formed to celebrate the success of a project that served real people in need. The Building that Teaches made the theoretical metaphors that form project-based policy development concrete: a tangible holding environment with a focused educative strategy. From a systems perspective, the sequence of events—from dance floor to balcony over and over—allowed the kernel of green building policy dynamics to grow, fostering increasingly objective understanding of the competing environmental and economic development factional interests.

The ultimate zoning change that instituted the integrated design paradigm involved classic adaptive work—not simply the straight-forward application of existing "technical" knowledge—that required an

---

servation initiative involving citywide energy efficiency"; require municipal departments to "include a minimum of 11 percent of power generated from renewable resources" and that by 2012 at least 15% come from renewable sources; require all motor vehicles purchased to be "alternative fuel, flexible fuel, or hybrid vehicles, unless they are not available for the needed function"; to "increase recycling of all materials by 10 percent by 2012"; and establish the Community Climate Action Task Force, which will complete emissions inventories, prepare and distribute education materials to residents and businesses, and identify and work with businesses to develop economic and workforce opportunities. *Id.* at ¶¶ 2, 6, 8–11.

evolution of values, the revision of priorities, and the development of new practices. The year-long Mayor's Green Building Task Force process—another holding environment—allowed stakeholder representatives whose multi-factional make-up mirrored this dynamic to make progress on addressing general barriers to building green in Boston. Finally, the creation of the City of Boston's energy policy function institutionalized the reframing of environmental to economic development issues that resulted from this work.

This Article focused on the Mayor of Boston and the governmental events through which his leadership connects with the people he serves. But the lessons from Boston's project-based policy development apply whenever an organization marshals resources to accomplish a project. Anyone can exercise leadership by using the project to reframe the organization's position as a problem solver within larger society—to identify an adaptive challenge. Events—educative interventions such as planning meetings, trainings, retreats, and press conferences—need to be sequenced to keep the project's kernel of change dynamics growing at a reasonable pace. The emerging theme of these events needs to connect with the authority figure's role to communicate the organization's vision with the outside world. Each dance floor moment keeps attention focused on the work. Frequent balcony retreats foster an objective understanding of how event dynamics mirror the organization's adaptive challenge, reflect what learning is needed, and help to identify partners. The sequence of events can create the holding environment needed to support the authority figure's leadership of the organization's fit with the future. Project-based policy development demonstrates that a thematic sequence of events, properly conceived and executed, provides the prospective opportunity to build the case for change.